

CONTENTS OF ACUUS SERIES CONFERENCES 1983-2025

(SORTED BY LAST NAME OF FIRST AUTHOR)

Note: Some proceedings had two somewhat difference versions and hence the same paper may appear twice in these cases. Refer to the contents list for each conference for more details.

_, 1991. "General reports and summaries of the conference," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, Japan, pp2-13

_, 1991. "Panel discussion - general debate," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, Japan, pp57-64.

_, 1991. "Tokyo declaration on Urban Underground Space Utilization '91," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, Japan, pp14-16.

Abe, K. and M. Kei, 2023. "Smart City Project to Enhance the Walkability of Underground Pedestrian Spaces Utilizing Data in the Otemachi-Marunouchi-Yurakucho District," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp315-320.

Abedi, H., J.R. Risitano, B.H. Lien and R.G. Sherman, 1995. "Design and construction of large diameter underground shafts," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp395-400.

Admiraal, Han and Antonia Cornaro, 2018. "Bankable and investment-ready underground space developments," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp62-71.

Admiraal, Han, 2012. "Underground Space as Invaluable Resource for Resilient Cities," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Afhami, Reza, Sara Jalali and Maryam Yarahmadi, 2012. "Studying the Development of Urban Life in Underground Levels of Historical Fabric of Mashhad (As a Strategic Plan)," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Agioutantis, Z., P. Viopoulos and S. Maurigiannakis, 2007. "Elastoplastic modeling of the chimney failure potential at the face of underground openings," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp391-396.

Agrawal, B.K., M. Singh and N.K. Samadhiya, 2005. "Prediction of shear strength of model rock joints under constant normal load conditions," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp161-164.

Agrawal, M., A. Cornaro and H. Admiraal, 2023. "Use of Underground Spaces for Resource-Efficient Data Centres: A Case Study of Helsinki, Finland," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp605-610.

Ahonen, L., J. Hietava, K. Korhonen, A. Martinkauppi and K. Piipponen, 2021. "Underground heat mine – potential for large scale production and storage of thermal energy," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Akhmetzyanov, Anvar, Nikolai Bobylev and Wolfgang Wende, 2021. "Geothermal energy in urban planning," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Aldorf J., Vojtasik K., 2002. "The training of Geotechnical and Municipal Engineers at the VSB Technical University of Ostrava," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Alessandro Cassa and Pascal Bauer (Canada) : Le paysage souterrain de la station Lucien-Lallier, Workshop B-4, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Alexandrov, Vadim and Sergey Alpatov, 2012. "Advantages of Mechanized Inclined Tunneling for Subway Station on the Example of "Admiralteiskaya" Subway Station Construction, Saint Petersburg, Russia," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDRom), ISBN-13: 978-981-07-3756-6.

Aliasghari, Habib and Bahman Ahadi, 2007. "Effect of anisotropy on rock mass deformation modulus in Javeh Dam site," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp469-474.

Aliasghari, Habib and Bahman Ahadi, 2007. "Effect of confining pressure on rock mass deformation modulus in Javeh Dam site," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp475-479.

Alizadeh, Razieh, Mohammad E. Zareie and Rezvan Alizadeh, 2012. "Utilization of Underground Space in the Sustainable Architecture of Iran with the Approach of Energy Efficiency," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDRom), ISBN-13: 978-981-07-3756-6.

Al-Mumin, Adil and L.L. Boyer, 1995. "Thermal performance of shaded sunken courtyard as a strategy for energy conservation in buildings in hot arid climates," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp557-562.

Alofe, E., M. Bastani and A. Tryggvason, 2025. "Geophysical imaging of Stockholm's subsurface at a municipal scale— implication for use and planning of its underground urban space," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp432-440.

Alpatov, S. and E. Lomakin, 2014. "Impacts of geotechnical conditions on decisions on integrated underground space use in historic area of Saint Petersburg," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Alpatov, S., 2016. "Conference welcome," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Al-Ssadah, G.A., M.M. Ali, Y. Hong and Z. Đukanović, 2025. "Tri-dimensional sustainability in urban underground transport (integrating environmental, governance, and resilience imperatives)," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp997-1007.

Amar, Georges, 1997. "Transport intermodal et urbanisme souterrain, le projet coeur transport de Paris-la Défense," Workshop C-2, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Amberg, Felix and Marco Bettelini, 2012. "Safety Challenges in Complex Underground Infrastructures," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Amberg, Felix, 2012. "Hagerbach Test Gallery - How to Develop and Run an Underground Research Facility," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Amemiya, K., 2023. "Win-Win Situation Between Urban Developments and Underground Spaces (The Case Study of Tokyo Midtown Hibiya)," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp101-108.

An, Guanfeng, Kunlong Yin, 2002. "The Application of GIS to Urban Underground Space," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

An, Xinmei, Lei He, Zhiye Zhao and Xifei Deng, 2012. "Development of Rock Bolt Models in Discontinuous Deformation Analysis," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Anastasios, Kallianiotis and Kaliampakos Dimitrios, 2012. "Improving Evacuation Plans in Underground Space: The Role of Emergency Exits Location," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Andreadaki-Chronaki, Eleni, 1983. "Vernacular architecture of Greece – earth-sheltered buildings of Santorini," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp25-30.

Andreaki-Chronaki, Eleni, 1986. "Earth sheltered architecture as an alternative for environmental planning – the experience of Santorini," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp6-11.

Aoki, K., Y. Mito, T. Yamamoto and S. Shirasagi, 2005. "Prediction of geological condition ahead of the tunnel face in TBM tunnels by geostatistical mapping and imaging technique," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp171-176.

Aoki, K., Y. Mito, Y. Nakamura, T. Yamamoto, K. Date and S. Wakita, 2005. "Dynamic grouting technique for the improvement of low-permeable rock masses," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp165-170.

Aoki, T., T. Fujikawa and K. Ochi, 1991. "Characteristics of discontinuities in mudstone," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp299-309.

Aoki, T., T. Fujikawa and K. Ochi, 1991. "Characteristics of discontinuities in mudstone rock masses (DOTAN)," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp242-247.

Aoki, Yoji, Atsushi Yoshizawa, Tomoya Taminato, 2016. "Anti-inundation Measures for Underground Stations of Tokyo Metro," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Aoki, Yoji, Saburo Yoshida, Tatsuo Suetsugu and Kennichi Harada, 2018. "Inspection methods for interior finish in Tokyo metro stations," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp374-385.

Aqeel Shakir Al-Adili, 2002. Two Dimensional Models to Assess the Ground Behavior around Tunnel (Baghdad Metro)," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Arapov, Ivan, Meho Saša Kovačević and Karlo Martinović, 2012. "An Underground Space as a Location for a Wastewater Treatment Plant," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Arbanas, Snježana Mihalić, Martin Krkač, Sanja Bernat and Željko Arbanas, 2012. "Use of Existing Data in the City of Zagreb (Croatia, Europe) for the Purpose of Geo-Planning," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Argenti M., 2002. "Underground Spaces: a Journey Between History and Myths, Literature and Architecture," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Arita, Masayoshi, Manabu Kadoshige, Tetsuo Ueda and Taro Kasuya, 2012. "Basic Research of Measures for Improving Existing Underground Transportation Nodes — A Case Study of the Osaka Umeda Underground Shopping Mall," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Arkipov, A., 2023. "Diagnostics of Conditions of Ice Walls, Jet-Grouting Fences and Concrete Slurry Walls After Accidents in Underground Construction of St. Petersburg by Crosshole Sounding Method," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1121-1126.

Arkipov, Aleksei, 2021. "Diagnostics of condition of soil lying in the foundation of sewer collectors and metro tunnels by crosshole sounding method in urban underground space," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Arkipov, Alexey, 2016. "Check and Monitoring of Condition of Concrete Slurry Wall, Jet-grouting and Frozen Soil Fences by Crosshole Sounding Method in Underground Construction," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Asselin, Vincent, 1997. "Paysages d'intérieurs," Workshop B-4, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Assis, André and A. Ferreira, 1997. "Urban problems and underground solutions in Brazil," Workshop B-2, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Attewell, P.B. and A.R. Selby, 1988. "The effects of large ground movements caused by tunnelling in compressible soils," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp316-326.

Augustin, Jean-Pierre, 1995. "Les réseaux souterrains de Montréal: aménagement et espace public," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp189-194.

Autio, Jorma, 1988. "Economic and functional operating characteristics of rock caverns used for various purposes in Finland," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp31-36.

Babendererde, Tim and Philipp Elsner, 2012. "Anchor Recovery with Inclined Compressed Air Tunneling for the City Tunnel Leipzig," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Bae, Min Hyuk, Tai-Jun Kim, Jong-Hyun Lee, Nicholas Mace, Adrian Yeung, Lauw Su Wee and Lip Hoew Goh, 2012. "The Use of 'Superbeam' in Deep and Irregular Excavations," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Baggs, D.W., 1983. "A review of insulation materials for Australian earth-covered buildings," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppD7-11.

Baggs, D.W., 1983. "Australia's first passive solar earth-covered dwelling, Hunter Valley case study, performance results," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppE2-8.

Baggs, David, 1983. "A review of insulation materials for Australian earth-covered buildings," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp255-258.

Baggs, J., 1983. "Management of earth-covered houses for energy efficiency," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppB6-10.

Baggs, Joan, 1983. "Management of earth-covered houses for energy efficiency," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp317-320.

Baggs, K.L., 1983. "Psychological factors influencing attitude to earth-covered dwellings and the underground lifestyle," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp219-222.

Baggs, K.L., 1983. "Psychological factors influencing attitude to earth-covered dwellings and the underground lifestyle," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppA15-19.

- Baggs, S.A. and C.F. Wong, 1986. "Survey of radon in Australian geotecture and architecture," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp111-116.
- Baggs, S.A., 1983. "A Design Aid for Assessing the Suitability of Soils at Earth-covered Building Sites," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppC13-20.
- Baggs, S.A., 1983. "Landscape considerations in the energy-efficient design of roof gardens for earth-covered buildings," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppC21-31.
- Baggs, S.A., 1992. "An Australian ecologically-sustainable, earth-integrated city for the next century," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp14-21.
- Baggs, S.A., M.W. Carter and V.A. Leach, 1983. "Radon daughters and the health of geospacer users," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppB18-27.
- Baggs, Sydney A., 1983. "A design aid for assessing the suitability of soils at earth covered building sites," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp323-330.
- Baggs, Sydney A., 1983. "Introduction – An overview of the Australian Segment," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, pp1-2.
- Baggs, Sydney A., 1988. "Survey and analysis of interior / exterior environments of nine case studies of 'dugout' dwellings, Cooper Pedy, South Australia," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp441-446.
- Bai, X.D., W.C. Cheng and B. Wu, 2023. "Investigating Inherent Mechanism of Loess Adhered to Shield Machine Cutting Tools," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp859-864.
- Bak, J. and A.W. van Es, 1992. "Rijswijk, an underground railway station," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp386-391.
- Bakema, G., 1992. "Cold storage in aquifers in the Netherlands: Physical conditions and steering possibilities during design," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp160-169.
- Balan, Alain, 1997. "EOLE : L'impact architectural sur le génie civil," Workshop C-2, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), *Proc. 7th Intl. Conf. Underground Space*, Montréal, Sep 29-Oct 3 (CD-ROM).
- Baldi A. M., Dezzi Bardeschi C., Dezzi Bardeschi M., Giorgi F., Giorni L., Ricci F., 2002. "The Tunneling for Enlargement Archeological Museum of Chianciano Terme (Siena)," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Bampousis, K., I. Vlachogiannis and A. Benardos, 2025. "Compressed air energy storage (CAES) system in artificial underground caverns within the rock salt formation of Monolithi, Ioannina, Greece," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp956-970.

Bao, X.H., J. Shen, X.S. Chen, X.L. Wu and H.Z. Cui, 2023. "Key Technologies for the Safe Construction of Underwater Super Large Diameter Shield Tunnels: A Case Study," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1151-1154.

Bardazza G., Gioia U., Scesi L., 2002. "Abandoned Mining Tunnels as a Resource for Industrial and Technological Plants," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Bardyn, Jean-Luc, 1995. "Activité en sous sol : conditions de travail et accueil du public," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp69-70.

Barles, S., 1992. "The rise of underground town planning: Edouard Utudjian and the G.E.C.U.S.," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp22-31.

Barles, Sabine, 1999. "Cost and value of urban underground space: the case of Paris," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp372-383.

Barles, Sabine, 1999. "Urban road tunnels, success and check: TEO in Lyons and Prado-Carenage in Marseilles," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp338-339.

Bartz, Janet G., 1986. "Attitudes and residential satisfaction of earth sheltered housing consumers," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp137-142.

Baryshnikov, V.D. and L.N. Gakhova, 2005. "Peculiarities of stress state formation near workings in the transient zone from the open to underground deposit mining," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp177-180.

Batsos, D.V. and I. Tzouvadakis, 2007. "Athens underground parking facilities," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp119-124.

Batsos, D.V. and I. Tzouvadakis, 2007. "Safety of employees engaged in underground projects – the case of the Athens Metro," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp539-544.

Battistelli L., Carluccio O., Lauria D., Proto D., 2002. "Environmental Safety for Urban Underground Space," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Battistelli L., Lauria D. et al., 2002. "Information and Communication in the Underground Space," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Bazinet, G. and J. Bélanger, 1995. "Le système d'information publique, de signalisation, d'affichage et de transaction du réseau piétonnier intérieur du centre-ville de Montréal," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp649-650.

Beaudet, Gérard and P. Lewis, 1997. "La répartition des commerces de vêtements dans les galeries marchandes et sur les artères commerciales du centre-ville de Montréal : complémentarité ou concurrence?," Workshop C-5, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Beccati M., 2002. "Multimedia, Communications and Safety Systems Integration in a Modern Underground," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Behr, R.A. and E.W. Kiesling, 1983. "Economics of shell structures for earth sheltered buildings," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp353-356.

Bélanger, Jules, 1997. "Partenariats et signalisation dans la ville intérieure de Montréal," Workshop A-6, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Belanger, Pierre, 2007. "Underground landscape: the urbanism & infrastructure of Toronto's downtown pedestrian network," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp329-336.

Bélanger, Pierre, 2012. "Underground Urbanization," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Belkaya, Huseyin and Haluk Ozmen, 2012. "The Marmaray Railway Project in Istanbul," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Bell, N., 1983. "Chapel building for Australian Evangelistic Association, Penhurst, N.S.W.," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppE9-15.

Bellotti P., Iannotta F., Serra M., 2002. "Urban High Speed Pass of Florence: an Underground Solution with respect to the Environment and Urban Condition," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Belyaev, Valery and Evgeny Pashkin, 2016. "Integrated Management of Underground Space Center of Moscow Based on the Development of Metropolitan Objects," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Belyaev, Valery, 2016. "Underground Development as Part of the Strategy for Sustainable Spatial Development of the City of Moscow," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Benardos, Andreas, Maria Souladaki, Liana Tampakopoulou, 2009. "Underground Parking Facilities in Athens: Technical requirements and feasibility analysis of two proposed schemes," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp353-358.

Benardos, Andreas, Xenofon Kazos and Nikos Sotiropoulos, 2012. "Design Analysis for the Underground Relocation of a Central Road Artery in Athens," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Bennett, David, 1983. "Built form: The shape of things to come," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp179-184.

Beqiri, J., 2021. "The implications of technological progress in architectural thinking: The future impossibility for an architecture of hiding," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703
<https://iopscience.iop.org/issue/1755-1315/703/1>

Berg, J.J. van den and H. Ehrenburg, 1992. "VerTech: Underground treatment of liquid wastes," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp527-537.

Berg, P. van den, J.S. van der Schrier and H.J. Hergarden, 1992. "Constructing Underground: Influencing geotechnical equilibrium," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp760-770.

Bergeron, Denis, 1997. CNRC - Les codes axés sur les objectifs," Workshop A-4, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Bergh-Christensen, Jan, 2012. "The Multi-Cavern Concept," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Bergue, Jean-Michel, 1995. "Le projet national RERAU: sauvegarde du patrimoine et respect de l'environnement dans les espaces urbains souterrains," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp495-500.

Bernard, Didier, 1995. "A travers le projet Météor, évolution des liens qu'entretiennent le Métro souterrain et la ville de surface," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp539-544.

Beros, Marco, 1999. "One hundred years of underground use for water distribution in France," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp475-477.

Berosch, Marco, 1995. "La prise en compte du coût social pour la pose et la réhabilitation des réseaux souterrains," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp145-156.

Bertholon, Patrick and Olivier Huet, 1995. "Espaces publics souterrains, nouveaux paysages urbains," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp317-322.

Bertrand, L. and C. Rozé, 2025. "Sensitive integration of underground spaces in Helsinki's urban fabric: from geology to architecture," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp143-154.

Besner J., 2002. "The Sustainable Usage of the Underground Space in Metropolitan Area," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Besner, Jacques, 1995. "Les défis du partenariat dans le développement souterrain des grandes métropoles," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp29-34.

Besner, Jacques, 1997. "Genèse de la ville intérieure de Montréal," *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), *Proc. 7th Intl. Conf. Underground Space*, Montréal, Sep 29-Oct 3 (CD-ROM).

Besner, Jacques, 1999. "Incentives used in the development of the Montreal's underground city," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp367-371.

Besner, Jacques, 1999. "The Diefenbunker, from cold war fortress to cold war monument," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp22-28.

Besner, Jacques, 2007. "Develop the underground space with a master plan or incentives," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Bernardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp1-8.

Besner, Jacques, 2012. "Resilience of Municipal Governments to Man-Made Disasters in the Urban Underground Space," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Besner, Jacques, 2012. "Underground Cities for Peoples: The "Humanization" of the Montreal Underground City and its Metro," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Besner, Jacques, 2014. "Planning and developing an underground city with or without a master plan: The Montreal case," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Besner, Jacques, 2014. "Works of art in metro stations: The Montreal example," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Bezrodny, Konstantin, Mikhail Lebedev, Roman Larionov, 2016. "Preservation of Urban Historic Centers," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Bhattacharjee, S. and J.G. Niyogi, 2023. "Urban Characteristics of Underground Cities and Extraterrestrial Colonies: Challenges and Opportunities," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp551-557.

Bianchi W., Capaldini P., Dalenz Cultrera A., Macchia G., Pendenza A., et al., 2002. "Alternative Mobility for Spoleto, a Town Open to Humans," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

- Bignand, Michel, 1995. "La sécurité dan les grands ensembles souterrains," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp25-28.
- Bignand, Michel, 1995. "Les mesures de sécurité dan les tunnels à petit gabarit," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp57-62.
- Bizet, Bernard, 1995. "Les relations interdomaniales dans le sous-sol," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp117-122.
- Blick, E.F. and J.G. Eyerman, 1986. "R-Factor for earth bermed buildings," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp175-182.
- Blunier, P., L. Tacher and A. Parriaux, 2007. "Systemic approach of urban underground resources exploitation," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp43-48.
- Bobylev, N., 2005. "Geocological studies for underground space development," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp48-51.
- Bobylev, Nikolai, 2016. "Transitions to a High Density Urban Underground Space," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Bobylev, Nikolai, 2018. "Geosystem and ecosystem services – exploring opportunities for inclusion in urban underground space planning," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp238-248.
- Bobylev, Nikolai, Dexter V. L. Hunt, Ian Jefferson and Christopher D. F. Rogers, 2012. "Sustainable Infrastructure for Resilient Urban Environments," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Bocchimuzzo, F., A. Perazzone, G.M. Cavallero and E. Piovano, 2007. "The Turin railway link," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp79-88.
- Bodolec, Caroline, 1999. "Cave dwelling in Shaanbei," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp232-241.
- Boer, E. de, 1992. "Planning considerations for long distance tunneling in the Netherlands," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp519-526.
- Boileau, Serge A., 1997. "Gestion et réhabilitation des réseaux souterrains pour le bien-être de la ville souterraine, Workshop D-6, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Boisvert M., 2002. "From Connexity to Connectivity: Enhancing the Efficiency of Interior Walkways with the Current Extensions of the Montreal's Indoor City," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Boisvert, Michel, 1997. "Le zonage vertical : pour un nouvel aménagement de la fonction restauration dans la ville intérieure montréalaise," Workshop C-5, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Boisvert, Michel, 2007. "Extensions of indoor walkways into the public domain, a partnership experiment," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp519-526.

Boisvert, Michel, 2009. "The Impact of Indoor Walkway Systems on the Use of Public Transit in Montréal and Toronto," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp229-235.

Bosch, J.W., 1992. "An underground bus terminal in Amsterdam – construction," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp666-673.

Bosco B. B., Galbiati D., Pasqualini A., 2002. "Compaction Grouting for "Broletto" (Town Hall) – Pavia," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Bowers, D.A., 1986. "Geocomposites – A systems approach," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp103-106.

Boyer, L.L. and G. Kim, 1995. "Design of lightcourts and interior atria for people and energy savings in large underground urban structures," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp183-188.

Boyer, L.L. and M.R. Atif, 1988. "Comparison of daylighting distribution in an underground dwelling high in the Rockies using computer algorithms, scale models and on-site measurements," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp470-475.

Boyer, L.L. and M.R. Atif, 1992. "Atrium daylighting in underground libraries," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp318-328.

Boyer, L.L. and R.W. Roush, 1983. "Daylighting analysis for an earth covered office building," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp259-264.

Boyer, L.L. and W.T. Grondzik, 1983. "Comfort assessment in earth covered dwellings in the U.S.," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp245-250.

Boyer, L.L. and W.T. Grondzik, 1983. "Energy performance of earth covered dwellings in the U.S.," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp295-298.

Boyer, L.L. and W.T. Grondzik, 1986. "Sunlighting, daylighting and passive solar heating for earth covered dwellings," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp220-223.

- Boyer, L.L., 1986. "Daylighting performance of an earth covered dwelling at high altitude," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp252-256.
- Boyer, L.L., 1986. "Design and construction of a remote, fully passive, two-story earth covered residence at high altitude," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp230-233.
- Brachos, G. and A. Benardos, 2007. "Thermal loads analysis of an underground cold storage facility," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp237-242.
- Brandl, Heinz, 2016. "Geothermal Geotechnics for Urban Undergrounds," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Brassinga, H.E., G. Hannink, P.A.A. Roelands and D. Wilschut, 1992. "Geotechnical aspects of underground structures in Rotterdam," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp674-682.
- Bregeon, Jacques, 1995. "Aménager le sous-sol," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp341-346.
- Breidburd, Aleksandr, 2014. "Underground utility networks function for integrated underground urban space use," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Breton, Erwan, 2016. "Underground Vegetal Scenography: Benefits and Installation Conditions," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Brewer, J.F. and V.P.Y. Kwan, 2018. "MTR railway tunnel crossings in Hong Kong," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp176-189.
- Britz, R.D., 1986. "Modular method of making a building Earthship structure," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp263-266.
- Broch, E. and J.A. Rygh, 1988. "Recreational facilities in rock in Norway," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp502-508.
- Broch, Einar, 2007. "Use of the underground in the City of Trondheim, Norway," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp175-180.
- Broere, W., 2023. "Urban Underground Space for Resilient Cities," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp611-616.
- Broere, Wout, 2012. "Urban Problems - Underground Solutions," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Broto A., 2002. "The A86 Underground Link-up to the West of Paris - Safety in Tunnel Reserved for Light Vehicles," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Broto, A., M. Bargéty and B. Moreau, 1995. "Les projets de voies souterraines réservées aux véhicules légers développés par Cofiroute," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp475-480.

Brousse G., 2002. "S.I.A.A.P.'s Part in the Utilisation of the Greater Paris Underground Space," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Brousse, G., 2005. "New developments for S.I.A.A.P.'s part in the utilization of the greater Paris underground space," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp52-54.

Brunner W.G., 2002. "Development of the Slurry Wall Technique and Slurry Wall Construction Equipment," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Brunner, W.G., 2005. "Special foundation construction for deep open excavations in Berlin," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp55-59.

Buang, Salmah and Jenny Woo, 2012. "Connecting Spaces – Recent Singapore MRT Stations," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Bull, C., 1983. "Earth-covered Roofs of Commercial and Cultural Sydney Buildings: Theory and Practice," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppC8-12.

Bull, C., 1983. "Earth-sheltered buildings of Sydney: A landscape architect's viewpoint," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp89-93.

Bull, C., 1983. "Earth-sheltered buildings of Sydney: A landscape architect's viewpoint," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppC2-7.

Bulychev N., 2002. "Theory and Methods of Underground Structures Design," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Burdizzo, B., B. Cavaglia and L. Peretti, 2007. "The development of the underground infrastructure of the system of mobility in Torino," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp273-278.

Burdizzo, B., L. Filicetti, S. Pelizza and L. Peretti, 2007. "The underground option for the new railway line between Turin and Caselle airport in the Turin urban area," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp49-56.

Cachia, Gilles, Keith Lee and Clément Cacarie, 2018. "Adaptation of horse shoe tunnel section for variable width and formwork optimization," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp760-774.

Cafofo, P., L. Ribeiro e Sousa and F. Moura, 2007. "Innovative underground works at Madeira Island, Portugal," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp137-144.

Cai, Xiani and Zhilong Chen, 2007. "Probe into control and guidance system of underground space planning for new urban center – an example of underground space planning for the New District Airport in TangShan," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp507-512.

Cai, Xiuyue, 1988. "The utilization and development of the space in subway stations – some ideas on the plan of Xi Dan station," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp110-115.

Campbell, D., J. de Beer, D. Lawrence, M. van der Meulen, S. Mielby, D. Hay, R. Scanlon, I. van Campenhout, R. Taugs, I. Eriksson and M. Bacic, 2014. "Sub-Urban – transforming relationships between geoscientists and urban decision-makers (Cost Action TU1206)," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Campbell, Diarmad, Johannes de Beer, Susie Mielby, Ignace van Campenhout, Michiel van der Meulen, Ingelöv Eriksson, Guri Ganerod, David Lawrence, Mario Bacic, Alex Donald, Constantin Radu Gogu, Jan Jelenek, Helen Bonsor, Cecile Le Guern, Gillian Dick, Gert Laursen, Carl Watson, Jeroen Schokker, Grzegorz Ryzinski, Stephanie Bricker, Renate Taugs, Luisa Goncalves, Nada Rapantova, Djurdjica Stojanovic, Igor Pesevski, Mitja Janza, Beatriz Mozo Lopez, Ray Scanlon and Marie Cowan, 2018. "Towards integrated planning through improved geoscience knowledge and use of the urban subsurface – the EU COST SUB-URBAN ACTION (TU1206)," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp72

Campbell, W.S., 1992. "Long-term economic evaluation of earth-sheltered and other buildings," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp591-600.

Canizares, L and J. Pé, 1995. "La voiture sous la ville: l'urbanisme souterrain, une alternative aux problèmes posés par la circulation et le stationnement des automobiles dans la ville moderne," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp365-372.

Cao, J.Y., Z.G. Yuan and H. Wang, 2007. "Engineering characteristics of rock-soil masses and engineering suitability evaluation for underground projects," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp379-384.

Cao, Li-qiao, Zhou Ding-Heng, Zheng Gang, 2009. "Finite Element Method Analysis of the Bottom Upheaval in the Excavations of Deep Foundation Pit," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp560-566.

Carmody, J. and R. Sterling, 1991. "Design guidelines for people in underground spaces," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp641-646.

Carmody, J. and R. Sterling, 1991. "Design guidelines for people in underground space," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp397-402.

Carmody, J., 1992. "Designing underground facilities for people: A case study of an office design," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp235-241.

Carmody, J., L.S. Shen, Y.J. Huang, L.G. Goldberg and G.D. Meixel, 1988. "A comprehensive method for predicting residential energy savings due to basement insulation," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp404-409.

Carmody, J.C. and R.L. Sterling, 1986. "Design strategies to alleviate negative psychological and physiological effects in underground space," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp127-136.

Carmody, John, 1995. "Development of an underground master plan at the University of Minnesota," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp237-242.

Carmody, John, 1995. "Potential problems and solutions related to the interior design of road tunnels," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp563-568.

Carpenter, P.R., 1992. "Earth sheltering and planning in the United Kingdom," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp198-204.

Carpenter, P.R., 1992. "Energy innovations at Caer Llan," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp339-350.

Carpignano A., Debernardi M.L., Patrucco M., 2002. "Risk quantifying and Management in Underground Excavations: a Possible Approach," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Carrubba S., 2002. "The Ancient Underground Spaces of Palermo: Study of a Wise Exploitation of the Territory," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Carter, D.N., 1983. "Earth sheltered experience and performance - 3 elementary schools," (long abstract only) *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp185-186.

Castiglioni, Federica and E. Lavagno, 1999. "Spaces and functions in underground constructions," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp164-175.

Ceccotto, Stefano and Msaud Arch., 2021. "Ryazanskaya Transit Oriented Development," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Cena, K., L. Sliwowski and J.R. Spotila, 1988. "Thermal comfort of humans in normal and special environments," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp492-495.

Champagne, M. and R. Dubeau, 1997. Communications et opérations (incendie en souterrain), Workshop A-3, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Chan, B.S., W.B. Jian and Q. Wu, 1988. "The resource significance of the Karst underground space," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp280-282.

Chan, Chin Loong, Bak Kong Low and Melvin Wei Meng Ng, 2012. "Probabilistic Sensitivity Analysis Illustrated for an Underground Rock Excavation," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Chan, I.H.H., L.W.H. Tsang and Y.K. Ho, 2023. "Engineering a New Future of Cavern Development in Hong Kong," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp559-568.

Chan, I.Y.S. and Z. Dong, 2023. "The greener the better? A virtual reality experiment for the effects of greenery types on underground space occupants' psychophysiological health and cognitive performance," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp341-348.

Chan, Isabelle, Chee Kiong Soh and Hao Chen, 2021. "Enhancing underground development users' health through facilities management: a study of the underground metro system in Hong Kong," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Chan, Y.H., K.W. Ng, G. Vallipuram, T.H. Guan, S. Anwar, T. Tang, B. Chin and J. Kachappilly, 2014. "Feasibility study of underground warehousing and logistics facility (UWLF) at Tamjong Kling, Singapore," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Chang, Anthony, Kian Wee Ng, Hans C. Schmid, Wooi Leong Tan, Kum Chun Seetoh, Derek Wong, Joo Heng Seow, Francis Wong and Audi Noel Capellan, 2012. "Feasibility Study of Underground Science City at Kent Ridge, Singapore Paper 2: Planning, Architectural, Engineering, Fire Safety and Sustainability," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Chang, Dongkuk, 1995. "Integrated multi-level circulation in dense urban area: the effect of multiple interacting constraints on integrated urban complex design problems," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp79-84.

Chao, Gao, Wu Kejie and Chen Qin, 2021. "The main characteristics of urban underground space regulatory plan from the perspective of China's spatial planning: A practice in Beijing Sub-Center," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

- Chatani, M., K. Yagi, K. Ishikawa, N. Ando, K. Yashiro and S. Nonaka, 1988. "Analysis of recognition of route in underground shopping areas of Tokyo and Yokohama," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp433-436.
- Chatani, M., K. Yagi, K. Ishikawa, T. Najazawa, K. Yashiro and T. Taniguchi, 1988. "Research on spatial perception in underground shopping areas of Tokyo and Yokohama," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp437-440.
- Chatani, M., K. Yagi, T. Nakazawa and K. Yashiro, 1986. "Underground dwellings in the loess land of China," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp36-40.
- Chee, R.L.G., H.H. Chan and K.W. Seto, 2023. "Planning and Implementation of the Joint Cavern Development at Anderson Road Quarry Site," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1091-1100.
- Chelkoff, Grégoire, 1995. "La fabrication des ambiances souterraines: Présence du public et configurations sensibles (voir et entendre)," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp295-302.
- Chelkoff, Grégoire, 1997. "Transitions sensibles et intériorité souterraine : dispositifs et configurations," Workshop B-1, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).
- Chen S.G., Ong H.L., Tan K.H., 2002. "A Study on Tunnel Separation Distance in Urban Underground Development," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).
- Chen Z.L., P. Zhang, H. Wang and H.Y. Yang, 2009. "Study on construction of urban road tunnels in city center of China," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp60-68.
- Chen, B.J., Q.Y. Chi and X.K. Li, 1988. "Environment and health in underground hospital," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp399-403.
- Chen, Cheng, 2014. "Primary research on the development mode of underground space," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Chen, G. and H.T. Yu, 2023. "A Unified Analytical Solution for Seismic Response of Deep Tunnels," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp201-206.
- Chen, H., D.M. Zhang and X.L. Yang, 2023. "Nonlinear Analysis of Pseudo-Dynamic Active Earth Pressure Considering a Multi-segment Rotational Failure Mechanism," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp963-968.
- Chen, H.Y., W.Q. Bai, R.L.K. Tiong, P.C. Chong and Y.H. Chan, 2014. "Quantitative analysis on public implication and expectation towards underground facility development," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Chen, Huimei, Lei He and Zhiye Zhao, 2012. "Modeling the Hydro-Mechanical Interaction for Fractured Rocks Mass with Discontinuous Deformation Analysis (DDA)," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9,

Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Chen, Jun and Ke Wang, 2012. "Practice and Exploration of Urban Underground Space Planning and Construction in Beijing," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Chen, Jun and X.D. Shi, 2007. "A probe into the development and utilization of underground space of new towns in Beijing," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp297-302.

Chen, Jun, 2009. "Development and utilization of the underground space of the conservation districts of historic sites in the old city of Beijing – opportunities and challenges," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp42-48.

Chen, Kai-Hua, Zhuo Zhang, Shao-Ming Liao, Fang-Le Peng, 2016. "Durability of Joint Components of Shield Tunnel under High Water Pressure in Erosion Environment," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Chen, L.D., D.S. Zhang and Y. Shu, 1988. "The evaluation of demand for underground space in urban area and optimal distribution," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp165-171.

Chen, Q., 2025. "Strengthening underground space connectivity to enhance the efficiency of underground space utilization: a case study of Beijing practices," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp224-231.

Chen, Q.G. and K.X. Wang, 1992. "Thermal process of cooled rock surrounding a deep buried orange cellar," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp457-466.

Chen, Q.G., C.F. Liu and Y. Feng, 1999. "Study on the wind water environment in reconstructing the cave dwellings in cliff-side," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp220-224.

Chen, Qigao, 1986. "Research on the thermal performance of a sweet orange cellar," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp190-194.

Chen, Qigao, 1986. "Theory of heat transfer in a tunnel with natural ventilation," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp205-209.

Chen, Qigao, 1988. "A program on wastes control for a heat power plant by an underground system," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp416-421.

Chen, Qigao, 1995. "Theory and practice on a system of comfort air-conditioning with outdoor air flow passing through shallow buried pipes," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp617-622.

Chen, X.L. and Q.B. Zhang, 2023. "Towards Sustainable Tunnelling: An Integrated Framework for Carbon Assessments in TBM Tunnels," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp659-664.

Chen, Y. and Z. Fu, 1992. "Evaluation of acoustical environment in some underground cinemas in China," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp361-365.

Chen, Y.K., Y. Chu, G.J. Cai, S.Y. Liu and A.M. Han, 2023. "The Application of Electrical Testing Techniques in Special Soil Foundations: A Review," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp891-896.

Chen, Z.L., C. Zhang, H. Zheng, Y. Jin and D.U. Dong, 2009. "A preliminary design of the underground space exploitation of the core district of Hangzhou Eastern New City Zone," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, -140.

Chen, Z.L., H.D. Gong, Y.B. Wang, Z.R. Yuan and H.Y. Yang, 2007. "The study of fuzzy comprehensive evaluation method using in underground space resources quality evaluation," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp409-416.

Chen, Z.L., W. Ru, Y.J. Tang and H.Y. Yang, 2005. "The design of underground space of new Qianjiang CBD of Hangzhou City – a model of the exploitation and utilization of urban underground space," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp65-68.

Chen, Z.L., X. L. Peng, Y. Sun and D.J. Guo, 2014. "The research on the development and utilization of urban road underground space," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Chen, Z.L., X.B. Yang, W. Li and Z.W. Zhao, 2014. "Research on the humanized design approach of the underground living space based on environmental psychology," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Chen, Z.M. and F. Xiao, 2023. "Quantitative Analysis of Flow Channeling Effect on the Exploitation of Geothermal Energy and One Possible Counter Method," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp241-248.

Chen, Zhilong and Jiang Yi, 2005. "Probe into the underground parking system in downtown areas of cities," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp60-64.

Chen, Zhi-Yi, Zu-Yan Shen, Yu Huang, 2002. "Underground Space Utility and Sustainable Development in Shanghai," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Cheng, Chihao, Shaoming Liao, Lisheng Chen and Guoqiang Zhao, 2018. "Precision analysis and control of pipe roof jacking below urban expressway: a case study of large underpass in Shanghai," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp651-660.

Cheng, Chihao, Shaoming Liao, Lisheng Chen and Junzuo He, 2021. "Jacking precision control of pipe roof and large box culvert below urban expressway-a case study of a large underpass in Shanghai," *Proc.*

17th World Conference ACUUS, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Cheng, Chihao, Shaoming Liao, Lisheng Chen and Weizhong Xu, 2018. "Study on ground suitability and construction countermeasures of metro shield in China," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp843-856.

Cheon, Janghwan, 2014. "Core design as elements for eco-friendly campus," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Cherif, M. and M. Hadid, 2014. "Effect of random spatially soil properties on 3-D foundation vibration based on half-space," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Cherkashin, Stanislav, 2016. "Installation of the Pipelines Made of Ductile Iron (DI) With the Usage Of Horizontal-directional Drilling Technique (HDD) For Water Supply Treatment Service and Sewerage Pipelines Construction and Reconstruction," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Chidire, A., J. Chan, B. Veerasamy, L. Yang, H. Tjiawi, J. Poh, C. Chuah, J. Lim, W. Wu, T. Massier and A. Romagnoli, 2023. "Geothermal Energy-Driven Electricity Generation Model for Singapore," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1173-1176.

Chikahisa, Hiroshi, Atsushi Enomoto, Masanobu Miyahara and Hideto Mashimo, 2012. "Current Plan of Underground Openings for International Linear Collider in Asia and the Development of its Guidelines," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Chiu, Jessica Ka Yi, Regula Frauenfelder, Malte Voege, Carsten Hauser, Helge Smebye, Geir Dehli and Per Anton Fevang, 2018. "Multi-method infrastructure planning and monitoring – increasing efficiency by integrated planning and automated technologies," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp726-734.

Choo, L.Q., Z.Y. Zhao and H.M. Chen, 2014. "Hydro-mechanical analysis of fluid flow through heterogeneous conductivity fields by discontinuous deformation analysis," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Christopoulos, George I., Chengwen Luo, Vicknaeshwari Marimuthu, Vinita Venugopal, Josip Car, Kian Woon Kwok and Chee-Kiong Soh, 2018. "Communicating and promoting underground spaces to policy makers, users and the public," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp563-569.

Christopoulos, George I., Hock Soon Seah, You Win Yeap, Adam Roberts, Elliot Chan, Vicknaeshwari Marimuthu and Chee-Kiong Soh, 2018. "Customizable, virtual-reality-based, assessment, design and training tool for underground office spaces," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp688-694.

Christozov, Dimitri, 1995. "Underground urban planning in Montreal: a tool for a sustainable metropolitan development," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp353-358.

Christozov, Dimitri, 1997. "Montreal underground: a case for indoor city planning," Workshop B-2, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Chung, S.K., E.S. Park and K.C. Han, 2007. "Feasibility study of underground LNG storage system in rock cavern," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp501-506.

Collin, J.J. and R. Michalski, 1995. "Interactions constructions souterraines / eaux souterraines: la ville et sa nappe," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp453-458.

Corken, E.S., 1992. "Earth sheltered tradition in early Ireland with several modern examples," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp406-417.

Corken, Eve Sinclair, 1995. "Contemporary aspects of the earth sheltered tradition in Ireland," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp529-536.

Cornaro, A. and J. Dellenbag, 2025. "Heat storage underground: a feasibility study in Zurich's urban core," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp507-514.

Cornaro, A. and M. Kompatscher, 2023. "Underground Space Use for Renewable Energy Production and Storage," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp259-266.

Côté, Ghislain, 1997. La prévention des incendies dans le métro de Montréal," Workshop A-3, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Cottrell, Richard, 1983. "Building systems: An energy analysis," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp191-196.

Cui, Chun-yi, Sun Zhan-qi, Wu Hong-jun, Zhao Ying-hua, 2009. "Numerical Analysis of the Characteristics of Piled Raft System in Construction Process of Deep Pit Excavation," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp554-559.

Cui, J.Q., A. Allan and D. Lin, 2014. "The development of underground pedestrian systems: a SWOT analysis and literature review," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Cui, J.Q., D. Lin and Z.L. Chen, 2007. "The environmental benefit analysis of urban underground expressway," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp261-266.

Cui, Ying, Yurie Hirasaka, Kiyoshi Kishida and Makoto Kimura, 2012. "Experiments on Mechanical Behavior of Shallow NATM Tunnels in Improved Ground," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Cui, Z.S. and Z.M. Gu, 1988. "The EP-PUR elastic sealer – a sealing material for underground engineering," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp208-210.

Cui, Zhen, Qian Sheng, Xianlun Leng, Jian Chen and Jiajin Liu, 2012. "Seismic Stability Assessment of the Baihetan Hydropower Plant Underground Complex," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

D. Kaliampakos, D., A. Benardos, P. Nomikos, V. Marinou and I. Zevgolis, 2023. "Developing Mountainous Tunnels in Greece—The Case of the Melissourgou Tunnel," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp195-200.

Dabas, M., A. Hesse and A. Tabbagh, 1995. "Géophysique de subsurface et reconnaissance archéologique du sous-sol urbain," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp213-218.

Dai, Cheng-yuan, Li Ming-guo, Zhang Da-wei, Li tao, 2009. "Study on the Technology of Excavation Construction Control for Shallow-buried Urban Tunnels and Numerical Simulation," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp548-553.

Dai, Qing, Fan Xin-tai, Sun Yong-hai, 2009. "Solution to Planning Management of Connection between Rail Transit Stations and Around Underground Space—Taking Shenzhen as an example," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp389-396.

Dal Negro E., Maltese C., Pistolesi C., 2002. "Use of Advanced Alkali free Accelerators for High Performance Shotcrete," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Damigos, D. and D. Solomos, 2007. "Re-designing the ventilation system to control unexpected strata gases during tunnel construction," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp551-556.

Dang, G.J., X. Jin and Y.C. Guo, 2023. "Influence of Cross Mining Tunnel on Geothermal Resource Utilization in Abandoned Mines," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp497-506.

Danilo Furundžić, Dejan Filipović, Nebojša Bojović, 2025. "Building below: architecture between finance and subterranean futures," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp78-91.

Danilov, A. and V. Chizhikov, 2025. "Optimization of tunnel ventilation systems in fire emergencies," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp705-712.

De M Raposo, Luís Carlos M M, 2021. "The implementation of network governance for sustainable urban underground usage, a comparative analysis of the case studies of the cities of Rio de Janeiro, Brazil and Helsinki, Finland," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual

Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

De Mulder, Eduardo F.J., R. Hack and D. van Ree, 2007. "Sustainable use and management of the subsurface," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp23-30.

De Rienzo F., 2002. "Spatial Modeling of the Cementation Degree and the Lithotypes in the Subsoil Turin Urban area (Northern Italy)," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

De Rienzo, Francesca, P. Oreste and S. Pelizza, 2007. "3D GIS supporting underground urbanisation in the City of Turin (Italy)," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp397-402.

De WILDE S., 2002. "Underground Spaces at the Heights," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Debrock, S. and T. Coppens, 2023. "Transition Management as a Policy Model to Reach Sustainable Use of Urban Underground Space," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp543-550.

Debrock, S., 2021. "The onset of underground urban planning in Flanders," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Della Valle N., 2002. "Barcelona Metro Line 9 - The Largest Metro Project in Spain," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Demenkov, Petr and Pavel Verbilo, 2016. "Methodology of Prediction Stress-strain State Deep Foundation Structures of Subway Station's Taking Into Account Stages of its Construction," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Demers, Clément, 2016. "Over & Underground Spaces & Networks Integrations a Case Study: The International District of Montreal," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Demeshko, E.A., 2005. "Analytical approach to determining the mechanical and technological characteristics of TBMs and shields with rotating cutterhead and disc cutters," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp69-71.

Denda, Atsushi, T. Mimuro and M. Noda, 1988. Slaking characteristics and mechanical behaviours of soft rock in Japan," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp366-371.

Deng, J.P., Y. Tan, Y.T. Zhou and W.Z Jiang, 2023. "Numerical Study on Flooding of Staircase Inside Subway Station," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp775-782.

Desbiens, Marie-Élaine, 1997. "Appui et soutien essentiel à la réhabilitation des infrastructures urbaines au Québec," Panel "Future of indoor cities," *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Di Cristofalo, S., S. Orioli, G. Silvestrini and S. Alessandro, 1988. "Thermal behaviour of 'scirocco room' in ancient sicilian villas," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp45-47.

Dias D., Kastner R., Maghazi M., 2002. "Slurry Shield Tunneling: Simulation of the Effect of Slurry Infiltration on The Face Stability," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Dieci, M., L. Soldo, A. Pellegrino, D. Peila, S. Pelizza and M. Filippi, 1995. "A research proposal for the examination of psychological and physiological reactions to using urban underground mass transport systems," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp105-114.

Dinis da Gama, C. and G. Paneiro, 2007. "Minimization solutions for vibrations induced by underground train circulation," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp571-576.

Dinis da Gama, Carlos, 2007. "Permanent control of displacements in tunnels," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp447-452.

Diniz, Daniela, 2012. "Underground Urbanism as a Response for Solving Social Inequalities," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Dong, Y.H., F.L. Peng and N. Bobylev, 2023. "Unraveling the Spatiotemporal Development Regularities of Metro-Led Underground Space in China Based on Multisource Data," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1189-1192.

Dong, Y.H., X.W. Luo, F.L. Peng and W. Broere, 2025. "The evolving resilience of global metro networks," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp476-487.

Dong, Yun-Hao and Fang-Le Peng, 2018. "Investigation and consideration on integrated development of metro-led underground space: a case of metro line 10 in Shanghai," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp622-631.

Dong, Yun-Hao, Fang-Le Peng, Xiao Xing and Xiao-Lei Wu, 2021. "Spatial accessibility and functional layout impacts on urban underground space development: a case study of Shanghai," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Dou, S.Q., Y. Shen and H.H. Zhu, 2023. "How Can Information Technology Contribute to Low-Carbon Tunnels: A Systematic Review," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1197-1200.

- Doublet, M. and P. Duffaut, 1992. "State-of-the-art of underground space use in France," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp215-224.
- Doublet, Maurice, 1995. "Bilan d'une expérience," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp15-18.
- Douglas, T.H., 1992. "Underground space construction – problems, limitations and opportunities," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp656-665.
- Doyle, M., 2025. "Geological aspects of urban personas: a computational ai pipeline for the multidimensional characterization of city streets in the province of Québec," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp794-795.
- Doyle, Michael, 2014. "What future for the urban underground? Subsurface and surface potential in San Antonio, Texas," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Drakouli, Eleni and A. Mavrikos, 2007. "Incorporating underground space in urban planning," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp317-322.
- Dridi, W. and T. Taji, 2023. "Rethinking the Role of Underground Architecture in Contemporary Japan: Project Trends Observed in Shinkenchi Magazine (2000–2020)," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1pp1-8.
- Du, Y., Y.H. Dong, N. Bobylev and F.L. Peng, 2023. "Robustness Evaluation of Metro-Led Underground Space Based on Complex Networks: A Case Study in Shanghai," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp599-604.
- Duddeck, H., D. Rabe and D. Winselmann, 1988. "Design criteria for immersed tube tunnels, experience gained by the autobahn-tunnel under the River Ems," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp172-179.
- Duddeck, Heinz, 1988. "Guidelines for the design of tunnels," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp180-188.
- Dudouit, Francois and Gilles Cachia, 2018. "Hong Kong - SCL 1103 – a redesign exercise and the lessons learnt," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp200-208.
- Duffaut P., Labbé M., 2002. "From Underground Road Traffic to Underground City Planning," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).
- Duffaut, P., 2007. "Safe nuclear power plants shall be built underground," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp207-212.
- Duffaut, Pierre and M. Labbé, 1995. "Offre et demande d'espace souterrain," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp129-134.

- Duffaut, Pierre, 1997. "Insertion des ouvrages souterrains dans un paysage géologique," Workshop D-3, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).
- Duffaut, Pierre, 2009. "Why underground works must be planned as multipurpose projects?" *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp19-24.
- Duhem, B. and F. Beaucire, 1995. "Les espaces souterrains, points nodaux de las ville étalée," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp311-316.
- Dumontier, Jean and C. Bettinger, 1997. "Création d'oeuvres d'art dans le cadre du Montréal souterrain," Workshop B-3, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).
- Dunkel, F., R. Sterling and G. Meixel, 1986. "Underground bulk storage of shelled corn in Minnesota," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp78-85.
- Dunkel, F.V., R.L. Sterling, G.D. Meixel and L.D. Bullerman, 1988. "Underground structures for grain storage - interrelatedness of biologic, thermal and economic aspects," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp1-6.
- Dupuis, Lucie, 1997. La sécurité des personnes dans le monde souterrain - un travail d'équipe," Workshop A-2, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).
- Eberspacher, W., 1986. "The Earth Systems structural forming system," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp257-262.
- Edelenbos, J. and R.A. Monnikhof, 1997. "Is there a future for the use of underground space in The Netherlands?," Workshop B-6, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).
- Eisenhofer, F., 1988. "Ferro cement domes set on coastal sand dunes in New Zealand," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp16-21.
- El Bartali, H. and S. Afif, 1988. "Temperature variations in underground grain storage structures," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp488-491.
- El Houssine, Bartali, 1986. "Underground storage pits in Morocco," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp68-73.
- Endicott, John, 2014. "The allocation of geological risk in contracts for rock tunneling," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Endo, M., 1991. "Design of the underground expressway in Tokyo," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp206-213.
- Endo, M., 1991. "Design of the underground expressway in Tokyo," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp153-157.

Eremenko, Dmitry, 2016. "Specificity of Technical Regulation in Russian Federation, its Significance for Development of Trechless Installation Methods," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Eremin, Dmitriy and Diana Eremina, 2016. "Influence of Granulometric Composition Structure of Anthropogenic- reformed Soil on Ecology of Infrastructure," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Erichsen, C., 2005. "Rock Mechanics as a basis for successful rock engineering for approximately 100km of tunnels for the new high-speed railway lines Stuttgart 21 and Wendlingen-Ulm," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp8-14.

Escobar M., 2002. "The Next Urban Frontier - The Inner City and the Role of the Evolution of Real-Property Law in the 21st Century - A Montreal Perspective," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Excel, P.H. van, 1992. "Underground construction in the Netherlands," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp114-122.

Fagervik, Finn, Petter Plassbak and Tiong Yong Teo, 2012. "Norwegian Project Management Principles Applied in the Jurong Rock Cavern Project," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Fairs, Raymond, 2009. "The Virtual Seaport," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp242-252.

Fan, Y.Q and L. Zhang, 2025. "Digital intelligence empowers the development and utilization of underground space in megacities," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp808-819.

Fan, Y.Q. and H.Y. Yu, 2014. "Research of urban underground space planning for ecological protection," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Fan, Y.Q., Z. Zhang and M.J. Yu, 2014. "Design of how to improve the business vigor of underground commercial space in an urban traffic hub," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Fan, Yiqun and Ke Yang, 2016. "Consideration about Effects of the Expo Axis Underground Space on Development of Surrounding Regions as "Urban Catalysis", " *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Fan, Yiqun, 2018. "Study on setting reserve protection layer in urban underground space planning," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp386-393.

Fang, Z. and W. Wu, 2023. "Stress-Dependent Permeability of Grouted Rock Fractures," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1161-1162.

- Fang, Z., H. Zhang and Y.F. Lin, 2025. "Research on underground space image and practice of three dimensional urban design," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp182-190.
- Faraggiana G., 2002. "Underground Living Spaces in Low Alps Inside the Old Mines of Brosso," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).
- Faroqy, A., W.Z. Zhai, I. Jefferson, N. Metje, K. Hansard, S. Luo, J. De Waele, H. Spinks, M. Pennington and P. Konieczny, 2023. "The Effect of a Supporting Fluid on a Pile's Shaft Resistance. Experimental Study at NBIF Facility," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1071-1076.
- Farray, D., 1997. "La ville problématique de l'espace souterrain," Workshop B-6, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), *Proc. 7th Intl. Conf. Underground Space*, Montréal, Sep 29-Oct 3 (CD-ROM).
- Federighi, Valeria and Filippo Fiandanese, 2018. "Underground projects in Chinese new towns. promise and invisibility in three case studies," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp822-830.
- Feng, Long, Shu Yu, 2009. "Study on Ecological Ventilation Technology and Evaluation System of the World Expo Underground Space," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp452-458.
- Feng, X. and Y. Lin, 1992. "Knowledge-based expert system for support design in tunnel engineering," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp789-797.
- Feroz, Michael and Erika Moonin, 2007. "Underground space utilization for developing sustainable water supply for southern Nevada in a sensitive environment," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Bernardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp125-130.
- Filippova, Yulia and Lyubov Matyushina, 2016. "Main Activities in the Field of Environment Protection and Environmental Safety in Operation of St. Petersburg Metro Facilities," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Firbank, J.J., 1983. "Low-technology, earth shelter, construction system utilizing 'Triform'," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp381-386.
- Firbank, J.J., 1983. "Low-technology, earth-shelter, construction system utilizing 'Triform'," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppD27-32.
- Flori, J.P., D. Delaunay, C. Barré, G. Grillaud and C. Sacré, 1995. "Une approche combinée pour l'étude de la dispersion des polluants dans une zone urbaine en sortie de tunnel routier," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp623-628.

Flouquet, Françoise and W. Luhrsen, 1983. "Summary of international data on monitored low-energy houses: a compilation and economic analysis," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp289-294.

Fok, Wendy W., 2007. "Understanding underground spaces: archaeological layering of building and excavating inverted architectural spaces," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kalamakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp359-366.

Forster, D.J., 1983. "Earth-sheltered accommodation for 55 people in a bush holiday camp," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppE68-72.

Forwood, B., 1983. "Natural ventilation for passive solar buildings," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppB2-5.

Forwood, Bruce, 1983. "Natural ventilation for passive solar buildings," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp227-230.

Fotieva N., Bulychev N., Sammal A., Antziferov S., 2002. "Planning the Location of a New Building Respectively to the Existing Tunnels," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Fotieva, N.N., N.S. Bulychev, A.S. Sammal, E. Hrubesova, J. Aldork, K. Voitasik and R.J. Fowell, 2005. "Evaluation of a sewer tunnel lining's durability," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp79-84.

Fowler, M., 1983. "The National Museum and Art Gallery of Papua and New Guinea," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppE43-48.

Fowler, Martin, 1983. "The National Museum and Art Gallery of Papua - New Guinea," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp173-178.

Frank J. Cihak, Frank J., 1997. National Fire Protection Association - Standard 130 and transit underground spaces," Workshop A-4, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Frénay, J.W., 1992. "Subterranean concrete structures for agricultural storage," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp496-508.

Friedman, J.B., 1983. "A user built incremental earth-sheltered solar dwelling," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp387-392.

Frolov, Vladimir, 2016. "Some Problems of Buildings and Structures Service Within Permafrost Area," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Fu, Y., T.J. Zhou, Y.R. Ding and X.Z. Fu, 2023. "Natural Ventilation in Deep-Underground Spaces," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp797-802.

Fu, Yan-Bin, Zhang Zi-Tai, 2009. "Experimental Study on Time-Dependent Mechanical Behavior of Muddy Clay under Unloading," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp487-492.

Fujimoto, Yasuo, Shigekata Mizuno, Masaaki Sakamoto, 2009. "Basic Research concerning Measures for Improving Existing Underground Transportation Nodes—Taking Umeda Underground Mall in Osaka as an Example," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp217-222.

Fujita, K. and S. Oda, 1991. "Pneumatic caisson method utilized for construction of deep underground structures," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp222-226.

Fukuda, T. and K. Yoshino, 2025. "Sustainable urban regeneration through "boundaryless" underground development: integration of underground and aboveground, public-private partnership, and continuity from planning to operation - a case study of Shibuya, Tokyo," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp901-909.

Fukuda, T., S. Ishiguro, I. Nakamura, H. Tanaka and R. Tokudomi, 2023. "Restructuring of Combined Underground, Above-Ground, and Deck Spaces Through Collaboration of Multiple Projects: Shinjuku Station, the Leading Large-Scale Multi-Use Station in Japan," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp523-528.

Fukumoto, D. and M. Yokotsuka, 2023. "Research Regarding Formulation of Guidelines for Underground Usage Associated with Urban Development," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1177-1180.

Fukumoto, D., S. Aono, K. Hayashi, T. Hirose and K. Masuyama, 2025. "Research on the ideas and challenges of creating a walkable pedestrian network by utilizing underground space," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp63-68.

Furundžić, D.S. and N. Bojović, 2023. "The Potential of Underground Spaces Around Metro Stations as a Form of Special Urban Forms," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp25-32.

Gabay, Daniel, 1995. "Traitement de l'ambiance climatique des ouvrages souterrains du réseau RATP," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp45-50.

Galbiati D., Pasqualini A., 2002. "Torre di Pisa (leading tower of Pisa) Foundations; Anchoring and Consolidation," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Galdieri, Patrizia, 1999. "The underground heart of Naples," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, p15.

Galinié, H. and P. Garmy, 1995. "L'évaluation du potentiel archéologique des villes: les archives du sol," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp201-206.

- Gandemer, Jacques, M. Dufresne de Virel and G. Barnaud, 1995. "Etude et réalisation d'un dispositif rideau d'air pour le cantonnement des fumées," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp51-56.
- Gangrade, R. and M. Mooney, 2023. "Risk Guided Strategy to Optimize Geotechnical Investigations on Tunnel Projects," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1201-1204.
- Gao, B, and Y. Geng, 1992. "Assessment of innovative use of underground space," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp560-569.
- Gao, B.Y. and Y.H. Geng, 1988. "Research on the psychological condition of people working and living in the underground circumstances," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp428-432.
- Gao, H.W. and C.Q. Zhang, 1988. "Shanghai people's square underground parking," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp133-137.
- Gao, Yanan, Feng Gao and Man-Chu Ronald Yeung, 2012. "Extension to Discontinuous Deformation Analysis for Rock Creep Problem," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Garland, M.A., 1983. "Earth-covered buildings and fire," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp151-158.
- Garland, M.A., 1983. "Earth-covered buildings and fire," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppD12-20.
- Garland, S., 1983. "Designing irrigation systems for use on and around earth-covered buildings," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppC32-38.
- Gauffin, Christian, 1995. "L'accord de Dennis: un grand projet d'infrastructures de transport pour Stockholm," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp379-386.
- Geng, Y.C., L. Shao and M. Geng, 2005. "The current situation and strategy for development and utility of underground space in Harbin," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp155-157.
- Geng, Y.C., X.H. Zhao and B.Y. Gao, 1999. "Study of the general design theory of cities' underground streets," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp317-322.
- Gerard M., Nguyen T., 2002. "What about "Clé de Sol"?", *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).
- Gerbeau, Marcel, 1995. "Aspects juridiques du Montréal souterrain," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp123-128.

Gerbeau, Marcel, 1997. "Le Montréal souterrain et la fiscalité municipale," Workshop B-5, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Gharouni-Nik, Morteza, 2007. "Design of ventilation for a highway tunnel in a very crowded urban area," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp583-588.

Giaccone, Antonino, 1995. "Evaluating heat losses from underground space towards the surrounding ground through a finite element model," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp609-616.

Gillies, A.D.S., C. D. Elifrits, Y. M. Erten and N. B. Augenbaugh, 1983. "An analysis of air heating during flow through ground passages," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp43-48.

Gillies, A.D.S., C. D. Elifrits, Y. M. Erten and N. B. Augenbaugh, 1983. "An analysis of air heating during flow through ground passages," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppB11-17.

Gindre, François, 1995. "Des parcs de stationnement souterrains conçus comme des espaces publics: la politique menée à Lyon," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp413-416.

Giro, C. and J.M. L'Anton, 1995. "L'arbre urbain comme réseau," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp487-494.

Glazer, Arik, 2016. "Reviving Burial in Tunnels," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Glazer, Arik, 2018. "Underground cemetery construction in Jerusalem," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp123-130.

Glendening & King Pty, Ltd., 1983. "St. Patrick's Church, Sutherland," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppE61-67.

Glozman, Olga, 2016. "Zones of Multifunctional Public Underground Space in the New Master Plan of Moscow," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Godard, Jean-Paul, 1997. "Solution souterraine : choix raisonné ou nécessité?" Workshop B-2, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Godard, Jean-Paul, 1999. "At or below ground level, which urban transport systems in the 21st century," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp346-358.

Godard, Jean-Paul, Jean Piraud, Dominique Hucher and Valerie Geburtig, 2012. "Redevelopment of the "Châtelet-Les Halles" Complex in the Centre of Paris," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore,

Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Goding, L.A., 1986. "Ferrocement as a building material for earth shelter," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp100-102.

Goh, J., 2021. "A literature review of medical support in cave rescue and confined space medicine – implications in urban underground space development," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703
<https://iopscience.iop.org/issue/1755-1315/703/1>

Goh, Kok Hun, Yunhuo Zhang and Jeyatharan Kumarasamy, 2012. "Some Engineering Properties of Soils and Rocks in the Bukit Timah Granite Formation of Singapore," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Golany, Gideon S., 1986. "Below-ground dwellings in China, Tunisia and Turkey: A comparative study," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp18-27.

Golany, Gideon S., 1988. "Contributions of below-ground space to urban design: A Trinity concept," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp194-201.

Golany, Gideon S., 1997. "Geo-Space, the 21st Century City," *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Goldschneider, Alexandra Guichon, Eric Amantini, Pascal Briand and Philippe Vaskou, 2012. "Hydrodynamic Containment Principle of Hydrocarbon Storage Caverns for Phase 1 Jurong Rock Caverns," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Gong, Y.F., A.J. Yao, Z.Y. Qi, Y.L. Li and Y.N. Li, 2023. "Study on Reasonable Reinforcement Range of Starting End of Overlapped Shield Tunnel in a Water-Rich Soft Stratum," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp109-120.

Gönner, D.H.W., 1988. "Prevention of industrial accidents and damage to property," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp509-514.

González Martínez, P., 2023. "The Metro Network as a Heritage System for Historic Urban Landscapes: A Critical Review from China to Spain," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp43-48.

Goyer, Pierre, 1995. "Une Ville conférence internationale axée sur thème des villes intérieures de demain," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp35-36.

Grande, L.B., H.M. Mathisen and C. Ahlen, 1995. "Gjøvik mountain hall: indoor air quality and thermal comfort," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp441-446.

Granit, Michael, 1988. "Underground design in urban areas," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp116-121.

Grasbakken, Elisabeth M., Hong Sze Han, Lu Ming, Lam Kok Pang and Benjamin Chan, 2012. "Conceptual Design of Underground Warehouse and Logistics in Singapore," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Gray, I.R., 1983. "Energy-efficient information supply," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppF45-49.

Grbić, M., O. Stanković and K. Lalović, 2025. "Integrated underground space planning in Belgrade: a smart city perspective," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp133-142.

Grebenets, V.I. and J.I. Rosenberg, 1992. "Underground space utilization for communication construction in permafrost," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp864-867.

Green, B. and R. Anderson, 1983. "A convective chimney rock bin energy storage retaining wall for the underground house," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp115-118.

Greenland, J.J., 1983. "Alternative technology in the architecture and territecture of China," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, Appendix C1-5.

Grekhova, Irina and Marina Gilmanova, 2016. "The Usage of Sludge of Wastewater in the Composition of the Soil for Land Reclamation," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Grondzik, W.T. and L.L. Boyer, 1983. "Earth shelter activity in the U.S.," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp237-241.

Grø, E., 2023. "Future Development of Underground Applications," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp675-688.

Grø, E., O. Høyar and H.M. Holmstrøm, 2021. "Subsea tunnel linking Föglö with the main island in Åland," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., *Proc. IOP Conf. Series: Earth and Envir. Sci.*, Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Grø, Eivind and Ming Lu, 2012. "Understanding and Utilizing In-Situ Rock Stresses in Design and Building Large Rock Caverns," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Grø, Eivind, 2014. "Sustainable urban development by use of underground space, examples from Norway," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Grün, E., 1992. "Systematic lowering of the basin of the Duisburg Harbour area by harmonic coal mining," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp99-107.

- Gu, Z.C., T. Osaragi, H.P. Zhu and J.W. Leng, 2025. "Quantifying the resilience contribution of underground pedestrian systems for solar exposure risk reduction in urban heatwaves," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp687-696.
- Gudehus, G., 1988. "Geotechnical innovations for an underground garage," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp86-89.
- Guillerme, André, 1995. "Terres Urbaines," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp19-24.
- Guillerme, André, 1997. "La recherche souterraine en France: bilan et perspectives," Panel "Future of indoor cities," *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).
- Guillerme, André, 1997. "Les conditions d'émergence d'une ville intérieure," *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).
- Guillerme, André, 1997. "La conservation du patrimoine souterrain urbain," Workshop A-5, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).
- Guillerme, André, 1999. "Recording and protecting underground industrial heritage," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp2-4.
- Guimond, Denis, 1997. "Déplacement des utilités publiques lors de travaux de construction sous le domaine public - le cas des Promenades de la Cathédrale," Workshop A-5, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).
- Guo, D.J., L.X. Wei, Z.L. Chen, J.W. Su and Q.H. Qian, 2023. "Towards a Carbon-Neutral City: Responsible Underground Space Use in China," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp429-438.
- Guo, D.J., Z.L. Chen, H.Y. Fu, H. Cai and H. Liu, 2014. "Evolution of detailed planning for urban underground space in China: insights from the comparison between Guangling and Qiangliang new cities," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Guo, Dongjun, M.J. Yu and Z.L. Chen, 2007. "A new choice for Shanghai container distribution – underground container transportation system (UCTS)," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp201-206.
- Guo, Dongjun, Priscilla P. Nelson, Jinrong Xie and Zhilong Chen, 2012. "Vertical Planning of Urban Underground Space Use in China," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Guo, Dongjun, Q.H. Qian, Z.L. Chen and J.L. Xi, 2005. "The tentative idea on alleviating Beijing's traffic jam by using underground logistic system," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp72-78.

Guo, Dong-jun, Yu Ming-jian, Chen Zhi-long, Wang Bo, 2009. "The Possible Starting Route & Transport Cost Analysis of Underground Container Transport System (UCTS) in Shanghai Port," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp265-269.

Guo, Dongjun, Z.W. Zhao, Z.L. Chen and X.B. Yang, 2014. "A study of the network optimization methods in city underground pedestrian system," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Guo, K. and W. Wu, 2023. "Discovery of Rock Burrowing Strategies Inspired by Bio-Erosion," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1209-1212.

Guo, Qing-Chao, Zhi-Guo Yan, He-Hua Zhu and Yi Shen, 2012. "Numerical Simulation on Fire Characteristics and Smoke Control of a Longitudinal Ventilation Road Tunnel," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Guo, Rong, Ming Lu and Ye Gao, 2012. "Underground Commercial Spaces in Harbin, China," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Guo, Rong, Yuan Li and Mengting Gu, 2018. "Research on optimization strategies of public safety in urban underground commercial space in Harbin," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp364-373.

Guo, X.H., M.N. Wang, L. Yu, J.X. Huo, G.B. Ni, X. Chen and Z.Y. Zhou, 2023. "Heat Release Rate Prediction for High-Altitude Highway Tunnel Fires Based on Field Tests of Combustion Characteristics," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp811-818.

Guurink, F.W., 1992. "City form and earth sheltered space use," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp123-136.

Ha, Susie, 2014. "Geotechnical adaptation technology to climate change: economic assessment of pervious block system," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Haasnoot, J.K., J. Edelenbos and R.A. Monnikhof, 1997. "Potential obstructions in the use of underground space in The Netherlands," Workshop C-1, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Hack, H.R.G.K. and RF. Bekendam, 1992. "Rock mass classification systems for assessing long-term stability of underground openings," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp811-817.

Haddadou, Naima, 2014. "Properties of self-compacting concretes made with binary, ternary and quaternary cementitious blends of marble powder, metakaolin and silica fume," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Hagenah, B. and P. Pospisil, 2025. "Adaptable safety concepts for underground rail, transit, and roadway applications," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp749-755.

Hagenah, B., P. Pospisil and C. Santangelo, 2023. "Sustainable Aspects for Planning and Operation of Tunnel Safety Equipment in Road and Rail Tunnel," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp769-774.

Hahn, Jong Ruhl, 2014. "Underground architecture – 21st century phenomena: focus on contemporary underground space design strategies in Korea," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Hait, John N., 1988. "Passive annual heat storage," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp476-481.

Hakoda, Toshiaki, Syoichi Nishiyama, Takaki Omori, Tadahiko Okumura, Mamoru Narusawa and Nobuyoshi Yabuki, 2021. "Integration of 3D models of structures and geological composition as an underground infrastructure model," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., *Proc. IOP Conf. Series: Earth and Envir. Sci.*, Vol. 703
<https://iopscience.iop.org/issue/1755-1315/703/1>

Hamajima, K. and S. Matsuoka, 1991. "Computer aided planning systems for underground parking," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp253-261.

Hamelin, Patrece and A. Si Larbi, 2016. "Smart Underground Panel: A Composite Manufacturing Process for Sandwich Panel Made of Textile Reinforced Cement and Multifunctional by the use of Sensors and Optical Fibers," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Hamelin, Patrice, Zyed Mesticou and Amir Si Larbi, 2018. "Design method for strengthening underground steel concrete structures with high performance textile reinforced cement," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp301-311.

Hamill, S.H., H.H.K. Tsang and B.C.P. Yu, 2018. "Planning, design and construction of MTR cavern stations for Hong Kong new railways," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp160-175.

Han, Gang and Jiawei Leng, 2018. "Research on changes of approaches on urban underground space design from the perspective of architecture," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp911-924.

Han, Jian-ping, Li Xiao-song, Wang Fei-xing, Li Lin, 2009. "Nondestructive Test and Numerical Simulation on Some Typical Roadway Supports of a Mine for Condition Assessment," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp573-578.

Han, X.J., D.M. Zheng and G.L. Huang, 1999. "The development and utilization of urban underground garage," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp478-480.

Han, X.L. and G.M. Song, 1999. "Initial inquiry on the culture environment of cave dwelling village on the loess plateau," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, p39.

Hanagreefs, P., S. Clarke and F. Dunkel, 1986. "Underground bag storage of dry edible beans in Rwanda (East Africa)," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp74-77.

Hanamura, T. and R. Kobayashi, 1992. "Underground distributed-type energy supply and recycling facilities in urban areas," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp544-551.

Hanamura, T. and T. Yamaguchi, 1992. "Joint R&D program for underground space use between private industries and government in Japan," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp170-179.

Hanamura, T., M. Shioiri and Y. Kouno, 1991. "Underground city development and a case study," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp143-150.

Hanamura, T., M. Shioiri and Y. Kouno, 1991. "Underground city development and a case study," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp92-97.

Hancock, Macklin L., 1997. "Subterranean space, a brief history and Toronto's involvement with its modern development," Workshop C-3, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Hane, T., K. Muro and H. Sawada, 1991. "Psychological factors involved in establishing comfortable underground environments," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp480-492.

Hane, T., K. Muro and H. Sawada, 1991. "Psychological factors involved in establishing comfortable underground environments," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp362-369.

Hane, Tadashi, 1988. "Application of solar daylighting system to underground space," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp464-469.

Hanley, B., 1983. "Nickol Bay Regional Hospital, Karratha, W.A.," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppE16-20.

Hanno, H., N. Kawada, T. Okada, T. Okano and T. Hasegawa, 2007. "Planning of disaster prevention measures in long urban tunnel – metropolitan expressway central circular Shinjuku route," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp545-550.

Hannula, J.K., 1983. "Earth-sheltered landscapes: Their classification and applicable design principles," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp57-60.

Harrall, J., D. Kastner, A. Garcia and M. Lee, 2025. "Reservoirs of energy: a journey towards energy autonomy for nine UK earth-sheltered homes," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp69-77.

Harrall, Jeremy, 2012. "A Demonstration of the Viability and Growing Acceptability of Earth-Sheltered Buildings in the UK," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Harrall, Jeremy, 2014. "Reservoirs of heat energy," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Hassall, D.N.H., 1983. "Fixed inclined louvres for solar control of facades and atria of earth sheltered buildings," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp125-129.

Hassall, D.N.H., 1983. "Fixed inclined louvres for solar control to façade and atria of earth-covered buildings," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppD21-26.

Hayakawa, T., T. Seiki and J. Nishi, 1997. "A study on spatial legibility in the underground space and its improvement," Workshop B-1, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Hayano, M. and T. Okawa, 1991. "Conceptual study on deep underground energy generation base," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp175-182.

Hayashi, H., D. Tamura, K. Aoki, Y. Okazaki, S. Nakashima and M. Shinji, 2023. "Study on Accuracy Confirmation for LiDAR Application on a Tunnel Face," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp783-788.

Hayato Tsubota, Mokichi Kuribayashi, Hiroshi Ueda, Hiromi Ban, 2025. "Underground network in Tokyo Torch project," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp219-223.

He, H.H., J. He, T.M. Fang, F.Z. Li and Y.T. Zhao, 2025. "Developing a standard for geological suitability evaluation of urban underground space: a case study in Beijing," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp992-993.

He, Jie, John Zacharias, Jia Geng, Yanan Liu, Yushan Huang and Wenhui Ma, 2016. "Underground Pedestrian Network for Urban Commercial Development in Tsim Sha Tsui of Hong Kong," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

He, Jisong and W. Vlasblom, 1997. "Mathematical Model of 2-D tunnelling for saturated soil with small rake angle," Workshop D-5, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

He, Jisong and W.J. Vlasblom, 1999. "Mathematical model of cutting saturated dense sand in tunneling," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp384-394.

He, Junzuo, Shaoming Liao, Zhiqun Gong, Cong Tang, Mengbo Liu and Yang Li, 2021. "The design and construction of a large composite subway station in limited space: An exemplary application of OCUE method in Xuzhou, China," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

He, Lei, 2009. "An empirical research on interaction mechanism between URRT and urban space based on the spatial economy," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp165-170.

He, Lei, Xinmei An and Zhiye Zhao, 2012. "Development of Contact Algorithm for 3-D Numerical Manifold Method," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

He, S.M. and M. Xu, 2009. "The application of multi-factor evaluation method in the planning of underground space – taking Nanjing for example," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp115-119.

Heim de Balsac, Renaud, 1995. "Urbanisme, Utudjian, Utopie," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp3-8.

Heng, Chao-yang, An Bao-liang, Zhou Zhi1, Wang Huan-ling, Wang Xi-qing, 2009. "Investigation of Adjacent Building's Deformation Induced by Excavating Underground Space," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp459-463.

Herrenknecht, M. and K. Bappler, 2005. "State of the art in mechanized tunnelling," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp36-41.

Hibino, S., K. Nakagawa and K. Nishi, 1991. "Development of fundamental technology on construction of compressed air energy store," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp329-337.

Hibino, S., H. Komada, Y. Fujiwara and M. Motojima, 1992. "Feasibility assessment of underground siting for nuclear power plant," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp725-734.

Hibino, S., K. Nakagawa and K. Nishi, 1991. "Development of fundamental technology on construction of compressed air energy storage (CASE)," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp260-265.

Hickman, B.S.D., 2021. "Waterproofing for buried decks," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., *Proc. IOP Conf. Series: Earth and Envir. Sci.*, Vol. 703
<https://iopscience.iop.org/issue/1755-1315/703/1>

Higashikata, Y., 1988. "Living in the Urban Under Unit," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp144-149.

Higashikata, Y., 1992. "Living in high technology Urban Under Units (3U) ," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp485-495.

Higashikata, Yoshio, 1986. "Under urban units in Japan," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp316-322.

Hillo, C. van, 1992. "Design aspects of an underground museum," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp392-398.

- Hirai, N. and K. Hagiya, 1991. "A conception and some subjects on the utilization of subsurface space," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp530-544.
- Hirai, T., N. Masaki and K. Okada, 1992. "The use of underground space and the prospects of underground shopping mall in Japan," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp32-43.
- Hirai, Takashi, 1997. "Present Condition and Future of Indoor City," *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).
- Hishammuddin, M.A.H.B., J.X. Wang, H.Z. Abidin, T.L. Yang, X.L. Huang and C.S. Ho, 2023. "Establishing a Comprehensive Land Subsidence Risk Assessment for Economic Resilient Metro-Led Underground Space Spatial Planning Model in Coastal Megacities of Shanghai and Jakarta by 2035 BaU: Brief COVID-19 Analysis," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp517-522.
- Hiyeda, T. J. Ogi and K. Nakamura, 1988. "Differences in thermal environmental characteristics of basements among districts," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp482-487.
- Hiyeda, T., H. Ogi, M. Yoshioka, K. Nakamura and K. Iwai, 1986. "Physical environment properties of the basement and its simulation," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp117-121.
- Ho, Y. K., Edward W. M. Lo, M. I. Wallace and Leslie W. H. Tsang, 2018. "Master planning of cavern development in Hong Kong: unlock hidden land resources for sustainable city development," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp40-51.
- Ho, Ying-Kit, Ka-Wah Shum, Jeffrey Chun-Fai Wong, 2016. "Strategic Use of Rock Caverns and Underground Space for Sustainable Urban Development of Hong Kong," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Hofmann, Pierre, Elton Xiong, Jorge Barbera and Aybek Otceken, 2018. "FRP anchors used as temporary tie-backs in retaining walls - case study of Doha Metro." *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp633-641.
- Hokkanen, Veikko, 1997. "Helsinki's multi-purpose utility tunnels (chauffage urbain)," Workshop D-6, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).
- Holmøy, Kristin Hilde, Hanne Louise Moe, Elisabeth M. Grasbakken, Jun Gang Cai, Kok Pang Lam and Benjamin Chan, 2012. "Conceptual Design of Underground Landfills in Singapore," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Hong, J.P., Y.S. Kang and T.Y. Ko, 2023. "Application of Machine Learning and Linear Regression for Estimating Cutter Life Index (CLI)," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp321-326.

Hong, J.Z., Y.F. Li, Z.K. Wei and X.F. Li, 2025. "Innovative practices and sustainable development for cavern design and construction based on the Q-system and rock reinforced approach," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp1021-1022.

Hong, Sze Han, Jun Gang Cai, Ming Lu, Elisabeth M. Graskbakken, Kok Pang Lam and Benjamin Chan, 2012. "'Safe Haven' Concept of Fire Safety Design for Complex Cavern System Situated in Rocks," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Hool Leng Phua, Shi Hui Tan, Teck Siew Chin, Seng Hou Lim, Edward Lim, 2025. "Hybrid earth retaining system for the construction of an underground metro station in varied ground," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp361-368.

Hooimeijer, F.L. and I.P.A.M. van Campenhout, 2018. "Distributed agency between 2D and 3D representation of the subsurface," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp712-725.

Horsbrugh, P., 1991. "Geospace panorama," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp196-203.

Horsbrugh, P., 1991. "Geospace panorama," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp625-632.

Horsbrugh, Patrick, 1983. "Geospacial planning," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp37-42.

Horsbrugh, Patrick, 1997. "Geospace : the ultimate interior," Workshop B-4, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), *Proc. 7th Intl. Conf. Underground Space*, Montréal, Sep 29-Oct 3 (CD-ROM).

Hosokawa, T. T. Tanaka and J. Cao, 2014. "Study on the standpoint of the comfort in the underground space – mainly on the inspection of thermal measurement result & questionnaire survey of the winter season in the underground space on China at Dalian," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Hosseini, Mohammad, 1997. "Géologie locale de Montréal avec études de cas en relation avec les constructions souterraines en milieu urbain," Workshop D-3, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), *Proc. 7th Intl. Conf. Underground Space*, Montréal, Sep 29-Oct 3 (CD-ROM).

Hou, J., Y.F. Li and Z. Li, 1992. "Application and development of original civil earth sheltered architecture in China," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp57-66.

Hou, J.Y. and H. Hou (China), 1997. "The vision of the underground space of inner core cities for tomorrow," Workshop B-2, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), *Proc. 7th Intl. Conf. Underground Space*, Montréal, Sep 29-Oct 3 (CD-ROM).

Hou, J.Y., 1986. "Development and utilization of cave dwellings and earth buildings in China," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp55-61.

Hou, J.Y., X.H. Feng and X.B. Zhao, 1988. "Affiliation innovation and exploitation of the hidden space – a study on the underground exhibition hall of bronze chariot and horses at Qin Shi Huang's museum," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp22-26.

Hou, J.Y., Z. Li, Y. Hou and Y.F. Fu, 1995. "The improvement and development of the living environment of cave dwellings in China," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp219-224.

Hou, Jiyao and J. Wang, 1999. "An outstanding "green architecture" – a work that was born nature imitated and recreated by the architects and transplanted to Beijing," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp258-259.

Hou, X. and Y. Su, 1986. "Stability and indoor environment of loess cave dwellings," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp45-54.

Hou, X. and Y. Su, 1986. "Urban underground space environment and human performance," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp307-316.

Hou, X.Y. and Y. Shu, 1988. "The model of underground space of the city," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp74-85.

Hou, X.Y. and Y. Shu, 1991. "The status quo and future of underground business streets of big cities in China," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp218-221.

Hou, Yan, 1999. "Hope Project" in countryside China – the probed about new type of school of earth sheltered habitat," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, p225.

Hove, J. van, 1992. "Productivity of aquifer thermal energy storage (ATES) in the Netherlands," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp580-590.

Howells, D.J. and T.C.F. Chan, 1992. "Development of a regulatory framework for use of underground space in Hong Kong," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp180-189.

Hu, Bin and Yajuan Zhang, 2012. "Research of Space Response for the Evacuation Design of Atrium Hub in the Underground Complex," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Hu, Bin, Xin Xiang and Yuan Lv, 2012. "Research on the Design for Evacuation in Underground Complex with Transport Hub," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Hu, Chang-ming, Zhou Zheng-yong, Li Yong-hui, Lin Yuan, 2009. "Analysis of the Ground Subsidence Caused by Dewatering in Deep Foundation Pit," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp481-486.

- Hu, Fan, 1988. "China's underground commercial constructions," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp156-161.
- Hu, Hua, Lin Shuzhi, Huang Jiannan, Cao Yong, 2009. "Research on Stratagem of Developing and Utilizing Underground Space of Xiamen Based on the Locating of Main Functions of City," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp397-402.
- Hu, Xiangdong and Shengjun Deng, 2016. "Ground Freezing Application of Intake Installing Construction of an Underwater Tunnel," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Hu, Xian-guo, Shu Yu, 2009. "Study on Assessment System of Service Safety for Underground Commercial Facilities," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp328-333.
- Hu, Z., Z. Zhong, Z. Zhu, T. Wang and S. Zhang, 1992. "Design and utilization of large-span earth sheltered construction," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp838-845.
- Hu, Z.Y., 1991. "On selection of underground traffic alternatives in Chongqing," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp647-652.
- Huan, Yi, Liu Jin-chun, Chen Li, Wu Hao, 2009. "3D Seismic Response Study on Underground Structures Based on Damaged Plasticity Theory," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp528-536.
- Huang, F.P. and Y.D. Xue, 2023. "Knowledge Graph-based Tunnel Water Inrush Risk Prevention and Control Method," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp695-700.
- Huang, J., H.L. Ji, A. Li, F. Gao and W. Gu, 2025. "Low carbon operation and maintenance technologies and applications for underground wastewater treatment plants," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp515-532.
- Huang, K., 2023. "Underground Space Planning and Design of East Square of Zhumadian High Speed Railway West Station in Henan Province of PRC," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp383-388.
- Huang, R., H.W. Huang, H.D. Wang, D.M. Zhang and B. Zhang, 2023. "Numerical Study of Dynamic Response and Vulnerability Analysis of Utility Tunnels Under Gas Explosion Load," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp689-694.
- Huang, Ruida, Yiqun Fan and Yi Liu, 2021. "An edge-computing-based sensing system for geo-structure risks," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>
- Hueting, R., 1992. "Economic functions of the environment," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp570-579.

Hui, P.P.Y. and J.C.N. Wong, 2023. "Land Use Zoning Mechanism for Cavern Development—Re-Thinking the Hong Kong Case," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp453-468.

Hui, P.Y., C.W. Mak, H.Y. Ng, C.F. Wong, and C.Y. Li, 2023. "A New Paradigm of Cavern Development," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp591-598.

Huot, Guy, 1997. "Les aménagements des centrales hydroélectriques souterraines de la société Hydro-Québec," Workshop D-2, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Hwang, B., A. Bae, K. Lim, H. Kim and H. Choi, 2023. "Laboratory Experiments on Rheological Properties of Foam-Conditioned Weathered Granite Soil," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp879-884.

Hwang, C., J. Choi, J.H. Jung and H. Choi, 2023. "Numerical Simulation of Trapdoor Experiments for Estimating the Loosen Load Around a NATM Tunnel," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp885-890.

Hylton, Joe, 1983. "Design development process for subterranean homes," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp203-209.

Hylton, Joe, 1986. "An analysis of the effect of plant materials in controlling heat flow through the roofs of earth sheltered buildings," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp183-189.

Hytiris, Nicholas, Konstantinos Ninikas, Rohinton Emmanuel, Bjorn Aaen, Paul Younger, 2016. "Heat Energy Recovery From Waste Water in the Glasgow Subway System," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Igarashi, K. and S. Okumura, 1991. "Conception of underground parking system," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp262-268.

Igarashi, K. and S. Okumura, 1991. "Conception of underground parking system," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp192-195.

Iglovikov, Anatoly, 2016. "The Development of Artificial Phytocenosis in Environmental Construction in the Far North," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Ikeda, T., M. Yokotsuka, S. Omura and T. Kasuya, 2009. "Study of underground space utilization for urban renaissance Tokyo's Yaesu district," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp25-30.

Ikeda, T., T. Akiyama, T. Yaguchi and S. Saito, 2007. "Construction of city gas-trunk line by shield tunnelling method in the deep underground of metropolitan Tokyo," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp113-118.

Imaizumi, Akane, Norikazu Shimizu and Shunsuke Sakurai, 2012. "Underground Space Design - Coupling Human Sensibility and Mechanics, and an Image Profile of Shape and Color," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Imaizumi, H., T. Isei, S. Kunimatsu, M. Sagisaka and M. Kinoshita, 1992. "Speech information transmission along a gallery," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp366-375.

Imamura, S., S. Tanaka and K. Sato, 1991. "Technology assessment technique on groundwater and land environment conservation concerning underground space development in urban area," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp429-438.

Inada, Y., N. Yokota, K. Tachibana and T. Tokikawa, 1991, "Basic research on the characteristics of basement," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp341-346.

Inada, Y., T. Manabe, S. Ohashi and M. Yoshikawa, 1988. "Stability of underground openings due to storage of heated water," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp338-343.

Ingallina, Patrizia, 1995. "Le sous-sol comme moyen pour revaloriser le paysage urbain. Des projets de "recupero ambientale": le cas des grottes troglodytes en Italie," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp513-522.

Inoue, H. and S. Sasaki, 1991. "Non blasting tunnel excavation method with slot-guide rod method," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp319-328.

Inoue, H. and S. Sasaki, 1991. "Non blasting tunnel excavation method with slot-guide rod method," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp254-259.

Ireland, T., S.F. Chau and S. Eratne, 2018. "Minimising disruption through the use of a mega TBM in an urban environment - waterview connection," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp282-292.

Irwin, C.B., 1983. "Two prototype earth-sheltered house designs for the hot arid region of Australia," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppF15-21.

Isabelle Chan, I. and S. Twum-Ampofo, 2025. "Enhancing psychological health through biophilic design: the influence of sea views on underground occupants," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp740-748.

Ishii, Michio, 1999. "A technique for building large and deep underground chambers using a pneumatic caisson," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, p429.

Ishino, Osamu and Kumagai Gumi, 1999. "The synthetic system for evaluating safety in a fire," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp430-445.

Ishioka, H., 1991. "Security management for underground space," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp590-603.

- Ishioka, H., 1991. "Security management for urban underground space," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp447-451.
- Iso, A. and K. Uchida, 1991. "Development of new pre-lining method for tunnels," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp338-344.
- Iso, A. and K. Uchida, 1991. "Development of new pre-lining method – Monobec method," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp266-269.
- Isozaki, Hikaru, Junichirou Oosawa, Yousuke Kawano, Ryo Hirasawa, Souichi Kubota, Shinji Konishi, 2016. "Measures Against Electrolytic Rail Corrosion in Tokyo Metro Subway Tunnels," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Jacques Vuille, Jacques, 1997. "La rénovation du passage souterrain Georges-Vanier, un lien essentiel à la revitalisation du quartier Petite Bourgogne," Workshop C-6, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).
- Janiszewski, M., L Uotinen, M Szydłowska, H Munukka, J Dong and M Rinne, 2021. "Visualization of 3D rock mass properties in underground tunnels using extended reality," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>
- Janitsary, M., 1988. "Shield tunneling and tunnel lining with new type of precast concrete segments," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp262-266.
- Jansson, Birger, 1988. "Habitation for homeless in earth-covered cabins," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp530-536.
- Jansson, Birger, 1988. Water and sewage in caverns and tunnels – 30 years' experience," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp94-99.
- Japaridze, Levan, 2007. "Problems of calculation of underground construction on limiting states of service ability," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp423-426.
- Jarosch M., Postolskaya O., Yufin S., Manko A., 2002. "Information System for Large Projects in Underground Space Development," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).
- Jean-Paul Godard, Jean-Paul, 1997. "Promotion de l'utilisation du sous-sol urbain: les actions de l'AITES/ITA," Panel "Future of indoor cities," *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).
- Jensen, R. and H. Roberts, 1983. "A combined underground house and fallout shelter," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp159-164.

Jensen, R.H. and H. Roberts, 1983. "A combined, underground house and fallout shelter," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppF2-8.

Jeon, S., S. Lee, S. Ra, C. Lee and J. Song, 2007. "LPG underground storage project (Y-2 Project) underneath an artificial island in Incheon, Korea," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp72-78.

Jeong, H.Y., S.D. Lee and S.W. Jeon, 2014. "Current and future study on assessment of cutting performance of hard rock TBM in Korea," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Jeremy Harrall, J., 2023. "Reservoirs of Heat: A Defining Characteristic of High Thermal Mass Earth-Sheltered Buildings," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp33-42.

Jevtic, M. and G. Micic, 2025. "Light and health in underground public spaces for the well-being of all," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp728-739.

Ji, Xiao-ming, 2009. "Construction Mechanics Mechanism and Construction Process Simulation Analysis of Large Span Tunnel," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp543-547.

Jia, Jian and Yingang Fang, 2016. "Underground Space Development in Comprehensive Transport Hubs in China," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Jian, Junhua and Wei Wang, 2012. "The Optimized Design of Tower-Podium Building Pile Foundation Stiffness to Reduce Differential Settlement," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Jian, Y., Q.L. Xin, P.Y. Wei and J.W. Yu, 2007. "The effect of ground water and its prediction methods and techniques during tunnel construction," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp480-486.

Jiang, Q.H., J.Z. Zhang and D.M. Zhang, 2023. "Three-Dimensional Stratigraphic Reconstruction Based on Improved Coupled Markov Chain," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp281-288.

Jin, X., G.J. Dang, Z. Wang, H.D. Fan and K. Hou, 2023. "Thermal Activation Effect of Heat Pipe on Surrounding Rock in Geothermal Energy Utilization," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp249-258.

Jin, Yi and Huang Wenliu, 2009. "Thoughts on the Underground Space Planning and Construction, the Core Area of Qianjiang New CBD, Hangzhou," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp403-408.

John Zacharias, 2018. "A longitudinal study of pedestrian movement in successive redesign projects at Les Halles, Paris," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp209-217.

Jones, Ken, 1997. "Conditions for the emergence of an indoor city," *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Jones, Ken, 1997. "Retail Dynamics of the Toronto Underground System: 1993-1997," Workshop C-5, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Jovičić, V., M. Pečovnik, S. Medved, Ž. Vukelić, E. Muhić and M. Kosovel, 2025. "Underground urbanization and geothermal potential in modern infrastructure: the case of the Maribor City tunnel," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp318-329.

Jun, Chen, W. Ke and W. Modi, 2014. "Underground space disaster prevention: discussion on countermeasures in Beijing by learning from overseas experiences," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Jun, Lin and Wen-jun Zhu, 2009. "Empirical Research on Correlation between Intensity of Urban Underground Space and Indexes of Land-Traffic Characteristics," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp193-200.

Junca, José Antonio, 1995. "Underground space use and quality of life," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp329-334.

Junca-Ubierna, José A., 1997. "Chiaroscuro in the indoor city / Clair obscur de la ville intérieure," Workshop B-1, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Jutipanya, K., L. Makana, A. Hojjati, N. Metje, D.V.L. Hunt, E.J.S. Ferranti, A.J. Hargreaves, J.M. Leach and C.D.F. Rogers, 2025. "Transformative approaches to underground infrastructure: road to net zero and beyond," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp573-579.

Kadoshige, M., Y. Fujimoto, I. Sasaki and T. Kasuya, 2014. "Possibility of utilization of underground space in disaster situations in Umeda and the surrounding areas," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Kainuma, N., Y. Kuramochi and Y. Akiyama, 1991. "Development of various robots for construction power conduits in urban areas," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp363-375.

Kajtár, L., 1992. "Thermal comfort dimensioning and results of measurements in underground spaces," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp636-645.

Kakhtar, Khosrow, 1995. "Application of physical modeling for performance assessment of underground installations," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp433-440.

Kaliampakos D. C., Bernardos A.G., Mavrikos A. A., 2002. "Underground Storage Warehouses in Attica, Greece: a Feasible Long-Term Solution," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

- Kaliampakos, D. and A. Benardos, 2009. "On-site underground hazardous waste repositories: a successful model," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp14-18.
- Kaliampakos, D. and A. Mavrikos, 2014. "The economics of the underground space," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Kaliampakos, D. and A. Mavrikos, 2025. "The role of underground mines in energy transition: a review," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp551-559.
- Kaliampakos, D., A. Mavrikos, S. Athanassopoulos, S. Papavasileiou, 2009. "Mining as an Underground Space Producing Activity: A Financial Point Of View," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp292-298.
- Kaliampakos, D., K. Anastasios and E. Athinaiou, 2014. "A study on underground evacuation plan parameters," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Kaliampakos, D., M. Athanassios and D. Lamprakis, 2025. "Old mines and industrial tourism: the case of an ancient mining gallery in Lavrion, Greece," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp191-200.
- Kaliampakos, D.C., N.I. Sofos and A.G. Benardos, 2005. "3D visualization in underground space development," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp94-98.
- Kaliampakos, D.C., S.L. Manaras, C.S. Orfanos and A.A. Mavrikos, 2005. "Underground bus depot in Athens – a novel design approach," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp90-93.
- Kaliampakos, Dimitris, 2014. "Underground development: a key to unlock the sustainability of modern cities," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Kaliampakos, Dimitris, 2016. "Underground Development: A Springboard to Make City life Better in the 21st Century," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Kaliampakos, Dimitris, Andreas Benardos and Athanassios Mavrikos, 2018. "Landfill mining: a promising recovery of the shallow urban underground," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp478-484.
- Kaliampakos, Dimitris, Maria Koutoula and Athanassios Mavrikos, 2018. "The integration of the metropolitan railways into the modern city life," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp599-610.
- Kallianiotis, A., D. Dragiou, A. Zachari, M. Menegaki and D. Papakonstantinou, 2023. "Virtual Reality Application to Study Occupants' Behavior in Underground Space Emergency Event," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp363-368.
- Kallianiotis, Anastasios and Dimitrios Kaliampakos, 2016. "Evaluation of Underground Spaces Evacuation Effectiveness," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Kallianiotis, Anastasios, Despina Papakonstantinou, Georgios Zografos, Andreas Benardos and Dimitrios Kaliampakos, 2018. "Fire and smoke effects to occupants and evacuation procedures in a metro station," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp338-354.

Kamal, El-din, S. Ibrahim and J.G. Hetherington, 1999. "The architectural design concept of urban underground network spaces – special analysis for underground interconnected space using space-syntax software," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp149-163.

Kaminagai, Yo, 2012. "The Paris Metro Design and Architecture Heritage," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Kang, Lifu, 2012. "Primary Investigation in Overall Development Against Underground Space of Chinese Urban Core Areas," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Kang, M., K. Kwon, Y. Yoon and H. Choi, 2023. "Harmony Search-Based Optimization System for Electrical Resistivity Surveys to Predict Cavities Ahead of a Tunnel," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp847-852.

Kang, Ning, 1988. "the precious stone auditorium in Hangzhou," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp150-155.

Kang, Ray S., 2014. "Architectural planning for underground campus design," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Kang, Y.N. and X.J. Guan, 1999. "An exploratory study on the development of underground space in China's city," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp107-111.

Kang, Yingnan and Feng Wang, 1999. "Studies on the compound waterproof structure for the deformation caps of underground buildings," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp510-512.

Kapsampeli, A.S. and M.G. Sakellariou, 2007. "Use of artificial neural networks for the prediction of tunneling-induced ground movements in urban areas," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp427-432.

Karpiloff, Douglas G., 1997. "When a disaster strikes: How to manage a successful comeback," *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Kashima, S., R. Nakamura, M. Matono, T. Taguchi and S. Kashima, 1991. "A study of underground physical distribution system in high-densely built-up area," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp158-163.

Kasuya, T., S. Matsuoka and K. Sato, 1991. "An approach to CAD-based coupling analysis of surface runoff and groundwater behavior around underground space," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp423-428.

- Kasuya, T., S. Matsuoka and K. Sato, 1991. "An approach to CAD-based coupling analysis of surface runoff and groundwater behavior around underground space," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp323-326.
- Kato, M., 2023. "Underground Transit Infrastructure Linked Urban Development in the Toranomom Hills," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp485-490.
- Kato, M., 2025. "Integrated urban regeneration of subway stations and urban development in central Tokyo - the case study of Toranomom Hills station tower," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp165-174.
- Kato, Takaya, 1997. "The development of urban city and using underground space," Workshop B-6, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).
- Katsabanis, P.D. and A.S. Tawadrous, 2007. "Numerical modelling of the effect of loading and timing in wall control applications," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp453-462.
- Katsumi, Kamemura, 2012. "Some Issues on the Performance Evaluation of Tunnel and Underground Cavern," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Kavarić, K., M. Popović, A. Savić, S. Jocković and M. Raković, 2025. "Experimental characterization of jet grout using digital image correlation technique," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp281-287.
- Kawanashi, J., K. Onishi and T. Kawanishi, 1999. "We support new yao-dong as an ideal revival of traditional technology for the sustainable well-being of mankind," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp242-244.
- Kawashima, H., K. Iwai, H. Furukawa, K. Ito, K. Umemoto, T. Kumazawa, G. Shigaraki and R. Imamura, 1986. "Geodata check system of sites for Japanese housing with basements," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp94-99.
- Kawashima, K., H. Sugita and T. Kanoh, 1991. "Loading test of shield tunnel specimens subjected to alternative axial loading," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp310-315.
- Kawata, H., N. Matsumura and M. Kishiya, 1991. "Application of multi-circular face shield method to underground stations," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp303-309.
- Kazan, Youssam, 2018. "Practical procedures concerning reduced retaining systems of deep excavations in cemented soil in urban zones in Lebanon," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp804-809.
- Keipert, J.D. and T.J. Williamson, 1983. "The performance of an earth bermed house in a hot arid climate," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp311-316.

- Keipert, J.D. and T.J. Williamson, 1983. "The performance of an earth-bermed house in a hot arid climate," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppE55-60.
- Kenda, Barbara, 1999. "Breathing architecture: the Venetian grotto-villa Garzadori-da Schio," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp43-48.
- Kernkamp, H., 1992. "Politics of underground transport systems in Utrecht," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, p234.
- Khalili, Maedeh and S. Sedigheh Mirgozar Langaroudi, 2012. "A Research on Using Underground Spaces in Iranian Traditional Architecture, with Focus on Godal-Baghcheh," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Khodabakhshian, M. and S. M. Mofidi, 2012. "Vernacular Underground Architecture in Arid Climate of Iran," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Khodabakhshian, Meghedy, 2014. "Revitalizing identity of underground spaces in vernacular residential architecture of Iran case study: Isfahan Province," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Khodabakhshian, Meghedy, 2016. "Comparative Study on Cliff Dwelling Earth-shelter Architecture in Iran," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Kiesling, E.W. and J.E. Minor, 1983. "Hazard mitigation through earth sheltering," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp133-140.
- Kikuchi, M., T. Miyazaki, T. Tokuda and H. Hashimoto, 2014. "A study of safety measures for underground shopping malls in Japan," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Kim, Chang Su, Young Ho Cho, Hyun Cho, Dong In Park, 2009. "A Case Study in the Application of T.R.c.M and C.A.M - Construction of Station with a Large Section Tunnel below Underground Shopping Centre," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp517-520.
- Kim, Dong-Min, Sang-Joon Ma and Hu-Jeong Gil, 2012. "An Application of All-in-One System for Sprayed Concrete Supporting of Mine Using Mobile Mixer in Korea," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Kim, H.G. and R.L. Sterling, 1983. "A study of house design combining earth sheltering and traditional Korean architecture," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp231-236.
- Kim, Hyunwoo, Seokwon Jeon and Byungkyu Jeon, 2012. "Effect and Detection of Adverse Ground Conditions During the Construction of a Subsea Tunnel," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9,

Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDRom), ISBN-13: 978-981-07-3756-6.

Kim, Kinam, H. Jeong, S. Jeong and H.K. Kim, 2014. "Economic assessment of landslide behavior simulation technology under climate change," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Kim, S.H., G.C. Kim, S.H. Hong and H.J. Kang, 2014. "Geotechnical design approach for the large open underground space without columns and lateral supports," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Kim, Sang Chul, 2014. "Plant maintenance best practices," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Kim, Y-G., Y. Mizuta and H.K. Lee, 1992. "Numerical analysis of displacement behaviours of a large scale model of underground construction according to timely differential excavations," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp782-788.

Kim, Yung, Tiong Yong Teo, Melvin Ng, 2012. "Construction of Tunnels and Caverns for Phase 1 Jurong Rock Caverns," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDRom), ISBN-13: 978-981-07-3756-6.

Kimber, W.J., 1986. "Liveability, comfortability, flexibility, affordability and longevity of 'Total Wood' earth covered structures," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp267-272.

Kimber, Wayne, Jr., 1983. "Energy and humidity performance of 'total wood' earth sheltered homes," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp299-304.

Kimura, K., M. Shukuya and S. Tanabe, 1983. "Estimation of annual heat loss and heat gain from earth-contact floors and walls with insulation in temperate climate regions," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp331-336.

Kimura, Y., A. Kitamura, T. Hara and H. Furuichi, 2014. "Tsunami measure for coastal cities," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Kimura, Yasumasa and Akio Kitamura, 2012. "Underground Mechanical Car Parking Facilities / Foundations," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDRom), ISBN-13: 978-981-07-3756-6.

Kindaichi, Juniji, 1995. "Infrastructure for traffic and freight by underground road network," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp373-378.

Kind-Barkauskas, F., 1992. "Creative aspects and uses for underground structures – examples from Germany," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp475-484.

King, T., D. Boddice, S. Luo, F. Rahimzadeh, A. Rodgers, A. Faramarzi and N. Metje, 2023. "Quantum Gravity Gradiometers for Urban Underground Mapping," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1133-1138.

Kishiya, M., H. Kawata and N. Matsumura, 1991. "Application of multi-circular face shield method to underground stations," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp393-402.

Kiyama, K. and K. Amemiya, 2025. "Creating underground space to improve the appeal of the Nihonbashi area. (The case study on the urban redevelopment project of the Nihonbashi 1-chome)," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp201-206.

Kizurov, Anatoly, Igor Lapshin, Sergey Kokoshin, 2016. "Differentiated Drying of the Mixtures Colloidal Components Used in the Construction of Underground Infrastructure," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Kneebone, T., 1983. "The acceptance and role of earth-sheltered building systems within a public housing sector," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp213-218.

Kneebone, T., 1983. "The acceptance and role of earth-sheltered building systems within a public housing sector," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppA9-14.

Ko, T.Y., T.K. Kim and B.S. Cho, 2018. "Challenging TBM projects in difficult conditions: large subsea tunnel and long mountain tunnel," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp266-274.

Kobayashi, R., K. Sekine, M. Osakabe and N. Kahata, 1991. "Energy evaluation for urban underground space utilization," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp191-200.

Kobayashi, R., K. Sekine, M. Osakabe and N. Kahata, 1991. "Energy evaluation for urban underground space utilization," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp144-149.

Kobayashi, T., S. Ueno, T. Negishi and H. Aoki, 1992. "Underground pedestrian and transportation network," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp67-74.

Kohn B., Vaysse J.P., 2002. "Architectural Concepts of the New Underground," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Kokoshin, Sergei, Nicholas Ustinov, Boris Kirgincev, 2016. "The use of Flexible Tubular Elements of the Overhaul and Tunnels Reconstruction," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Kokoshin, Sergei, Sergey Sozonov, Ivan Shestopalov, 2016. "Theoretical Justification of Reducing Soil Adhesion to the Surfaces of the Excavator Working Body at Creation Underground Infrastructure," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

- Kolev, Chavdar, 2016. "Some Geotechnical Characteristics of the Subway Construction in Sofia City, Bulgaria," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Kolymbas D., Maehr M., Herle I., 2002. "Tail Gap Grouting," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).
- Komai, Takeshi, 1995. "Simulations of groundwater transport in unsaturated domain around a large underground space," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp283-288.
- Kondrachova, T., W. Broere, G. Gaspari and G. Grasselli, 2023. "Does Common Infrastructure Planning Support Better Urban Sustainability? Analysis of Mass-Transit Projects on Short-Term and Long-Term Sustainability Impacts," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp397-402.
- Kong, L.J., Z.L. Chen, H. Cai and T. Wu, 2007. "Optimization of sunken road planning with environmental impact analysis by CFD simulation," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp385-390.
- Konishi, Shinji, Keisuke Okanoya, Ryuji Okada, Hiroaki Hashiguchi and Ryuji Fukuda, 2018. "Tokyo Metro project - strategies to reduce vehicle and platform congestion of Tozai line," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp145-152.
- Konishi, Shinji, Koichi Kawakami, Masumi Taguchi, 2016. "Inspection Method with Infrared Thermometry for Detect Void in Subway Tunnel Lining," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Konishi, T. and K. Watanabe, 1988. "Study on utilization of underground space of Ohya," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp90-93.
- Konukhin, V.P., 2005. "Underground oil and gas tanks in hydrocarbon raw material delivery systems in the Russian Arctic region," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp42-47.
- Konykhov, D.S. and I.V. Kolybin, 2021. "Principles of the integrated development of Moscow City underground space," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>
- Korolev, S.G., A.V. Peskov and J.V. Sushkov, 2005. "Action of the spherical wave of compression on the cylindrical ridge casing," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp186-190.
- Koroleva, I.V., 2025. "Triaxial studies of gray clays in different loading modes as a foundation for underground construction," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp452-458.
- Korotaev, Vladimir, 2016. "Development of Underground Space as Part of Efforts to Improve the Spatial Structure of Moscow," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

- Korotaev, Vladimir, 2016. "Spatial Organization of Russian Cities. Underground Development," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Kotsakis, V., C. Froudakis, A. Kallianiotis, M. Menegaki and D. Labrakis, 2025. "Evacuation behavior and safety egress analysis in tunnel fires: a virtual reality simulation study," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp713-727.
- Kotsareli, Maria, Mavrikos Athanassios and Kaliampakos Dimitris, 2012. "Social Cost-Benefit Analysis of the Western Expansion of the Athens Metro," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Kotsiopoulos, A. and I. Sakellaridou, 1997. "Underground ex-tensions: forms and implications," Workshop B-3, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), *Proc. 7th Intl. Conf. Underground Space*, Montréal, Sep 29-Oct 3 (CD-ROM).
- Kotsiopoulos, A.M. and I. Sakellaridou, 1992. "Planning and design reversals: The experience from a large scale underground project," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp242-253.
- Koumantakis, I., D. Rozos and P. Tsagaratos, 2007. "Underground space development in Attica County in relation with its geological structure," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp221-230.
- Kovačević, Meho Saša, Karlo Martinović and Lovorka Librić, 2012. "Sustainable Underground Engineering Centre (SUNEC)," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Kovačević, Meho Saša, Mario Bačić, Ivan Arapov and Karlo Martinović, 2012. "Utilization of Underground Structures for Geothermal Energy," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Kozin, Evgeny, 2016. "Safety Operation Assurance for Metro Artificial Facilities During Underground Space Development in St. Petersburg," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Krikovszky, Péter, 1995. "Plan for below-ground development of Budapest's Hosok Tere," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp389-394.
- Krivošić, V., L. Crnogorac, R. Tokalić, Z. Gligorić and B. Gluščević, 2025. "Forecasting the TBM performance using Grey-stochastic simulations," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp923-932.
- Krznarić, L., S. Milošević and H. Jovanović, 2025. "Integration of geographic information systems (GIS) for underground space mapping on the example of Belgrade," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp831-837.

Kukkonen, I.T. and M. Pentti, 2021. "St1 Deep Heat Project: Geothermal energy to the district heating network in Espoo," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Kunitomi, Tsuyoshi, Taro Kasuya, Nobuaki Tanikaga and Tetsuya Shirane, 2012. "Study of Ideal Development and Management of Underground Networks (Role Sharing Between Public and Private Sectors)," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Kuramochi, Y. N. Kainuma and Y. Akiyama, 1991. "Development of various robots for constructing power conduits in urban areas," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp283-290.

Kurihara, K., H.Asega, K. Hagiya, S. Nishimura, T. Kitagawa and N. Hirai, 1991. "A conception and some subjects on the utilization of subsurface space – investigations on safety in the NEO-EDO conception," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp407-414.

Kurokawa, Takashi, 1991. (Chm.) Panel Discussion, "Images of underground city complex," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp88-98.

Kurokawa, Takashi, 1991. (Chm.) Panel Discussion, "Images of underground city complex," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp50-56.

Kurokawa, Takeshi, 1997. "Trends and challenges in Subterranean Utilization in Japanese Cities," Panel "Future of indoor cities," *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Kursova, E.V., 2005. "Numerical modeling of a tunnel in jointed rock using multilaminar material model," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp191-195.

Kuwajima, F.M. and A. Negro Jr., 1988. "Ground movements around underground openings in gravitational stress field," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp332-337.

Kuwana, Masaru, Kohtaro Kuramoto and Shuntaro Akiyama, 2018. "Tokyo Metro Ginza line renovations (Shitamachi area)," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp153-159.

Kwan, Julian S.H., Leslie WH Tsang, Fred Ng, Johnny Cheuk and Gary Au, 2021. "Cavern fire safety – overview of requirements and pragmatic solutions in Hong Kong," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Kwon, K.B., M.K. Kang, B.H. Hwang and H.S. Choi, 2023. "Probabilistic-based TBM Risk Management Model Using Bayes' Theorem Considering TBM Accident Case Study," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp717-722.

- Labbé, Monique and Melissa Belmekki, 2012. "The Underground Space as a Space for Economic Development," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDRom), ISBN-13: 978-981-07-3756-6.
- Labbé, Monique, 1997. "Du proche au lointain, du général au particulier," Workshop C-4, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).
- Labbé, Monique, 1997. "Réflexions pour un projet sous la Seine," Workshop C-6, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).
- Labbé, Monique, 2018. "Three emblematic achievements of Paris: the adaptability of underground spaces as a facilitator of city transformation," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp30-39.
- Labbé, Monique, Jean-Pierre Palisse and Jean-François David, 2018. "Rethinking the underground: the "Ville 10d" experimental methods and recommendations in the Greater Paris," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp20-29.
- Lacatus-Dumitrescu, E., 1995. "Le Montréal souterrain: une étude de perception," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp177-182.
- Laezza R., 2002. "The Architecture of the Groundline: Sperimental Spaces for Architecture Underground," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).
- Lai, H.P., T.G. Ng, I. Yogarajah and C.Y. Yong, 2018. "Performance of soil-nailed slope excavation with seepage cut-off wall," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp642-650.
- Lai, Thomson M.K., Roger Z. H. Luo, Jeffrey Wong and Tan Yeung, 2018. "Innovative technologies for planning and design of underground space development," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp705-711.
- Lake, James D., 1997. NFPA 520 standard for Subterranean Spaces," Workshop A-4, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).
- Lalosevic, M. and M. Kosovic, 2023. "Urban Planning as a Chance for Preservation and Affirmation of Historical Underground Spaces—A Case Study of Kosancicev Venac, Belgrade, Serbia," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1193-1196.
- Lalošević, M., M. Hadži Arsenović and A. Jovović, 2025. "Planning public urban underground spaces: cultural amenities in Belgrade's riverfront park," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp112-120.
- Lam, Yik Chong, John Endicott, Ka Fai Wong and Wing Bun Mui, 2012. "Development of Large Span Railway Tunnel A Case Study of West Rail – Tai Lam Tunnel," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDRom), ISBN-13: 978-981-07-3756-6.

Lambert, P. and P. Réby, 1995. "Les ouvrages enterrés pour la mise en valeur des monuments historiques," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp225-230.

Lambertucci, F., 2025. "Infrastructuring heritage. New paradigms for subway stations in the archaeological center of Rome," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp244-254.

Lambertucci, Filippo, 2012. "Digging in the Past: Archaeology as a Resource for Rome Underground Transit," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Lambertucci, Filippo, 2016. "Archaeo-mobility. Integrating Archaeological Heritage with Everyday Life," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Lan, Anna, 2016. "Transport Orientated Development and Commercialization of Underground Space in China: Trends in Shanghai, Tianjin and Shenzhen," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Landa, E.R., 1983. "Radon concentrations in the indoor air of earth sheltered buildings in Colorado," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp275-280.

Landahl, Gustaf, 1995. "Planning and building permission underground," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp581-586.

Langzhou Tang, L.Z., L. Yu, M.N. Wang, Y. Xiao, J. Zhou and H.H. Yang, 2023. "Numerical Simulation on Structural Safety of Deep-Buried Tunnel Crossing Hard and Soft Rock in Strong Earthquake Areas," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp149-156.

Lao, J.S., C. Hu, Z.C. Li, J.Z. Sun and W. Qin, 2023. "Study on Integral Performance of Suction Bucket-Marine Soil-Jacket Support of Offshore Wind Power," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp943-950.

LaPlace, Guy, 1995. "EOLE: Les aspects fonciers d'un grand projet souterrain," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp469-474.

Laplace, Guy, 1997. "L'insertion d'EOLE dans la ville," Workshop B-5, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Lardinois, J.P.P.M. and P.E.M. Verheggem, 1992. "Financial pros and cons of building underground spaces and earth sheltered structures," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp552-559.

Laughton, C., P. Nelson, Y. Abd al Jalil, 1995. "A tool for tunnel excavation prognosis," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp359-364.

- Lavagno E., Pelizza S., Peila D., 2002. "True - Training for Underground Environment, a Master Course," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).
- Lavagno E., Schranz L., 2002. "The Underground World: A Proposal for a Virtual Encyclopaedia," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).
- Lavagno, E. and L. Schranz, 2005. "Metro line development characteristics in large European metropolitan areas," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp15-23.
- Lavagno, E. and L. Schranz, 2007. "Recent development and utilization of underground space in Italy," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp163-168.
- Lavagno, E., C. Delmastro and L. Schranz, 2014. "Planning for low-carbon cities in China: the role of the underground space into a comprehensive advanced local energy plan," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Lavagno, Evasio and Daniela Scaramuccia, 1999. "A network of underground multi-purpose tunnels for the renewal of a large urban area," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp481-486.
- Lavagno, Evasio and Laura Schranz, 2007. "Energy rational use and underground space: opportunities for sustainability," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp9-14.
- Lavagno, Evasio and Laura Schranz, 2012. "Underground Urbanism: Master Plans and Other Tools for a Rationale Utilization of the Urban Underground Space," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDRom), ISBN-13: 978-981-07-3756-6.
- Lavagno, Evasio, 2016. "Underground Education: Attitudes towards More Underground-oriented Educational Programs," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Law, K., F. Ng, J. Kwan and J. Wong, 2021. "An Exploration of the Planning Approach for New Development Area with Underground Space in Hong Kong," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., *Proc. IOP Conf. Series: Earth and Envir. Sci.*, Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>
- Law, Kelvin, Pearl Hui, Kian Wee Ng, Keith Low, Hin Guan Tay and Anwar Sajjad, 2012. "Urban Planning & Design for Underground Space Development - The Experience in Asia Compact Cities," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDRom), ISBN-13: 978-981-07-3756-6.
- Law, Winnie W. Y., Joyce W. C. Chow, Marion K. W. Kan, David H. W. Leung and Johnny C. Y. Cheuk, 2018. "From conception to consensus – importance of public engagement and its challenges for underground projects," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp550-562.

Layadi, Ismail, 2014. "Modeling the mechanical behavior of reinforced concrete beam-column system," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Lebedev Mikhail Olegovich, 2018. "Choosing a calculation method for stress-strain of supports and lining of transport tunnels," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp678-687.

Lebedev, Mikhail, 2016. "Automated Systems as a Part of Geotechnical Monitoring in Construction and Operation of Transport Tunnels," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Lee, Bo Yeon and K.E. Kurtis, 2014. "Salt crystallization damage of underground cementitious materials," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Lee, C.I., J.J. Song, H.W. Lee and S.P. Lee, 2005. "Design and construction of underground oil and gas storage in Korea," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp99-104.

Lee, G.J. and C.S. Kim, 1997. "Determination of suitable directions for the systematic development of underground space in Korea," Workshop C-1, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), *Proc. 7th Intl. Conf. Underground Space*, Montréal, Sep 29-Oct 3 (CD-ROM).

Lee, Gahng Ju, 2014. "Framework derivation for the universal design of underground public pedestrian facilities in Seoul," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Lee, Gahng-Ju and Na-Hee Kim, 2012. "Analysis of Underground Public Pedestrian Facilities in Busan Metropolitan City," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Lee, Gahng-Ju, 2009. "Examination of Underground Space Development Legislation in Korea," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp299-304.

Lee, Sang-Yun, Y. Lee, S.I. Yang, Y. Kang and C.H. Lee, 2014. "Uncovering grounds: to make the past current," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Lee, Tse-Hung and Ian Askew, 2012. "Innovative and Green Technology for the Excavation of Drop Shafts," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Lee, Youngsoo, Sanghoon Jung, Songhyon Lee, Kihwan Lee and Hyun Cho, 2012. "Integrated BIM Management System and its Application on Civil Engineering Site," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Legault, Olivier, 1997. "La planification et la promotion des espaces souterrains," Workshop D-1, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), *Proc. 7th Intl. Conf. Underground Space*, Montréal, Sep 29-Oct 3 (CD-ROM).

Legrand, Roland, 1997. "EOLE une architecture exigeante," Workshop B-3, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Lei, B., W.Q. Ding and Q.Z. Zhang, 2025. "Research on the high-temperature mechanical properties of corrugated steel-concrete composite structures in tunnel engineering under fire," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp299-308.

Lelièvre F., 2002. "Exposing the Invisible in Montreal's International Quarter," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Lelièvre, Francine, 1999. "Pointe-A-Calliere the Montreal museum of architecture and history," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp16-20.

Lembo, F. and F.P.R. Marino, 2014. "Typological choices for underground architecture," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Lembo, Filiberto and Francesco Paolo R. Marino, 2012. "Semi-Underground Buildings: Design Models for the Contemporary Cities," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Lemos, J.V., L.R. Sousa, N. Fotieva, N. Bulychev and A. Sammal, 2005. "Multiple shallow and cut-and-cover tunnels - seismic analysis," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp196-203.

Leroux, Martine, 1995. "Les indices sensibles du monde souterrain," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp281-282.

Lesiuk, S., 1983. "Landscaping for energy conservation," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppC45-50.

Lesiuk, S., 1983. "Soil stratification techniques for earth-covered buildings," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppC39-44.

Lesiuk, Stephen, 1983. "Soil stratification techniques for underground buildings," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp83-88.

Levy, Albert, 1995. "Quelques réflexions à propos de la notion d'urbanisme souterrain," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp323-328.

Lewis, Paul and M. Boisvert, 1995. "D'un urbanisme souterrain à un urbanisme tridimensionnel," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp73-78.

Li, A.G., L. Sun and Q.H. Zheng, 1999. "Control of indoor air quality," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp454-458.

Li, Amy Huanqing, 2021. "Re-promoting Sustainable Underground Urbanization for Developed and Developing Countries in Our Modern History," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki,

Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703

<https://iopscience.iop.org/issue/1755-1315/703/1>

Li, C.B. and C.G. Pei, 2009. "Sustainable utilization of underground space in urban regeneration areas – as an example of Qingdao city," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp69-74.

Li, Charlie C. and Gisle Østereng, 2012. "Dynamic Rock Support in Underground Space Constructions," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Li, Charlie C., 2012. "Design Principles for Underground Space Construction: Structure Mechanics or Rock Mechanics?" *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Li, D.Y., A.H. Zhou, L.C. Wang, G.N. Zhou, T.T. Yang and X.M. Zhang, 2023. "Experimental Study on Mechanical Properties of Surrounding Rock of Railway Tunnel in Operation and Reasons for Tunnel Defects," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp993-998.

Li, G.W., L.L. Zhang, Q. Xu, X.B. Chen, F. Cheng and C.Z. Xu, 1999. "Ecological development and ecological construction are foundations to prosperity – study of development countermeasure of Fushun open coalpit," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp199-201.

Li, Guixian and Z.Q. Wang, 1988. "Prediction of seismic effect of underground space," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp356-361.

Li, Hang, Shao-ming Liao, Yong-jing Tang, Mingliang Shen, 2018. "Effect of bilateral excavation on adjacent historical building and monitored analysis in Shanghai soft area," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp992-1002.

Li, Huanqing and Yiqun Fan, 2018. "Deep Shanghai Project – a resilient strategy for infrastructure integration," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp93-102.

Li, Huan-Qing, Aurèle Parriaux and Philippe Thalmann, 2012. "The Way to Plan a Sustainable "Deep City": The Strategic Framework and Economic Model," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Li, Hui, Wang Peng, Yan Xiang, Zhu Wenjun, 2016. "Researches on Sound Environment in Futian Underground Railway Station," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Li, J.D., X.F. Chen, C.H. Luo, T.H. Zhang and K. Wu, 2023. "Experimental Study on Maximum Ceiling Temperature in Traffic Merging Section Tunnel Fires," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp723-728.

Li, J.X. and H.H. Zhu, 2023. "Explore Propagation and Reflection Characteristics of Tunnel-Blasting Seismic Waves in Rock Mass with a 3D Structure-Geology Model," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1127-1132.

Li, Jidong, 2014. "3D numerical settlement analysis of a new subway station close-attached undercrossing the existing subway station," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Li, Junhuan and Dongjun Lu, 1999. "The new model cave dwelling buildings," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, p251.

Li, Liyun, Zhongwang Qiu, Yingying Dong, Xiuli Du, 2016. "Risk Caused by Construction of the Metro Shaft Adjacent to Building and its Control Measure," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Li, Ning and H.D. Zhang, 1988. "The visco-plastic FEM analysis for the underground opening in the layered expansive rock," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp352-355.

Li, P.F., W. Feng, X.J. Gao, Z.Q. Jia, H.F. Wang and Z.H. Liu, 2023. "Mechanical Properties of Segment Joints in Subway Shield Tunnels by a Full-Scale Test," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1031-1062.

Li, Peng, Liu Xin-rong, Liang Ning-hui, 2009. "Evaluation of the Function Spaces Composition in Underground Urban Complex," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp442-446.

Li, Peng-fei, Zhang Ding-li, Fang Qian, Li Bing, Sun Feng, 2009. "Stability Analysis of Surrounding Rock of Subsea Tunnel Based On Coupled Fluid-Solid Theorem," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp579-584.

Li, Shihui, 1988. "The scientific methodology of tunnel surrounding rock stability analysis," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp216-220.

Li, Su-yan, Yu Yong-he, Zhang Yong-gan, 2009. "The Study on Rank Classification of Level of Service for Urban Tunnel," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp270-274.

Li, X., B. Yang, S. Miao and X.B Li, 2023. "Non-probabilistic Reliability-Based Design for Spalling Property in Hard Rock Tunnel Using an Info-Gap Method," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp185-194.

Li, X.J., X. Gu and J.R. Zhang, 2009. "Pragmatic development and utilization of underground space in public green space: a case of Shenzhen," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp171-175.

Li, X.Z., H. Xu, L.P. Sun and J. Che, 2014. "Demand and driving factors of urban underground space development: quantitative and comparative study," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Li, Xiangran, 1999. "Study on environmental engineering geology of underground space exploitation in littoral cities of eastern area in China," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp463-469.

- Li, Xiaozhao, Wenbo Wu, Liang Cao, Huanqing Li and Zhongxing Zhang, 2012. "Evaluation of Geo-environmental Suitability for the Development of Underground Space in Suzhou," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Li, Xun, Wang You-wei, Chen Ye, Bao Wen-qin, 2009. "Some Thoughts Concerning Development and Utilization of Urban Underground Space in China," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp343-352.
- Li, Y.F., J.T. Yuan, Z.Q. Hong and W. Li, 2025. "Research of drilling and blasting method based on a super-large cross-section cavern in Hong Kong," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp1010-1020.
- Li, Y.F., Z.K. Wei, J. Hong and C. Guan, 2025. "Implementation of smart site safety system and 5G/IOT in tunnel construction in Hong Kong – solution for safety construction," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp659-670.
- Li, Y.F., Z.K. Wei, J. Hong and X.F. Li, 2025. "Application of embedded fiber optic in the whole process monitoring of cavern development project," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp971-972.
- Li, Y.P., Z.Y. Wang and H.H. Liu, 1988. "Three dimensional back analysis of viscoelastic creep displacements," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp383-387.
- Li, Y.Q. and W.G. Zhang, 2023. "Performances of Two Inverse Sequencing Excavations in Anisotropic Clay," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1155-1160.
- Li, Yuxiang, 1988. "A suggested underground tramline in the West Lake area in Hangzhou," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp138-143.
- Li, Z.M., 1992. "Process discretization principle and its application," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp834-837.
- Liang, Y.H., W.D. Wang, W. Huang, J.B. Wu and S.J. Feng, 2023. "Practice of High-Filled Foundation in Construction of the Underground Space in Urumqi International Airport," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp873-878.
- Liao, Shao-ming, Meng-bo Liu, Yang Li, Cheng-lei Xi and Ke-xian Li, 2018. "Numerical analysis on stiffness and geometry forms of shield tunnel joints," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp886-893.
- Lim, Chul Won, John E. Sankey, Yassine Bennani and Dimitri Plantier, 2018. "Innovative precast arch tunnel system applied to a Korean expressway," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp695-704.
- Lim, Eng Hwee and Richard Hoo, 2012. "Exploiting the Potential of Underground Space in Cities," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Lin L., Z.R. Gu, J.L. Ren and X.J. Wang, 2023. "Issues and Reflections on Development and Construction of Urban Rail Transit Leftover Underground Spaces," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp477-484.

Lin, H.S., X.W. Tang and W.M. Huang, 2023. "Research on Intelligent Prediction for Deep and Large-Diameter Circular Shaft in the Pearl River Delta Region," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp897-902.

Lin, M.Y. and F. Liu, 2025. "Human perception experiment in underground space enhanced with mixed reality," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp777-783.

Ling Xu, Hongwei Huang, 2002. "Construction Monitoring of a Long Road Tunnel in China," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Lippett, B. Sandford, D. Rae, H. Asche and T. Peglas, 2018. "Design challenges of the Westconnex Arncliffe ventilation connections," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp345-354.

Littlejohn, G.S., 1988. "Rock anchorages for underground support," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp227-233.

Littlejohn, G.S., 1988. "Sprayed concrete for underground support," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp234-240.

Liu K., F.L. Peng and Y. Shu, 2009. "Ideas and practices on urban underground space planning in business district in Shanghai," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp141-145.

Liu, Chang-qing, Ren Jian-xi, Zhang Yin-he, Li Qing-yuan, Liu Hui, Sun Yang, 2009. "Monitoring Study on Deformation Law of Deep Excavation Supporting Structures in Metro Station," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp475-480.

Liu, D.X., L. Zhu and Y.Q. Liao, 2025. "Regression analysis of the development area of underground space in Shanghai," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp232-243.

Liu, Deming, 1999. "Developing underground public space winter cities," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp330-331.

Liu, F., S. J. Jiang, H. L. Cai, X. W. Zhang, 2009. "Analysis on Monitoring Results of Surrounding Rock Deformation and Anchor Rod Stress of an Underground House," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp500-506.

Liu, G.M. and Z. Li, 1992. "Investigation and research on Turfan's earth adobe dwelling," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp846-856.

Liu, Henry and Charles W., 2009. "A LIM-PCP System for Freight Transportation in Underground Cities," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp203-210.

Liu, Jie and Qing Lin, 1999. "Green architecture and it's in Shanghai," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp213-219.

Liu, S.C., Y.K. Qiao, N. Bobylev and F.L. Peng, 2023. "Evaluating the Contribution of Underground Space to Urban Resilience in Key Urban Areas: A Case Study in Shanghai," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp745-750.

Liu, S.G., W.Q. Zheng, G.H. Zhong and Z.Z. Zhou, 2025. "Flood risk assessment and resilience strategies for urban metros under extreme rainfall," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp533-542.

Liu, S.H. and H.W. Huang, 2025. "Multi-risk management for undersea tunnel construction based on NSGA-III algorithm," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp933-941.

Liu, Shao-tang, Ji Zhi-gang, Liang Yu-bao, Fan Wen-ping, Liao Zhong-ping, 2009. "Convergence and Settlement Monitoring During Construction of Subway Tunnels," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp464-469.

Liu, T., H.H. Zhu, Y. Shen, W.F. WU, L.K. Xu and S.Z. Feng, 2025. "Analysis of carbon emission characteristics and reduction potential on tunnel lighting safety, security and human factors," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp650-658.

Liu, Wei, Xiao-Wu Tang, Peng-Lu Gan and Qiang Tang, 2012. "Research on Soil Deformation Induced by Overlapped Tunneling in Stratum Soil," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDRom), ISBN-13: 978-981-07-3756-6.

Liu, X.R., Z.L. Zhong, Q.H. Qian and Y.X. Zhang, 2007. "Research on the feasibility of Chao Tianmen cross-river tunnel project in Chongqing," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp493-500.

Liu, Xin-rong, Zhu Ze-bing, Zhang Yong-xing, Li Peng, 2009. "The Control Technique of Blast Vibration of Shallow Tunnel Excavation in Station Project," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp447-451.

Liu, Y. and J.P. Liu, 1999. "A case study on sustainable building based on the traditional cave dwelling mode located in north of Shaanxi," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp74-80.

Liu, Y.B., S.M. Liao, Z.Y. Li, H.W. Zhong and H. Liu, 2023. "Vlasov Beam-Based Soil-Tunnel Interaction Model for Rectangular Tunnel Considering Five Cross-sectional Deformations," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp999-1006.

Liu, Y.F., Y. Liu and J.P. Liu, 1999. "Ameliorating the indoor thermal environment of yao dong by using sun space," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp58-72.

Liu, Y.H. and X.J. Chen, 1999. "The primary effect and problems of geological factors in opening up the underground space in city," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp112-115.

Liu, Yi, 2016. "A Study on Merging and Diverging Area Design for Urban Underground Expressway," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Liu, Yun, 2014. "A research on the underground road system planning in the central areas of Beijing," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Lo, Frankie L.C., Mark I Wallace, Florent DeSaintPaul and Julian S H Kwan, 2018. "Updated guidelines for cavern engineering - Geoguide 4: guide to cavern engineering (2nd edition)," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp52-61.

Lohmeyer, G. and K. Ebeling, 1992. "Building in ground water," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp703-714.

Lok, H.S., Y.F. Li, Z.K. Wei and Z.Q Hong, 2025. "Integrating "scan to BIM" technology into the construction of a cavern project," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp994-996.

Lolaev, Alan B. and N.D. Shklyarov, 1995. "Underground space and urban planning in cold region," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp85-90.

Long, L.Y., W. Broere and X.H. Zhang, 2025. "Life-cycle carbon footprint of underground infrastructure," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp467-475.

Lopez, De Asiain Jaime, 1988. "One earth sheltered village in Andalucia, Spain," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp72-73.

Lowing, A.N., 1983. "Earthquake considerations for earth-shelter residential buildings," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp141-146.

Lowing, A.N., 1983. "Earthquake considerations for earth-shelter residential buildings," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppF34-39.

Lu Ye, Zhengfeng Gao, Yunjing Lai, Hongwei Huang, 2002. "The Construction of Underground Link Tunnel in Shanghai of China," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Lu, Aimin, 1999. "Underground building and Chinese climate," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp513-516.

Lu, B. and M.X. Zhang, 2023. "Research on Last-Mile Delivery System of Underground Logistics Based on Intelligent Level," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp423-428.

Lu, B., M.X. Zhang and Y.Q. Fan, 2021. "A Feasibility Study of Urban Underground Logistics System -- A Case Study of Shanghai," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., *Proc. IOP Conf. Series: Earth and Envir. Sci.*, Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Lu, Bingjie, 1988. "The strange buildings – the building group of Tu-Lou in Tian-Liao Keng (pit)," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp63-71.

Lu, D., W. Wu, A. Romagnoli, H. Tjiawi, J. Poh, T. Massier, C. Chua, L. Yang, A. Chidire, B. Veerasamy and J. Loong, 2023. "Heat Extraction Characteristics of Hot Granite in Singapore," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1171-1172.

Lu, Liang, 2009. "Exploration of Connection between Metro Stations and the Underground Space," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp372-376.

Lu, Lili and Yaoming Wang, 1999. "Counter measure of sustainable development of Shanghai underground space," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp310-316.

Lu, M., D. Mao, X.P. Zhang and Z.Y. Zhao, 2014. "Challenges on shaft construction – water control and rapid excavation," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Lu, Shan, Nakamura Hitoshi, Yu Shu, 2016. "The Establishment and Application of Underground Space Safety Evaluation System in Shanghai," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Lu, Shixi, 1986. "Insulation practice for subsurface cold storage," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp273-276.

Lu, Shu-xian, Jin Won Choi, Doo Young Kwon, 2009. "Developing a Framework of a 3D Intelligent Guidance System for the Underground Space," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp415-419.

Lu, T.S. and S.Y. Liu, 2023. "Numerical Analyses of an Excavation Case in Thick Soft Clay with the Aid of SCPTU Test," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1147-1150.

Lu, X.Q., K.Y. Hou, Y. Shu, L.D. Yang and D.S. Chang, 1991. "Pudong underground space planning theory and model," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp119-122.

Lu, X.Q., K.Y. Hou, Y. Shu, L.D. Yang and D.S. Chang, 1991. "Shanghai Pudong underground space planning theory and model," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp653-656.

Lu, Y.Y. and R.L. Xu, 1999. "New technique of administration of underground ventilation system characteristic graph of system," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp459-462.

Lu, Younian, 1988. "A general formula for calculating the rock resistant factor K of hydraulic pressure tunnel," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp362-365.

Lu, Yuan-jing, Gu Yi-jia, 2009. "Assessment of Underground Space Resource Based on GIS Technology," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp433-436.

Lui, Pao Chuen, Jian Zhao and Yingxin Zhou, 2012. "Creation of Space in Rock Caverns in Singapore — Past, Present and Future," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Lunardi P., 2002. "The Construction of Large Span Stations for Underground Railways," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Lunardi, Pietro, 1995. "The underground sewage treatment plant at Brunico in Media Pusteria," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp401-406.

Lunardi, Pietro, 1995. "The use of underground space as a means of safeguarding the environment: amendments to legislation," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp577-580.

Lunardi, Pietro, 2016. "Evolution of Design and Construction Approaches in the Field of Tunnelling: The Results of Applying ADECO-RS When Constructing Large Underground Works in Urban Areas," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Luo, W.J., P. Zhang and Y. Zou, 2023. "Numerical Investigation on Anisotropic Deformation around Gas Storage Cavern in Jointed Rock Mass," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1101-1106.

Luo, W.L., P. Zhang, C.L. Li, Y. Zou and Z.Z. Li, 2025. "Preliminary numerical evaluation of re-using oil storage caverns for hydrogen storage by using lined rock cavern technology," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp416-424.

Luo, W.P. and D.J. Yuan, 2023. "Prediction of Fracture Initiation in Cohesive Soil Using a Data-Mining Approach," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp969-974.

Luo, Y.B., J.S. Yang, Q. He, Z.H. Zhu and Y.C. Tan, 2025. "Hydrogeological investigation and monitoring analysis of water-related hazards in operational highway tunnels in water-rich regions," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp560-572.

Luong, M.P., 1988. "Tensile and shear characteristics of rock materials," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp327-331.

Lv, Liang-hai, Bai Yong-qiang, Wang Tong, 2009. "The Fire Characteristic and Fire Protection Measures of Underground Space," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp322-327.

Lyu, Hai-Min, Shui-Long Shen and Fang-Le Peng, 2018. "Vulnerability assessment of land subsidence induced risk in Shanghai, China," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp293-300.

Lyu, Z.X., Z. Li, R. Zeng, Y.M. Hu and Y.Q. Liu, 2023. "Investigating Elevated City Transformations Through the Analysis of Future Urban Scene Components Depicted in Films and Television Works," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp235-240.

Ma, Bao-song, Zeng Cong, 2009. "The Development of Underground Infrastructure Asset Management in China," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp359-365.

Ma, C.X., Z.J. Li and F.L. Peng, 2025. "Management of urban underground space development in Shanghai: experience and challenges," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp207-218.

Ma, Chen-Xiao, Fang-Le Peng, Jian-Cheng Hu, Xiao-Lei Wu and Shuai-Fu Ding, 2018. "Integrating and restructuring of urban underground space: a case study of the Middle Hong Kong Road CBD in Qingdao," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp775-785.

Ma, Chen-Xiao, Fang-Le Peng, Jun-Bo Zhang and Tian-Qing Wang, 2021. "Evaluation of Spatial Performance of Urban Underground Public Space: A Case Study of Wujiaochang Sub-center in Shanghai," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Ma, De-zhong, Zhou Zhen, Jiang Yong-qing, 2009. "Simulation Study on Safety Evacuation in Underground Business Street Fire," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp317-321.

Ma, Sang-Joon, Hujeong Gil and Domg-Min Kim, 2012. "A Study on Applicability of Composite Lining Method by Field Construction Test," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Ma, Y.Q., T.Q. Wang, Y. Zhang and A.G. Li, 2025. "Influence of geometric parameters and velocity of vent on heavy gas exhaust efficiency in tunnels," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp765-776.

Ma, Zhongzhen and Yu Shu, 1997. "The shield engineering and technology development in China," Workshop D-4, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Mac Feat Smith, Ian and E.S. Woods, 1995. "Design and construction of three lane highway tunnels for the Route 3 Project, Hong Kong," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp461-468.

Mac Van, Abel, 1997. "La responsabilité du tréfoncier," Workshop B-5, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Madinaveitia J., 2002. "The Bilbao Metro Station at Ansio," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Madinaveitia, Jose Ramon, 1997. "The Bilbao subway and integration in the city," Workshop C-2, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Madryas, C. and J. Rozycki, 1986. "Concrete as a structural material in underground structures subject to dynamic loads," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp107-110.

- Madryas, C., 1988. "Some problems of the underground grids rebuilding," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp275-279.
- Madryas, Cezary, 1995. "Strategy for reconstructing sewage pipes," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp501-506.
- Maesoba H., Sunagawa Y., Nishi J., Tanaka T., 2002. "A Study about the Cause of the Difficulty to transfer in the Subway Station - Targeting Oedo Line," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).
- Mahdi, A. and S. Beheiry, 2014. "A framework for bid fraud prevention in construction," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Mahmoud E.H., El-Kady A.A., 2002. "Mitigation of Blast in Underground Spaces - Analysis and Simulation using the AUTODYN Simulation Package," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).
- Mahmoud, E.H. and J.G. Hetherington, 1999. "New spatial forms to reduce the effects of blast waves in underground spaces," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp446-453.
- Mahmoud, Ehab Hanafi, 2005. "Developing of megatrends in the fourth waves of urban underground space," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp105-108.
- Maidl, B., and K. Gebhardt, 1988. "The planning of the 4 shaft of the Elbtunnel in Hamburg," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp189-193.
- Mair, R., 1983. "Groundhouse, a fan-shaped, multi-level structure in North Queensland," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppE21-25.
- Makarov, V., V.N. Makishin, I.S. Pushkarev, I.V. Sadardinov, A.N. Buzikov and J.A. Hrulev, 2014. "Independent underground tunneling transport system in Vladivostok City," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Makarov, Vladimir, Valentin Anikeev, Igor Pushkarev, Viktor Filonenko, Ilyas Sardadinov, Anastasia Mirobian, 2016. "Effective Tunneling Transport System in Vladivostok City," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Makovetskiy, Oleg and Stanislav Zuev, 2016. "Practice Device Artificial Improvement Basis of Soil Technologies Jet Grouting," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Makovsky, L. and Y. Shchekudov, 2005. "Computer-aided simulation of the behaviour of pre-reinforced supports in transportation tunnel engineering," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp204-207.

- Mammino A., Tonon F., Ometto L., Bovo F., 2002. "Moving the Padova Train Station and Link Underground: a City Planning and Engineering Proposal to Make the Town more Organic and Livable," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).
- Mammino A., Tonon F., Siviero E., Briseghella B., Faccio P., Zordan T., 2002. "A New Tunnel for the City of Mestre," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).
- Man'ko, A.V., O.K. Postolskaya and S.A. Yufin, 2005. "Geomechanical monitoring of underground structures with application of modern computer technologies," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp208-212.
- Manandhar, Ramesh, 1983. "Mud brick dome and vault construction at Maryborough, Victoria," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp.371-376.
- Manandhar, Ramesh, 1986. "People's earth sheltered architecture in Nepal," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp28-32.
- Mangora V., De Biase A., Cherubini S., Lombardo C., Ciamei A., 2002. "High Mechanization of Underground Works in Torino," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).
- Mangushev, Rashid, Evgeny Rybnov, Elena Lashkova, Anatoliy Osokin, 2016. "Examples of the Construction of Deep Excavation Ditches in Weak Soils," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Maniou, Magdalene and Athanassios Mavrikos, 2018. "The educational potential of modern metro systems," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp544-549.
- Mao, Dawei and Bjorn Nilsen, 2012. "Numerical Analysis of Effects of Weakness Zones on Tunnel Stability – 2D Versus 3D," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDRom), ISBN-13: 978-981-07-3756-6.
- Mao, Dawei, Ming Lu, Zhiye Zhao, Melvin Ng, 2016. "Effects of Water Related Factors on Pre-grouting in Hard Rock Tunnelling," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Marcovecchio, John, 1997. "Les défis de construire une galerie commerciale sous une cathédrale - le cas des Promenades de la Cathédrale," Workshop A-5, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), *Proc. 7th Intl. Conf. Underground Space*, Montréal, Sep 29-Oct 3 (CD-ROM).
- Marec, Michel, 1995. "Comment rendre les tunnels routiers plus agréables à franchir," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp255-262.
- Mária Hámor-Vidó, Tamás Hámor, János Kovács, 2025. "Classification, conflict mapping and criticality assessment of underground assets: a holistic approach for informed decision makers," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp860-870.

Marinos, P.G., M. Novack, M. Benissi, G. Stoumpos, D. Papouli, M. Panteliadou, V. Marinos, K. Boronkay and K. Korkaris, 2007. "Assessment of ground conditions with respect to mechanized tunnelling for the construction of the extension of the Athens Metro to the City of Piraeus," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp57-66.

Markov, Vladimir, 2014. "New solutions for Saint Petersburg metro system design and construction," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Martarèche, Frédéric, 2012. "The Perforex Pre-Cutting Method: An Inventive Tunnel Construction Technique Maximizing Safety for the Workers and Surroundings," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Martin, C., 1983. "Composting toilet: an alternative to traditional sewage systems," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppD33-37.

Marvin, S. and S. Slater, 1995. "The new infrastructure crisis in the UK: competition for urban space in Sheffield," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp1139-144.

Maslak, Vladimir and Dmitry Boytsov, 2016. "Modular Design of Subway Facilities," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Maslak, Vladimir, Dmitry Boytsov, Andrey Danilov, Elena Levina, Semen Gendler, 2016. "Innovative Engineering Solutions for Improving Operational Safety and Efficiency of Subways with Two-way Tunnels," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Masuda, N., N. Tanikaga, T. Kasuya and T. Shirane, 2014. "A study of development of a network between Nagoya City Sasashima Area and the existing underground space of Meieki," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Matei, A., V.I. Pop and S. Tiganas, 1995. "Réintégration de quelques sites archéologiques de Cluj Napoca dans un tracé touristique européen," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp231-234.

Mathieu, M., 1992. "Economical construction of cut-and-cover tunnels using prefabricated concrete," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp693-702.

Mathisen, H.M. and K. Kolsaker, 1995. "Energy use for heating and ventilation in rock caverns for public use," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp289-294.

Mathur, G.C., 1983. "Social and economic constraints to modification and obstacles to technology transfer for making mud houses resistant to seismic forces," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp147-150.

Matsumoto, R. T. Hirose and S. Takamatsu, 2005. "Use of underground for creating good landscapes," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp109-114.

Matsumura, H. and T. Minoda, 1001. "Usage and development of underground space in Osaka," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp116-121.

Matsumura, H. and T. Minoda, 1001. "Usage and development of underground space in Osaka," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp75-78.

Matsuoka, S. and K. Hamajima, 1991. "Computer aided planning systems for underground parking," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp186-191.

Matsushita, K., S. Miura and T. Ojima, 1991. "Environmental study on underground parking lot development in city," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp172-179.

Matsushita, K., T. Ojima and S. Miura, 1991. "Environmental study on underground parking lot development in city," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp234-244.

Matveeva, Olga, Ekaterina Sokolova, Galina Fedorova, Igor Zyryanov, Viktor Lobanov, 2016. "Ensuring Corrosion Resistance of Injection Solutions for Grouting of Jointed Rocks in Underground Developments of Cryolithozone," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Maugenest, C. and F. Schokking, 1992. "Chemical wastes above or underground: A pre-evaluation study," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp467-474.

Maurenbrecher, M.P., J. Herbschleb and B.T.A.J. Degen, 1995. "Investigating the sub-surface in urban areas for underground spaces with special reference to Amsterdam," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp207-212.

Maurenbrecher, P.M. and H.J.B. Z. Trimbos, 1991. "Preliminary infrastructural development plan for the resort town of Valkenburg, SE Netherlands by adapting existing open and underground quarry spaces - basis for an international contest," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp661-669.

Maurenbrecher, P.M. and H.J.B. Z. Trimbos, 1991. "Preliminary infrastructural development plan for the resort town of Valkenburg, SE Netherlands by adapting existing open and underground quarry spaces - basis for an international contest," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp123-132.

Maurenbrecher, P.M. and P.N.W. Verhoef, 1988. "Review of research into structural stability of underground space in abandoned building stone mines in the Cretaceous limestones of southeast

- Holland," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp372-376.
- Maurenbrecher, P.M., 1992. "Evaluation of opportunities for use of underground space in the Netherlands," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp432-441.
- Maurhofer, Stefan and Antonia Cornaro, 2012. "Chips and Laser Underground Waferfab and XFEL – Two Unique Underground Structures," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Mavrikos, A. and A. Benardos, 2014. "Financial assessment and valuation of the underground hazardous waste repository in Lavrion, Greece," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Mavrikos, A. and D. Kaliampakos, 2007. "Appraising the environmental advantages of underground storage facilities in Athens," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp267-272.
- Mavrikos, A. and S. Mitsialis, 2023. "Underground Microgreen Farming in Athens, Greece: Design Concept and Investment Analysis," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp643-650.
- Maxwell, Angus, Arthur So and William Tai, 2012. "Risk Management for Ground Engineering Works: The Role of the Independent Monitoring Consultant," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- McKown, C. and E. Davis, 1983. "Interior design of earth shelters – high market impact," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp251-254.
- McKown, C. and K.K. Stewart, 1983. "Consumer acceptance as a research technique," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp223-226.
- Mehdi Safaee, M., N. Mohajeri and Anita Aghili, 2007. "Historical urban places: case study Tehran, Iran," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp309-316.
- Melnikov, N.N., V.P. Konukhin, V.A. Naumov, P.V. Amosov, S.A. Gussak, A.V. Naumov, Y.R. Katkov, Y.G. Smirnov, A.O. Orlov and Y.Y. Rybin, 2005. "Concept of an underground storage facility for spent nuclear fuel from ship power units in the Kola Peninsula," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp24-35.
- Meng, L.J., K.J. Wu, Y. Deng and Y.T. Zhao, 2023. "Exploration of an Integrated Planning Approach for Acupuncture-Style TOD to Drive the Renewal of Historic and Cultural Districts," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp469-476.

Meng, L.J., Y.T. Zhao, K.J. Wu and J. Guo, 2025. "Exploration of urban design concepts for underground public spaces in renewal areas: a case study of Beijing's underground space construction," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp175-181.

Meng, W.Z., C. Zhang and W. Wu, 2023. "Smart Detection of Underground Anomalies Using Convolutional Neural Network with Sliding Time Window," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1139-1142.

Merkin, V.Y. and B.N. Vinogradov, 2005. "State of the art in construction codes of practice for transportation tunnel engineering in Russia," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp115-117.

Merkin, Valery and Dmitriy Konyukhov, 2016. "Development of Moscow Underground Space Plans, Results, Perspectives," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Merkin, Valery, Dmitriy Konyukhov, Aleksey Simutin, Grigoriy Medvedev, 2016. "Stabilizing of High-altitude Position of the Centrifuge's Foundation by Compensation Grouting Technique During Underground Tunneling," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Metje, N., I. Jefferson, K. Hansard, D. Chapman and A. Faramarzi, 2023. "National Buried Infrastructure Facility (NBIF)—New Opportunities for Controlled Testing," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1221-1224.

Micic, G., 2025. "Universality in design: user-centric methodology for infrastructure projects - Brussels experience," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp39-47.

Micić, K., N. Joksimović, M. Marjanović, V. Jovičić and J. Ninić, 2025. "Towards an advanced geotechnical modelling of block-in-matrix rock for robust tunnel design and construction," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp288-298.

Miki, T., 1991. Urban development and underground space use in Nagoya," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp122-126.

Miki, T., 1991. Urban development and underground space use in Nagoya," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp79-81.

Milliken, L.D., 1992. "Beneficial use of industrial by-products for hydraulic salt mine backfill," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp447-456.

Millis, Stuart W., Kitty H.K. Chan, Anek Kanittanon, Hermond C W Cheung, Leslie W H Tsang, Phyllis P X Chan and Felix C K Kong, 2018. "Adaptive re-use of an underground explosives magazine," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp112-122.

Min, X.H., Y.N. Wang and S.L. Shen, 2025. "Identification of Karst caves based on multi-sources data fusion during shield tunnelling," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp355-360.

- Minke, Gernot, 1983. "Earth sheltered buildings utilizing tamped earth and plant stabilized earth as building materials," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp377-380.
- Miranda, T., A.G. Correia and L. e Sousa, 2005. "Determination of geomechanical parameters using a KBS system and application to an underground station," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp218-225.
- Mirsayapov, I. and N. Aysin, 2025. "Simulation of the soil base of a building foundation near a deep pit," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp425-431.
- Mirsayapov, I.T. and I.V. Koroleva, 2018. "Strength and deformability of deep foundations clay grounds in underground structures and high-rise buildings," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp669-677.
- Mirsayapov, I.T. and N.N. Aysin, 2021. "Influence of the deep pit construction on a settlements of surrounding buildings," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>
- Mirsayapov, Ilizar and Irina Koroleva, 2016. "Long-term Settlements Assessment of High-rise Building Groundbase Based on Analytical Ground Deformation Diagram," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Misra, P., 1983. "Earth-covered homes with application of low profile arches in suburbs of New South Wales," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppE26-30.
- Mitake, T. and T. Shirane, 2009. "The operation of local parking lot rules in the OMY District and the formation of underground parking lot networks," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp90-95.
- Mitchell, P.B., 1983. "Ongoing earth-covered housing projects in South Australia," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, Appendix B1-5.
- Miura, S. and T. Ojima, 1991. "Environmental study on underground shopping center," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp471-479.
- Miura, S. and T. Ojima, 1991. "Environmental study on underground shopping center," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp355-361.
- Miya, K. and S. Ishikawa, 1991. "Toward practical utilization of the DOT tunneling method," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp345-355.
- Miya, K. and S. Ishikawa, 1991. "Toward practical utilization of the DOT tunneling method," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp270-277.

- Miyaji, A., K. Sashida and S. Nomura, 1991. "Application of chainsaw to tunneling method," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp248-253.
- Mizuguchi M., Nishida Y., Tomita T., Noguchi H., Yamamoto M., 2002. "Public Underground Spaces Around Tokyo Central Station: Enhanced Utilization for a Severe Earthquake Scenario," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).
- Mizuguchi, M. and T. Kasuya, 2014. "A study of future measures by public-private collaboration to prevent underground inundation around Tokyo Station," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Mizuguchi, Masaharu, 2007. "Public-private cooperation as deregulation proceeds," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp557-562.
- Mizuguchi, Masahuru, Taro Kasuya, Takaki Omori, Motohiro Sawada and Takahiro Saito, 2012. "Study of Potential Flooding of Underground Pedestrian Space in the Area Around Tokyo Station," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Mo, J. and X.Y. Meng, 1999. "Resource space urban fabric – a study of the development of underground space in Beijing," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp138-148.
- Mochizuki, Nahoko, 1995. "The relation between preferred lighting and behavior in underground space: problems and possibilities of task-ambient lighting," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp551-556.
- Mohamed, A.H., N. Ismail, K.W. Mohd, S.A.H. Sulaiman and N. Sulaiman, 2025. "Enhancing the development of underground land: issues on legal, social and economic aspects," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp910-922.
- Mohanto, S., K. Singh, T. Chakraborty and D. Basu, 2012. "Cyclic Thermo-Mechanical Analysis of Wellbore in an Underground Compressed Air Energy Storage Cavern," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Mohapatra, A., S. Mishra, W.S. Chen and K.T. Arora, 2023. "Geothermal Gradient of Underground Structure Subjected to Fire and Blast Loads," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp651-658.
- Mohkam, M., T. Ciblac and M. Esfehiani, 1997. "Approches numérique et expérimentale des mécanismes de rupture de tunnels en terrains meubles sans pressurisation," Workshop D-5, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Molé, Sylvie, 1997. "Propositions pour une gestion intégrée des commerces sur rue et hors rue à Montréal," Workshop C-3, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Monnikhof, R.A.H., J. Edelenbos and R.A.A. van der Krogt, 1999. "The new underground planning map of the Netherlands – a feasibility study of the possibilities of the use of underground space," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp97-106.

Mooney, Michael A., Jacob Grasmick and Soroush Mokhtari, 2018. "Characterizing complex underground conditions using big data analytics, geostatistics and 3D modeling," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp275-281.

Moreau, B., M Deffayet, I Chan, F Lam, P Chau, M Bettelini, F Ng and G Au, 2021. "Fire safety issues in underground spaces: a need for regulatory evolution – French, Swiss and Hong Kong SAR, China (Hong Kong) contexts," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Morency, René, 1997. "Des conduits qui nous ouvrent la porte à tout un monde souterrain," Workshop D-6, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Morgan, Judy, 1997. "Toronto's PATH Program - A public/ private partnership," Workshop A-6, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Morishima, M. and K. Fujiwara, 1991. "Mobile communications for underground living," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp604-607.

Morishima, M. and K. Fujiwara, 1991. "Mobile communications for underground living," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp452-457.

Mossmark, F., P. Lindgren, E.L. Frisk, L. Melgaço, M.M. Zurita, J. Norrman, V. Svahn, T. Söderqvist, O.T. Sandström and Y. Volchko, 2023. "Case Study-Driven Research to Provide a Foundation for Advancing Geosystem Services and Planning Practices for the Subsurface," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp529-534.

Mossmark, Fredrik, Thomas Dalmalm, Mats Engdahl, Linnea Muje, Lars Rodhe and Hanna Wåhlén, 2018. "The need for coherent three-dimensional planning of Swedish urban areas," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp405-411.

Mulligan, H., 1992. "Underground dwellings in central England," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp329-338.

Mulligan, Helen, 1983. "The low-input dwelling: energy requirements in the vernacular use of underground space," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp19-24.

Mulligan, Helen, 1986. "The rock-cut dwelling in a temperate climate: Occupational patterns and heating demand," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp12-17.

Mulligan, Helen, 1988. "Estimating the energy consumption of cave dwellings: the profile factor method," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp458-463.

Murakami, Y. and T. Arai, 1988. "Present status of the shield-tunnelling method developing in Japan," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp292-297.

Murakami, Yoshimaru, 1988. "Types of utilization of underground spaces – history, present and tomorrow," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp286-291.

Nabeshima, H., T. Shiotani and A. Matsushita, 2007. "Effective underground use enabled by subway construction in narrow area where many other lifeline lie," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Bernardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp131-136.

Nakajima, Y, 1991. "Future prospect for underground space resources – Case study of Oya area in Utsunomiya City," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp167-174.

Nakajima, Y, 1991. "Future prospect for underground space resources – Case study of Oya area in Utsunomiya City," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp108-112.

Nakamura H., 2002. "A Study about the Effects of Barrier-Free Facilities taking a Sense of Fatigue of a Person who uses a Wheelchair into Consideration," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Nakamura, H. and M. Oosawa, 2021. "Effects of the underground discharge channel/reservoir for small urban rivers in the Tokyo area," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., *Proc. IOP Conf. Series: Earth and Envir. Sci.*, Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Nakamura, H., K. Murakami, M. Kikuchi and M. Oosawa, 2023. "Study on the Actual Situation of Entrances and Exits of Underground Stations Installed on Building Sites and the Application of Urban Development Systems," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1077-1082.

Nakamura, H., T. Yamana, T. Matsushita, T. Wakamatsu and T. Wakamatsu, 1991. "Research of smoke control in underground structures," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp545-555.

Nakamura, H., T. Yamana, T. Matsushita, T. Wakamatsu and T. Wakamatsu, 1991. "Research of smoke control in underground structures," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp415-422.

Nakamura, Hideo, Kazushige Shinya, Kenjiro Kobayashi and Yoshihiro Takami, 2012. "A Study on the Formation of Underground Networks in Japan," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou,

Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Nakamura, Y. and M. Oosawa, 2025. "Research on composition of shops in underground mall," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp882-889.

Nakanishi, K., 2023. "Efforts to Move Railway Tracks Underground in Japan," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp87-92.

Nakano, N., K. Shintani and J. Fujita, 1991. "City planning of underground space utilization in Tokyo," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp108-115.

Nakano, N., K. Shintani and J. Fujita, 1991. "City planning of underground space utilization in Tokyo," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp70-74.

Nakashima, M., A. Hirata and Y. Hori, 1988. "Design and construction of a subway line under large permanent structures by underpinning," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp251-256.

Narvi, Seija, 1995. "Town planning of underground spaces in Helsinki," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp347-352.

Nasri V., Schabib J., 2002. "Different Alternatives for the Launch Wall of the Queens Cut and Cover Tunnels, East Side Access Project, New York," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Navarro Torres, V. and C. Dinis da Gama, 2005. "Blast induced vibration control and management in underground spaces," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp226-232.

Nelson, Susan, 1997. "The status of underground space and underground construction in United States," Panel "Future of indoor cities," *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3. (CD-ROM).

Nero, A.V., 1985. "Radon in energy-efficient earth-sheltered structures," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp281-285.

Neumann, J. and D. Paul, 1988. "The first parking cavern with shelter in the Federal Republic of Germany," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp515-518.

Newman, J.O. and L.C. Godbey, 1983. "Multi-therm solar earth house with retreat area – design considerations," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp109-114.

Newman, J.O. and L.C. Godbey, 1986. "Soil temperatures adjacent to a South Carolina earth sheltered residence," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp158-168.

- Ng, K.C., R.K.S. Chan and M.I. Wallace, 2018. "The contribution of underground development to slope safety in Hong Kong," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp103-111.
- Ngu, W.C., E.W. Poon and W.W. Yang, 2025. "Underground circulation of logistics as a strategy for land optimization and logistics efficiency: a case study of district logistics network in Jurong Innovation District, Singapore," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp635-649.
- Nie, Bihua, 1988. "On the design of entrance to underground space," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp298-301.
- Nie, Wen, Huimei Chen, Zhiye Zhao and Manchao He, 2012. "Experimental Investigation on Water-Induced Variations in Mechanical Behavior of Sandstone," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Niira, Kyoko, Katsutoshi Shigeno, Masahiko Kikuchi, Tadashi Inoue, 2016. "Disaster-prevention Measures for Underground Space to Deal with Large-scale Earthquakes and Intensified Flood Disasters in Japan," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Niitani, Yoji, 1991. (Chm.) Panel Discussion, "Urban underground network and terminal facilities," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp30-53.
- Niitani, Yoji, 1991. (Chm.) Panel Discussion, "Urban underground network and terminal facilities," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp33-38.
- Nik, M. Gharouni, B. Abrah, M. Karami and L. Faramarzi, 2012. "Stability Analysis of Underground Structure by Numerical Method (Case Study: Penstock Tunnels of Rudbar Dam-Iran)," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Nishi J., Tanaka T., Seiki T., Furumai T., Yashiro K., 2002. "The Advantages and Disadvantages in the Use of Deep Underground Space," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).
- Nishi, J. H. Igarashi, K. Sato and M. Morita, 1991. "Traffic problem and underground utilization in urban area," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp223-233.
- Nishi, J. H. Igarashi, K. Sato and M. Morita, 1991. "Traffic problem and underground utilization in urban area," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp164-171.
- Nishi, J., M. Morita, H. Igarashi and K. Satoh, 1992. "Efficiency of underground pedestrian passage in towns with snow and cold weather," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp293-302.

Nishi, J., T. Seiki and Y. Nishida, 2007. "The urban problems and the underground solutions," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp31-36.

Nishi, J., T. Tanaka and K. Kuriyama, 1995. "Comfortable design factors in underground space," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp165-170.

Nishi, Junji, F. Kamo and K. Ozawa, 1988. "National use of urban underground space for surface and sub-surface activities," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp257-261.

Nishida Y., Masaki M., Yamamoto M., Tomita T., 2002. "Futuristic Underground Arcades: Thoughts for an Ideal Realization," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Nishida, Y. and N. Uchiyama, 1991. "Subject of utilization of underground space on urban development," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp151-156.

Nishida, Y. and N. Uchiyama, 1991. "Subject of utilization of underground space on urban development," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp98-101.

Nishida, Y. H. Fabillah, S. Ichihara, J. Nishi and K.D. Cho, 2007. "The underground images in Japan, Korea and Indonesia," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp169-174.

Nishida, Y., 1991. "Underground utilization during an urban disaster," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp190-197.

Nishida, Y., K. Hasegawa, N. Tanikaga and T. Kasuya, 2014. "Regarding networking the center of Hiroshima focusing on the Shareo underground shopping mall," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Nishida, Yukio, Taro Kasuya, Tetsuya Shirane and Kenji Hasegawa, 2012. "Research of the Effects of the Development of an Underground Shopping Mall," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Nishioka, S., Y. Tannaka and T. Minemura, 2007. "Deep underground usage for effective executing of city facility construction," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp291-296.

Nitani, Y., H. Aoki, H. Matsutani, A. Shindo, H. Taguchi, T. Takeda, Y. Iida and Y. Shiromizu, 1999. "Feasibility of underground transit malls in Japanese cities," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp291-305.

Noguchi, Hirotake, Yasuhito Kawagishi, Takeshi Moriya and Shinji Konishi, 2018. "Connecting the station to the city," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp570-575.

Nomikos, P.P., P. Yiouta-Mitra and A.I. Sofianos, 2007. "Stability of multi-jointed roof rock beams in large underground opening," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp463-468.

Nomura, S., A. Miyaji and K. Sashida, 1991. "Application of chainsaw to tunneling method," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp310-318.

Nordgren, Ingemar, 1988. "Cold storage in rock," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp122-126.

Norrman, J., L.O. Ericsson, K L Nilsson, Y Volchko, J Sjöholm, A Markstedt and V Svahn, 2021. "Mapping subsurface qualities for planning purposes: a pilot study," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., *Proc. IOP Conf. Series: Earth and Envir. Sci.*, Vol. 703
<https://iopscience.iop.org/issue/1755-1315/703/1>

Novello Massai G., Boffa Tarlatta E., Bocconcino M.M., 2002. "New Spaces for the Land: Drafting and Representation in the Underground Works' Project," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Novello, G., M. Bocconcino and M. Vitali, 2005. "City requalification and mobility in the historical public squares of the Italian city: plans, projects, representation and realizations for underground parking areas in Turin," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp118-123.

O'Neill, Ken and Weimin Deng, 2018. "Creation of a subterranean public space under a recreated headland on Sydney Harbour," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp83-92.

Ochi, Kengo, 2018. "Urban underground development and urban renaissance in Japan," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp857-863.

Oda, J. and Y. Shuto, 1991. "An analysis of disaster cases in underground space," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp439-442.

Oda, J. and Y. Shuto, 1991. "An analysis of disaster in underground space," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp578-583.

Oda, S. and K. Fujita, 1991. "Pneumatic caisson method utilized for construction of deep underground structures," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp269-276.

Odagiri, N., H. Dobashi, K. Namikawa, S. Egawa and A. Saito, 1999. "Effective utilization of underground space for road development using a new tunneling technology in urban areas," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp408-419.

Ogata, Y., M. Seto and K. Katsuyama, 1995. "Investigation of the underground by geo-tomography with the precise blasting system," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp603-608.

Ogi, H., T. Hiyeda and K. Nakamura, 1988. "Simulation system for environmental property of man-basement system," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp447-452.

Ohara, Taisha, Tetsuya Shirane, Taku Tanikawa and Yu Yoshioka, 2018. "Improvement of public spaces in central Tokyo terminal station areas through public-private partnerships: improvement of Tokyo station underground plaza," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp218-227.

Ohkuma, K., Y. Seno and N. Yamada, 1991. "Development and application of an automatic shield tunneling system," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp356-362.

Ohmura, Satoshi and Masatoshi Kawachi, 2007. "A study on space reorganization / use strategy for municipal renovation – an example of Yaesu area at eastern side of Tokyo Station," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp577-582.

Ohmura, Satoshi, Hitoshi Asano and Masami Yokotsuka, 2021. "Study on Planning of New Underground Railway & New Station in The Yaesu-Kyobashi-Nihonbashi District (Part 2)," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., *Proc. IOP Conf. Series: Earth and Envir. Sci.*, Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Ohmura, Satoshi, Masami Yokotsuka and Takeshi Abe, 2018. "Study on planning of new underground railway & new station in the Yaesu-Kyobashi-Nihonbashi district," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp506-514.

Ohnishi, Y., C. Zhang, S. Nishiyama, K. Hayashi and A. Okamoto, 1999. "Application of photogrammetry on rock displacement measurement," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp420-428.

Ojima, Toshio, 1991. (Chm.) Panel Discussion, "Development method for centralization of underground," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp72-87.

Ojima, Toshio, 1991. (Chm.) Panel Discussion, "Development method for centralized utilization of underground," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp47-49.

Okada K., Fujita T., Tanaka M. 2002. "Introduction of Barrier-Free to Underground Stations," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Okamura, M., 1991. "On the construction technology for underground structures with large section and length in metropolitan area," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp387-392.

Okamura, M., 1991. "On the construction technology for underground structures with large section and length in metropolitan area," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp299-302.

Okawa, T. and M. Hayano, 1991. "Conceptual study on deep underground energy generation base," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp133-137.

Okazaki, Y., M. Takebe, N. Hirose, Y. Tsubokura and H. Hayashi. 2023. "Investigation of Adhered Salt at the Entrance Part of Road Tunnels in an Environment that Antifreezing Agents are Scattered," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp701-706.

Okuda, M. and K. Iwai, 1986. "An analysis of needs for basements in Japanese housing," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp146-151.

Okumura, T., Y. Takahashi, M. Yokotsuka and T. Kasuya, 2014. "Environmental contribution by a deep underground logistical system in the metropolitan area," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Okuni, Michio, 2009. "The sustainable urban design and underground networks in Tokyo, Madrid and Bilbao," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp83-89.

Okuyama, K., 1991. "A study of urban underground public space in Japan and the planning complexity of pedestrian's selected space functions in underground space," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp460-470.

Okuyama, K., 1991. "A study of urban underground public space in Japan and the planning complexity of pedestrian's selected space functions in underground space," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp347-354.

Okuyama, K., 1992. "Graphic and spatial communication of information in underground environmental space in Tokyo," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp275-282.

Okuyama, K., J. Nishi and T. Seiki, 1999. "Modernology study of underground urban space in Japan," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp260-266.

Okuyama, Kenji, 2007. "A study for the construction method, site environment and its usage of newly built underground architecture in Japan," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp345-350.

Okuyama, Kenji, 2012. "A Study of the Construction Factor and its Scale of Newly Built Underground Architecture in Japan," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Oliver, D.L., 1986. "User acceptability and marketing strategies for rammed earth in developed countries," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp143-145.

Onishi, Michitaka, Tomoyuki Hamada and Taro Kasuya, 2012. "Human Behavior Observation and Pedestrian Flow Simulation for Improving an Existing Underground Plaza," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

- Oosugi, A., T. Nagasawa, K. Yamane, S. Fukui and T. Fujisawa, 2007. "The utilization of underground spaces in Osaka City's sewage projects," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp145-150.
- Oreste P., Soldo L., 2002. "The Use of Underground Spaces for Environmental Protection Purpose," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).
- Osaka, H., T. Sonoda, M. Nakamura, H. Hagiwara and T. Noguchi, 1991. "Construction of underground space by new shield tunneling method – spiral tunneling and ramification of multi-circular face shield," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp376-386.
- Osborne, G.B., 1992. "Rammed earth technology in Australia," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp857-863.
- Osborne, Graham, 1986. "Low cost self-help earth shelter," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp152-157.
- Oshima, K., S. Ihara and H. Hakuba, 1991. "Vision and subjects of urban underground system," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp183-190.
- Oshima, K., S. Ihara and H. Hakuba, 1991. "Vision and subjects of urban underground system," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp138-143.
- Otani, Tatsuhiko, Tatsunori Chijiwa and Masato Shinji, 2012. "Proposal of Practical Design Method of Pipe Roof," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Otomaru, S., I. Ozawa and T. Hirai, 1991. "A Study on the Method for Areawide Development of Urban Underground Space," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp101-107.
- Oude Luttikhuis, E.H.J., 1992. "Underground space for utilities," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp144-148.
- Ouden, C. den, 1992. "Design of energy-supply system for heating and cooling an underground museum," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp601-609.
- Outters, N. and P. Lundman, 2014. "Major road and rail projects in Sweden – challenges and advantages," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Ozawa, I., T. Hirai and S. Otomaru, 1991. "A Study on the Method for Areawide Development of Urban Underground Space," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp65-69.

- Ozerskiy, A.Y., D.A. Ozerskiy and V.V. Bielyi, 2005. "Use of the mined-out space of coal mines of Kansk-Achinski coal basin for a disposal of ash and slag waste," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp124-127.
- Ozturk H., Tannant D.D., 2002. "Implementation of Hoek-Brown Failure Criterion in FLAC," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).
- Paganis, A., V.N. Georgiannou, R. El Dahr and X. Lignos, 2023. "Laboratory Evaluation of Low-Cost MEMS Based Sensor for Inclination and Acceleration Field Monitoring in Real-Time," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp349-356.
- Palmer, B., 1983. "Earth-integrated architecture for Tasmania's national parks and historic sites," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppF9-14.
- Pan, B.Y., W. Wu, Y. Huang, B.L. Chen and H.H. Zhu, 2025. "Extraction of individual rock discontinuities based on three-layer clustering algorithm from 3D point clouds," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp337-344.
- Pan, Q., Y.H. Dong, F.L. Peng and S.T. Ng, 2025. "Modeling of public perception in metro-led underground public space for planning optimization: a case study of Hong Kong," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp820-830.
- Panagiotopoulos, George, Dimitris Kaliampakos, Andreas Benardos, Athanassios Mavrikos, 2016. "The Underground Atlas Project: Can We Really Crowdsource the Underground Space?," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Panella, Fabio, Yung Loo, Michael Devriendt, David Gonzalez, Akshat Kaushik, Richard Ollerhead and Jan Boehm, 2018. "Smart image based technology and deep learning for tunnel inspection and asset management," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp894-904.
- Panthi, K.K., 2025. "Norwegian method of tunnelling (NMT) for sustainable use of underground space in urban areas," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp345-354.
- Papa, Meliti and A. Benardos, 2007. "Comparative evaluation of alternative methods for the construction of underground car parks," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp487-492.
- Papada, Lefkothea, Nikolas Katsoulakos, Dimitris Kaliampakos, 2016. "Fighting Energy Poverty by Going Underground," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Papadomarkakis, D., 2025. "A critical review of the existing methodologies for the estimation of the value of underground space," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp871-881.
- Papadomarkakis, D., 2025. "Combatting modern city problems with the usage of underground space: the case study of Greece," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp488-495.

Papakonstantinou, D., A. Kallianiotis and A. Benardos, 2021. "Parameters that affect tenability conditions during fire emergency in metro tunnels," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Papakonstantinou, Despina, Andreas Benardos, Anastasios Kallianiotis, Maria Menegaki, 2016. "Analysis of the Crowd Evacuation Modeling Approaches for the Case of Urban Underground Spaces," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Papakonstantinou, Rebecca, Kallianiotis Anastasios, Papakonstantinou Despina and Menegaki Maria, 2021. "Computer modeling analysis of METRO ticket gates impact to evacuation procedures," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Paraskevopoulou, C. and A. Cornaro, 2025. "BENEATH THE SURFACE: UNLOCKING URBAN GEOTHERMAL POTENTIAL FROM LEGACY SUBSURFACE ASSETS," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp580-588.

Park, Chulwhan, Chan Park and Seokwon Jeon, 2012. "Correlations Between TBM Performance Parameters in Hard Rock," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Park, Dohyun, Seokwon Jeon, Chung-In Lee, 2009. "Reduction of Blast-Induced Vibration Considering Tunneling Direction and Location of a Nearby Structure in Urban Areas," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp420-425.

Park, E.S., S.K. Chung, D.H. Lee and H.Y. Kim, 2007. "Experience of operating an underground LNG storage pilot cavern," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp157-162.

Park, J.W., B.K. Son, C.I. Lee and J.J. Song, 2007. "Numerical analysis of the change in groundwater system with tunnel excavation in discontinuous rock mass," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp433-440.

Park, Jae Seung, 2014. "Landscape and architecture for urban campus," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Park, S., Y. Son, H. Park, H. Kim and H. Choi, 2023. "Effect of Artificial Ground Freezing on Deep Excavation for Shield Tunnel Restoration: Field Application and Numerical Simulation," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp853-858.

Park, S.J., J.H. Hwang and T.Y. Ko, 2023. "Drilling Rate Index Estimation via Soft Computing Techniques," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp929-936.

Parriaux, A., P. Blunier, P. Maire and L. Tacher, 2007. "The DEEP CITY Project: a global concept for a sustainable urban underground management," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp255-260.

Pashkin, Evgeny and Sergei Mazein, 2016. "The Methods Use of the Heterogeneous Engineering-geological Conditions Diagnostic During Shield Underground Tunneling," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Pasiakos, G., D. Moutsika, A. Chalari and I. Kapageridis, 2007. "Design and visualization of underground workings using information from multiple sources," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp417-422.

Paton, D.J., 1983. "Terraspace home: motivation, design, performance public response," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppE31-36.

Patrucco M., Sorlini A., 2002. "Workers Safety Conditions in Urban Underground Construction: Risk Evaluation, Management and Monitoring as applied in Northern Italy," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Peila D., Pelizza S., 2002. "Design of Underground Mines for Civil Reuse," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Pelizza S., Peila D., Oreste P., Oggeri C., 2002. "Importance of Preliminary Investigations in Tunneling Design," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Pelizza S., Peila D., Oreste P., Oggeri C., Vinai R., 2002. "Environmental Aspects of Underground Construction and Exploration for Underground Structures - State of the Art," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Pelizza, Sebastiano, 1995. "Some considerations on the advantages of the use of underground space," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp647-648.

Pelizza, Sebastiano, 1997. "Innovations of underground construction in urban area," Workshop D-5, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), *Proc. 7th Intl. Conf. Underground Space*, Montréal, Sep 29-Oct 3 (CD-ROM).

Pellet, Anne-Lise, R. Kastner and A. Aiello, 1995. "Pose de réseaux par technique sans tranchée: expérience d'un chantier de microtunnel à marinage pneumatique," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp481-486.

Peng J., K. Liu and F.L. Peng, 2009. "Evaluating the suitability for exploitation of underground space resources in urban areas," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp49-53.

Peng, F.L., Y. Shu, T. Hane, K. Muro and H. Sawada, 1991. "The fuzzy-hierarchy systematic evaluating model on the psychology and physiology environment of subsurface," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp657-660.

Peng, F.L., Y. Shu, T. Hane, K. Muro and H. Sawada, 1991. "The fuzzy-hierarchy systematic evaluating model on the psychology and physiology environment of subsurface," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp403-406.

- Peng, Fangle, J.W. Zhao, X.T. Lu and K. Liu, 2014. "Underground space regulatory planning for Hongqiao CDB in Shanghai," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Peng, J., Y. Wang and F.L. Peng, 2014. "Evaluation of underground space resource for urban master plan in Changzhou City," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Peng, L.Y. and L. He, 2023. "An Information Mapping Algorithm for Integrating Complex Geological Models into Numerical Analysis of Engineering Excavations," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp333-340.
- Peng, S.T., K. Ariaratnam and O.C. Nam, 2007. "Construction of rail tunnels using slurry machines on Circle Line Stage 3, Singapore," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp99-106.
- Peng, Xiaoli, Zhilong Chen, Yuan Sun and Dongjun Guo, 2012. "The Research on the Underground Prevention Space System Under the Comprehensive Urban Disaster Prevention," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Peng, Zhang and Z.S. Tan, 2007. "The study of the pavement settlement standard induced by shallow buried tunnel," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp441-446.
- Perlmutter, D., E. Erell and Y. Etzion, 1992. "Monitoring an insulated earth-sheltered structure in a desert climate," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp646-655.
- Perlo, Riccardo, 2014. "Safe and cost-efficient solutions for underground excavation," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Perminov, N.A. and A.N. Perminov, 2014. "Geotechnical challenges for major infrastructure projects," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Perminov, N.A. and A.N. Perminov, 2018. "Calculative substantiation of the protection methods for long-operated structures of the sewage systems of large cities," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp981-991.
- Perminov, Nikolai and Andrey Perminov, 2016. "Geotechnical Protection of Engineering Infrastructure Objects in Large Cities Under Intense Anthropogenic Impact and Long Term Operation," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Perminov, Nikolai, Vitalii Zencov and Andrey Perminov, 2012. "A Comprehensive Geotechnical Support System for Underground Space Development Projects," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Perrault, Dominique, 2014. "Between presence and absence groundscape," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

- Pešić, D., K. Lipovac, B. Antić, E. Smailović, F. Filipović, N. Marković and J. Šćekić, 2025. "Road tunnel safety evaluation and crash analysis: experiences from Serbia," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp784-793.
- Peskov, A.V., 2005. "Durability and movement of "load-environment-construction" system at impulse influences," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp233-237.
- Petersen, D., C. Nelson, R. Emanuelson, N. Podas and M. Marshak, 1986. "Outfitting an underground science laboratory," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp245-251.
- Petiteau, Jean-Yves, 1995. "Ethnographie de parcours en milieu souterrain: itinéraire de Madame B., Conservateur au Louvre," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp303-308.
- Phin, L.S. and M.A.M. Ismail, 2014. "Evaluation of twin tunnels interaction under influence of tunnels configuration and construction sequence," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Phua, H.L., M.M. Ali, M. Wu, A.K.P. Pochambavi and S.T. Aung, 2025. "Conquering challenges in the design and construction of an integrated underground Singapore metro station," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp309-317.
- Picon-Lefebvre, Virginie, 1995. "La gare de La Défense: infrastructure et espace public souterrain," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp243-248.
- Pinzon-Isaza, Arq. Hernando, 1983. "The Underground salt cathedral of Zipaquirá – Colombia," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp31-36.
- Pinzon-Isaza, Hernando, 1988. "Eurotunnel – a tunnel beneath the English Channel," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp234-240.
- Pitchumani, N. Kumar, Ganesh Deepak Kanchuboyina, R K Anjana and Sai Krishna Bugga, 2021. "Behaviour of an underground metro station for different constitutive models - A study on the influence of Mohr-Coulomb and other advanced constitutive models using PLAXIS 2D for the proposed Chennai Metro Rail Phase 2 project," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>
- Poh, J., H. Tjiawi, W. Wu, A. Romagnoli, T. Massier, C. Chuah, J. Lim, L. Yang, D. Lu, A. Chidire, B. Veerasamy and J. Chan, 2023. "Geological Perspectives from the First Deep Exploratory Slimhole in Singapore," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1231-1233.
- Poirier, Jean-Patrice, 1995. "Complémentarité du stationnement en parcs souterrains et sur voirie," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp587-592.

Pospisil, P. and B. Hagenah, 2025. "Bringing urban transportation infrastructure underground," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp16-25.

Pothier, Louise, 2018. "A sewer transformed into a museum: an exceptional achievement in Montréal," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp131-144.

Poulidi, N, and A. Benardos, 2021. "Moving underground for urban regeneration – Design challenges and cost assessment for the proposed undergrounding of Poseidonos Av.," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Price, D.G., 1992. "On the stability of existing natural and artificial underground openings for use as underground space," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp798-810.

Proulx, Guylène, 1997. "Évaluation des portes-papillon comme moyen d'issue dans le Métro de Montréal," Workshop D-4, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Pshenichnikov, K.G. and Y.V. Syrokomy, 1992. "Underground space in the Urals," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp442-446.

Qian Qihu, 2002. "Underground Infrastructures for Sustainable Development in China," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Qian Qi-hu, 2009. "The development of risk management research on the exploitation of underground space in China," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp3-13.

Qian, Daren, 1988. "Construction of the Yanan Road underwater tunnel in Shanghai," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp162-164.

Qian, Fuyan, 1988. "An experiment study on CO₂ concentration criterion of the air in underground shelter," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp422-427.

Qian, Qihu and Xiaoqiang Chen, 2007. "Evaluation of the status quo and outlook of the urban underground space development and utilization in China," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp15-22.

Qian, Qihu, 1997. "The coming high tide of utilizing urban underground space in China," Workshop A-1, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Qian, Qihu, 1999. "The fourth wave in the development of underground space and current situation prospects, development strategy in China," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp5-13.

- Qian, Qihu, 2012. "Underground Urban Complexes Development in China," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Qiao, Nan, Xiaoli Liu, Yunling Duan, Xuefeng Zhao and Xuefei Wei, 2018. "Monitoring trial using GBINSAR to assess the stability of a massive rock waste stockpile," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp956-962.
- Qiao, Y.K. and F.L. Peng, 2023. "Valuing Sustainability Externalities of Urban Underground Space Use for Planning and Land Administration," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1185-1188.
- Qiao, Y.K., J.S. Xiao, N. Bobilev and F.L. Peng, 2025. "Developing a data-driven Bayesian network model for layout planning of urban underground commercial facilities," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp92-103.
- Qiao, Yingjuan Yiqun Fan and Shirong Mao, 2018. "The study on evaluation index system for safe operation of urban underground space," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp326-337.
- Qiao, Yong-Kang and Fang-Le Peng, 2016. "Master Planning for Underground Space in Luoyang: A Case of a Representative Historic City in China," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Qiao, Yong-Kang, Fang-Le Peng, Xiao-Lei Wu and Shuai-Fu Ding, 2018. "Underground space planning in urban built-up areas: a case study of Qingdao, China," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp255-265.
- Qiao, Z. and J.Y. Hou, 1986. "Development and utilization of loess cave districts in urban China," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp288-294.
- Qu, D.Y. and Y. Xing, 1999. "Decline and rehabilitation of the sunken courtyard type dwellings based on the example of Xizhang village in Lingbao City Henan province," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp34-37.
- Quagliata, Narcissus, 2014. "Function – beauty – cultural significance," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Quan, L.J., D.Y. Li, Q.M. Zhou, A.H. Sun, J. Tao, G.J. Luo and K. Liu, 2023. "Case Study of Rainwater Treatment System in a Large Urban Underground Space Complex Project in Xi'an China," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp69-74.
- Quarmby, A., 1991. "Recent development in earth-sheltered architecture in the United Kingdom," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp633-640.
- Quarmby, A., 1991. "Recent development in earth-sheltered architecture in the United Kingdom," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp204-211.

Quarmby, A., 1992. "Marketing earth-sheltered architecture," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp418-431.

Quarmby, Arthur, 1983. "Earth shelters as architecture," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp167-172.

Quarmby, Arthur, 1986. "Principles and practicalities of design," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp215-219.

Quarmby, Arthur, 1988. "The design of earth-sheltered and underground developments," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp37-42.

Quarmby, Arthur, 1995. "Building with the landscape," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp99-104.

Quarmby, Arthur, 1997. "Going under to stay on top," Workshop B-6, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), *Proc. 7th Intl. Conf. Underground Space*, Montréal, Sep 29-Oct 3 (CD-ROM).

Raffaldi, Marco, Enrico Boi and Chiara Dell'Orto, 2012. "The Underground Network Laboratory of the Lombardia Region," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Rahamimoff, A., A. Silberstein, D. Faiman, A. Zemel and D. Goaver, 1986. "Earth integrated educational center in the Israeli Desert," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp241-244.

Rahmani, Elaheh, 2012. "Intelligent Solutions to the Underground Spaces in Iran," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Rao, Xin-ping, Yi Wu, Sun Hui, Zhang Zhenhua, 2009. "Application of TSP and Advanced Drilling Geological Prediction Technology in Construction of Qiyueshan Tunnel," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp493-499.

Rattia, V.H.F., H.C. Rocha, A.A.N. Dantas and T.A. Mendes, 2023. "Tunnels in Tropical Soils—A Sensibility Analysis of Soil Parameters Applied on the Construction of Line 5 of the São Paulo Metro," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp835-846.

Rechitsky, V.V., 2005. "Investigation of the day surface settlement profile in tunneling," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp128-133.

Rehbock, Michael, Nedim Radončić and Kurt Mair am Tinkhof, 2018. "Integrated underground solutions in urban areas - state-of-the-art applications and project examples," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp495-505.

Rejeski, David, 1986. "Energy sensitive land-use planning in urban environments," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp282-287.

Remy, Nicolas, 1999. "Coming in and coming out underground spaces," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp186-192.

Ren, B.K., P.F. Yan and H.H. Zhu, 2023. "Multi-scale Simulation of Fracture Behavior of Underground Concrete Structures Based on Phase Field Theory," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1107-1112.

Ren, Shao-yun, 2009. "Regional Assessment of Underground Shopping Mall Fire Safety Based on Analytic Hierarchy Process," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp305-310.

Ren, Yunying, 1999. "The aesthetic value of underground space system in urban design – a sorts of idea, of method and of theory," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp184-185.

Rhamani, N., A. Denis and M. Frappa, 1995. "Modélisation du champ de potentiel électrique dans le sous-sol: identification d'hétérogénéités naturelles ou anthropiques," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp637-644.

Rhim, Hong Chul and Sang Il Kim, 2012. "The Role of Research Center for Urban Underground Space (RCUUS) in Advancing Underground Development in Seoul, Korea," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Rhim, Hong Chul, 2014. "Underground campus development at Yonsei University – Baekyang Ro Project," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Rhim, Hong Chul, Yoon Hie Lee, Ja Young Kim, Joo Eun Sung and Leehong Kim, 2018. "Underground development of campuses in Seoul," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp905-910.

Rickard, James Michael William, Harry Lee and Mark Innes Wallace, 2012. "Cavern Development for Relocation of Sewage Treatment Facilities in Hong Kong," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Rizzo, G. and A. Giaccone, 1988. "Modeling tools for approaching energy and environment analysis of earth sheltered buildings," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp453-457.

Roberts, A.C., C.K. Soh, H.S. Yap, J. Car, K.W. Kwok and G. Christopoulos, 2023. "The Role of Worker Satisfaction in the Underground Environment with Job Satisfaction and Turnover Intent," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp9-14.

Roberts, Adam C., George I. Christopoulos, Hui Shan Yap, Zheng Tan, Vinita Venugopal and Chee-Kiong Soh, 2018. "Does knowing you're underground affect your perception of the space?" *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp530-537.

Robertson, Alan, 2012. "Australasian Tunneling into the Future," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Robertson, G., 1983. "Proposed low energy, passive-solar, earth-sheltered house on Banks Peninsula, Canterbury, New Zealand," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppF28-33.

Robertson, Graeme, 1983. "Low-energy passive solar earth sheltered house on Banks Peninsula, New Zealand," (abstract only) *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, p103.

Rohde, Jan K. G., 2012. "Sustainable Use of the Underground Space," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Rong, G., Y.J. Bai, M.S. Huang and Y. Gao, 2014. "Research on the usage investigation and optimization strategy of underground rail traffic in Harbin," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Rong, Guo, Wang Sainan, Huang Mengshi, 2016. "Underground Railway Safety Analysis and Planning Strategy: A Case of Harbin Metro Line 1, China," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Rönkä, Kimmo and Jouko Ritola, 1995. "Underground planning in Finland: classification methods and guidelines for subsurface planning," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp571-576.

Rose, M.A.H., 1983. "Design for 20 interconnected hillside subgrade dwellings," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp104-108.

Rosenfeld, E., J.L. Guerrero, O. Ravella, G. Brusasco, L. Ciancaglini and A. Jurgeit, 1983. "First solar house proptotype in Patagonia - Argentina," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp119-124.

Ross, S., M.I. Wallace, Y. Ho, W. Tsang and K. Ng, 2014. "Recent studies into the feasibility of developing rock cavern facilities in a dense urban city," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Ross, Stuart, Mark Wallace and Jimmy CK Tong, 2018. "Development of an energy calculation approach for volumetric analysis of various types of uses in underground rock caverns," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp972-980.

Rudgar, R. and M.S. Izadi, 2014. "Historic urban conservation based on underground development case study of Toupkhana Square, Iran," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Rust, Ed, 1997. A Case study of the 1991-1992 Americold-Kansas City Facility Fire Incident," Workshop A-3, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Rutten, A.M., 1983. "Earth-wall (mud brick) houses in Australia," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppF22-27.

Rylander, Rod, 1983. "Appropriate technology in earth sheltered construction," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp367-370.

Rylander, Rod, 1986. "Adaptation of the vertical crawl space technique to conditions in Nepal," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp33-35.

Saari, Kari, 1988. "Public subsurface buildings in Finland," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp11-15.

Sætrevik, Kjell, 2012. "Rapid and Cost Saving Tunneling by Use of Rock Bolts and Shotcrete as Permanent Support," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Safaei, M.M. and H. Hashemi, 2025. "Subterranean urbanism for wildfire resilience: post-disaster planning and GIS-based design in Topanga–Palisades, Los Angeles (2025)," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp589-601.

Safaei, M.M. and K. Poumakhdoomi, 2014. "The need for development of underground spaces of the historic fabric of City of Tehran," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Safaei, M.M., S.S. Mirrezaei and A.Z. Vaneshani, 2023. "Development of Cultural Landscape and Removal of Urban Visual Pollution Using Underground Architecture—Case Study: Tehran Laleh Park," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp49-60.

Safaei, Mohammad Mahdi and Narges Hamzeh, 2018. "The versatility approach in the formation of the underground architecture in the second Pahlavi era (case study: Quran museum) and its utilization necessity in sustainable development of the city of Tehran," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp438-445.

Safaei, Mohammad Mahdi and Narges Nematipour, 2021. "Development of urban public spaces using urban underground spaces: a new method to improve quality of life (QOL) in Tehran metropolis," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Safaei, Mohammad Mahdi, 2009. "SHAVADAN: the sustainable architecture in the city of Dezfoul in Iran," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp9-102.

Safaei, Mohammad Mahdi, 2012. "Sarbetagh: A Sustainable Underground Architecture for Development of Tourism Industry in City of Dezfoul in Iran," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Safaei, Mohammad Mahdi, Ali Afshar and Aala Derambakhsh, 2012. "Construction of Tohid Intercity Tunnel and Huge Changes in its Surrounding in Old Part of Tehran, Iran," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

- Safaei, Mohammad Mahdi, Marjan Ghafoori, 2016. "Providing the Needed Green Spaces Together with Splendid Architecture Through Development of Public Underground Spaces for City of Tehran," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Safaei, Mohammad Mahdi, Negin Samadi Kafi, Arefeh Torkaman, 2016. "A Focus on the Contribution of Promoting TOD to Increasing Tehran's Public Spaces," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Saito, E., H. Ikemi, H. Nakano and M. Nakamura, 1991. "Estimation of the anxiety in underground urban space during earthquakes," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp512-520.
- Saito, E., H. Ikemi, H. Nakano and M. Nakamura, 1991. "Estimation of the anxiety in underground urban space during earthquakes," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp382-388.
- Sakai, D., A. Fukuhara and K. Miyashita, 1992. "System of measurements to confirm stability of Kushikino underground crude oil storage caverns during excavation," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp715-724.
- Sakakura, Y., H. Shimizu and H. Itabashi, 2007. "Sapporo's urban management and roles of the underground path," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp533-538.
- Sakamoto, M. and M. Kawachi, 2007. "Basic research into ideal way of underground space of district around Osaka Station," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp231-236.
- Sakurai, S., K. Asano, M. Yoshii, N. Hasegawa and K. Kobayashi, 2012. "An Abandoned Tunnel Utilized for Altitude Environment Training and Hyperbaric Oxygen Therapy Facilities," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Salmelainen, J., 1992. "Subsurface space and city planning in Finland," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp91-98.
- Salomone, Lawrence A., 1983. "Procedures used to predict the thermal behavior of soils," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp49-53.
- Sami Al Hasan, Mohammad, 2012. "Legible and Meaningful Underground Space: Investigating Non-Signage Elements in Spatial Memory and Navigation inside Hong Kong Underground Stations," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Santen, C. van and A.J. Hansen, 1992. "Daylight and building underground," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp259-264.
- Sarchenko, Vladimir, 2016. "The Economic Essence of Underground Development," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

- Sato, K. and K. Kawamoto, 1991. "Underground river project in Tokyo," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp201-205.
- Sato, K. and K. Kawamoto, 1991. "Underground river project in Tokyo," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp150-152.
- Sato, K. and T. Fukuhara, 1992. "An approach to control system of water budget in underground space environment," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp617-624.
- Sato, K., 1991. "Underground space use and environment protection technology in Japan," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp439-449.
- Sato, K., 1991. "Underground space use and environment protection technology in Japan," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp333-340.
- Sato, K., T. Kasuya, S. Matsuoka and T. Fukuhara, 1992. "Geohydraulic study on freezing process of refrigerated underground foodstuffs storage," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp509-518.
- Sato, Kenji, 1999. "A development plan of a storage-transport network for earthquake disaster utilizing the subway line No. 12," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp284-290.
- Sato, M., M. Inui and H. Sawada, 1991. "Psychological and behavioral effects of visually closed office spaces," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp493-504.
- Sato, M., M. Inui and J. Sawaki, 1991. "Psychological and behavioral effects of visually closed office spaces," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp370-376.
- Sato, Masatoshi and Shigeki Kusama, 2012. "The Design and Construction of the Marunouchi Underground Pedestrian Passage," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Sayigh, A.A.M. and T. Al-Jeda, 1983. "Potential of earth coupled buildings in reducing the cooling load in Kuwait," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp305-310.
- Scalise, J.W., 1983. "A survey of earth sheltered housing in the Arizona – Sonoran desert," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp69-74.
- Scalise, J.W., 1983. "The Banen Desert Hillside House in Arizona," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp197-202.

Schafer, M., W. Niemeier, T. Stolp and M.-B. Schaller, 2005. "TISSY – an information and management system for tunnelling," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp238-241.

Schmid, Hans C., Kian Wee Ng, Anthony Chang, Marcus S. Y. Tong and Thomas S. K. Tang, 2012. "Feasibility Study of Underground Science City at Kent Ridge, Singapore Paper 1: Geology, Hydrogeology and Cavern Design," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Schmidt Ariztía, Francisco, 2012. "New Logic and Roles for the Las Condes Underground Center in Santiago," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Schneider, H.J., 1983. "The Australian climate – an overview," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppA4-8.

Schneider, H.J., 1983. "The Australian climate – an overview," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp11-14.

Schokking, F, A. Lokhorst and M.C. Geluk, 1992. "Geological framework for planning the use of the underground in the Netherlands," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp76-90.

Scholey J., 2002. "The Development of Underground Space for Intermodal Transport Interchanges," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Schrantz, L., F. Fiermonte, A. Cittadino and M. Bodini, 2014. "Regione Piemonte: A GIS project for the underground," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Schranz, L. and M. Raffaldi, 2014. "Towards an Italian Underground Cadastre," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Schubert, W., K. Grossauer and P. Sellner, 2005. "Advances in the observational approach in tunnelling by new techniques of monitoring data evaluation," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp242-247.

Schurer, G., 1983. "A contemporary earth-sheltered project in the historical context of South Australia," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppE37-42.

Schurer, Gerhard, 1983. "A contemporary earth sheltered project in the historical context of South Australia," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp357-362.

Seiki, T., J. Nishi and Y. Nishida, 2007. "Renovation challenge of underground quarries for Oya tuff," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp107-112.

- Seiki, T., J. Nishi, Y. Ichikawa and Y. Kikuchi, 1997. "Classification of underground space and its design procedure in Japan," Workshop D-2, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).
- Sekiguchi, K., J.A. Yoshida, T. Kawanishi, Y. Yoshino, J.P. Liu, Z. Wang and S.P. Zhang, 1999. "Measurement result of thermal pattern, air quality, sound and lighting conditions in yao-dong dwellings," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp56-57.
- Selby, A.R., 1992. "Effects of ground movements caused by construction of axisymmetric caverns," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp771-781.
- Selinfreund, M., R. Farrer and P. Munding, 1983. "Monitoring an earth-sheltered solar-assisted house," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp345-349.
- Sellberg, B., 1991. "Swedish R&D programme and support on underground planning in the 1990s," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp619-624.
- Sellberg, B., 1991. "Swedish R&D programme and support on underground planning in the 1990s," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp113-118.
- Sellberg, B., 1992. "R&D on underground utilization in Sweden," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp205-214.
- Semenyuk-Sitnikov, V.V., 2005. "Mathematical model for the determination of building's supplementary settlement caused by technological influences," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp134-137.
- Seno, Y., K. Ohkuma and N. Yamada, 1991. "Development and application of an automatic shield tunneling system," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp278-282.
- Shan, Y.H., M.J. Zhang, C.X. Guo, P.F. Li and W.J. Liu, 2023. "A Fixed End Composed of Long Bolts and Mold Bag Concrete for Prefabricated Inner Support in Foundation Pit and Experimental Investigation on its Bearing Capacity," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1007-1030.
- Shang, Qian and Wenyi Zhu, 2012. "A Study on Underground Public Space in Beijing," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDRom), ISBN-13: 978-981-07-3756-6.
- Shang, Qian, 2016. "Underground Space: A View for the Conservation of Beijing Old City," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Shao, Yuhang, Yang Lv and Yunhuo Zhang, 2012. "A Conceptual Study of Civil Defence Subway Station by NATM," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Sharma, B.D. and R.K. Bhandari, 1988. "Subterranean ancient structures of India," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp48-53.

She, Fengxu and Hong Yuan, 2018. "Study on the influence mechanism of underground space on the development of land connectivity and spatial autocorrelation in Shibuya station," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp590-598.

Shen, Cai-Hua and Wu Zhong, 2009. "Project Optimization Research of Cut Blasting of Urban Tunnel," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp537-542.

Shen, L.S., Y.J. Huang and J. Poliakova, 1988. "The effect of soil thermal and moisture properties on building foundation heat loss," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp410-415.

Shen, M.W. and F.L. Peng, 2009. "Study on the construction of networked underground space for Huaqiangbei District in Shenzhen," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp146-150.

Shen, S.L., Q. Zheng and A.N. Zhou, 2025. "Climatic change induced vulnerability evaluation of urban underground spaces," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp459-466.

Shen, Y., Z.Y. Yan and H.H. Zhu, 2023. "Holistic Framework to Determine Structural Fire Performance of Shield Tunnel: Mechanism, Models and Design," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp707-710.

Shen, Yi, He-Hua Zhu, Xiu-He Chen and Shou-Zhong Feng, 2012. "Low-Carbon Effect Analysis Based on the Establishment of Tunnel Portal Greening-Design," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Shi, C. and Y. Wang, 2023. "Stochastic Modelling of Subsurface Stratigraphy from Sparse Measurements and Augmented Training Images," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp369-376.

Shi, X.L and S.F. Wang, 2023. "DEM-Based Numerical Simulation of Rock Cutting Process Using Conical Pick Under Confining Stress Influence," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp133-138.

Shi, Xianghong, 1999. "Some analysis about the present situation and development of cave dwelling in Shanxi province," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp50-53.

Shi, Xiao-dong, 2009. "Development and utilization of underground space based on large-scale infrastructure construction of Beijing," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp31-35.

Shi, Xiaodong, Yiting Zhao and Kejie Wu, 2021. "Research on the development and utilization of underground space in Beijing Old City," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703
<https://iopscience.iop.org/issue/1755-1315/703/1>

Shi, Xiaolan, 1999. "Simple space and pure exhibits," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp306-309.

Shi, Y., 1988. "Developing earth sheltered buildings to improve Lanzou City's development," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp43-44.

Shigenaga, T., S. Kashima, R. Nakamura, M. Matano and T. Taguchi, 1991. "A study of Underground Physical distribution system in high-densely built-up area," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp214-222.

Shih, J.C., 1992. "Architectural issues for earth-covered buildings," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp303-317.

Shiina, Isao, Izumi Sasaki, Yutaka Harada, Taro Kasuya, 2016. "Study of a Simulation to Solve Difficulties of Commuters Stranded in Underground Spaces in Umeda and the Surrounding Areas at the Time of a Disaster," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Shimoda, Y. and M. Mizuno, 1991. "Utilization of thermal characteristics of the ground at underground space," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp608-618.

Shimoda, Y. and M. Mizuno, 1991. "Utilization of thermal characteristics of the ground at underground space," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp458-465.

Shin, Hee-Soon and Eui-Seob Park, 2007. "The current status of underground space utilization in Korea," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp181-186.

Shinyashiki, Y. and K. Yashiro, 1999. "Spatial analysis of Kunda in West India," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp487-493.

Shirane, T., S. Futakuchi, N. Tanikaga and T. Kasuya, 2014. "Research for planning related to extension of the Shinjuku Subnade underground shopping mall," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Shirane, Tetsuya, Kenichi Nakamura, Nobuhiro Masuda, Taro Kasuya, 2016. "Study of Development of Urban Environments, Mainly in the Vicinity of Underground Stations," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Shou, Keh-Jian and Chih-Ying Hsieh, 2016. "On the Behavior of the Overcut and Stuck Effects During Pipejacking," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Shou, Keh-Jian, 2012. "Natural Ventilation and Energy Saving for a Long Tunnel," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Shrestha, Pawan Kumar and Krishna Kanta Panthi, 2012. "Plastic Deformation Behavior in Tunnel in Schist and Schistose Mica Gneiss Based on a Case from Nepal Himalaya," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Shrestha,, B.P. and K.K. Panthi, 2025. "Challenges associated with planning and construction of a road tunnel through lesser Himalayan rock mass – a case study," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp369-379.

Shu Yu, X. Wang and X.Y. Hou, 1995. "The function model of square underground space utilization before railway station in Chinese large cities," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp249-254.

Shu, Yu and X.Y. Hou, 1988. "The interaction between underground environment and mankind," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp393-398.

Shu, Yu, X. Wang and X.Y. Hou, 1995. "The planning of Chinese urban underground park," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp135-138.

Shu, Yu, X. Wang and X.Y. Hou, 1995. "The utilization of Chinese urban underground space in the 21st century," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp509-512.

Siero, G.C.W.H., 1983. "Earth sheltered Architecture in hot arid Australia," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp77-82.

Siero, G.C.W.H., 1983. "Earth-sheltered Architecture in hot arid Australia," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppC56-62.

Signoretto I., Grasso P., De La Menardiere J., 2002. "Turin Automated Metro," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Sijpkens, P. and D. Brown, 1997. "Montréal's indoor city – 35 years of development: an overview of its history, its development, and a discussion of its future," Workshop A-1, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Sikkel, H.A., 1992. "An underground bus terminal in Amsterdam – legal issues," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp225-233.

Sikkel, H.A., 1992. "Design and use of underground public space," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp254-258.

Sillos, Jacques, 2007. "The urban road tunnels and some cultural aspects of the contemporary city development," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp367-372.

Simogochi, T., Y. Tenjin, M. Nakajima, T. Fujimoto and N. Ohki, 1999. "Underground space utilization under the hillside near urban area in Japan and its case study," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp267-272.

Sioutas, K.N. and A. Benardos, 2023. "Machine Learning Methods on Predicting TBM's Penetration Rate in Athens Metro," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp327-332.

Sipetic, N. and S. Milijic, 2025. "Historical underground structures of Belgrade: identification, classification, and urban potential for sustainable city development," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp255-268.

Sipetic, N. and V. Djokic, 2025. "Advancing underground urban space planning: the potential of foresight methods in systemic planning and transition management," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp155-164.

Šipetić, N., V. Đokić and S. Milijic, 2023. "Guidelines for Determining the Concept of Institutionalization of Underground Planning in Developing Countries," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp507-516.

Šipetić, Nemanja and Petar Kuzmić, 2016. "Design the Future Urban Plan of the Underground Construction from the Aspect of Geological and Geotechnical Features of Belgrade's Inner City Area," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Šipetić, Nemanja, Danilo Furundžić and Mikana Savić, 2018. "The defining of the models for the infrastructural installation planning in Belgrade through the use of the integrated underground utility tunnels," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp485-494.

Skenderas, D., C. Paraskevopoulou and A. Benardos, 2025. "Analyzing contractual practices in major underground infrastructure projects," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp890-900.

Smit, D.R., 1992. "Feasibility study on an underground concert hall," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp351-360.

Smith T.W., 2002. "Ventilation of Enclosed Car Parks and Service Areas," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Smits, Florence, 1995. "Les impacts des galeries marchandes souterraines sur les commerces de la rue Sainte-Catherine (Montréal)," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp545-550.

Smolders, Bert, 1995. "Cross-border underground business park Heerlen-Aachen," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp271-278.

- Smoot, Ralph C., 1983. "Passive cooling in earth sheltered housing in Texas," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp75-76.
- Smoot, Ralph C., 1986. "Design and construction process of an earth sheltered home in Austin, Texas," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp234-240.
- Sniatkov, S.V. and S.Z. Souponitsky, 1995. "Diagnostic technique et renforcement des construction souterraines des bâtiments historiques de Saint Pétersbourg," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp427-432.
- Sobotka, P., P. Kaminsky and J. Kittler, 1992. "Earth sheltered housing in Slovakia – environmental and energy aspects," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp625-635.
- Soh, C.K., A.C. Roberts, V. Marimuthar, J. Car, K.W. Kwok, and G. Christopoulos, 2023. "SWOT Analysis of Underground Work Spaces," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp617-622.
- Soh, Chee-Kiong, George Christopoulos, Adam Roberts, Eun-Hee Lee, 2016. "Human-centered Development of Underground Work Spaces," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Soh, Chee-Kiong, Vicknaeshwari Marimuthar, Adam C. Roberts, Josip Car, Kian Woon Kwok and George I. Christopoulos, 2018. "Developing and communicating high-value, human-centered underground work spaces: results of a multidisciplinary, multi-year study," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp10-19.
- Song, Gongming and X.L. Han, 1999. "Underground space and city tourism – research of the tourism pattern of Chinese basin city on loess plateau," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, p21.
- Song, Haiqing, Haibing Cai, Zhishu Yao, Chuanxin Rong, Xiaojian Wang, 2016. "Finite Element Analysis on 3D Freezing Temperature Field in Metro Cross Passage Construction," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Song, Tian-tian, Jian Lian, Wang Chun-he, 2009. "The Practice of Risk Identification and Assessment of Shield Tunnelling in Chengdu Metro," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp311-316.
- Song, Won-Kyong, Hyung-Mok Kim and Jonny Rutqvist, 2012. "Numerical Simulation of Coupled Thermodynamic and Geomechanical Performance of CAES Pilot Cavern," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Song, Y.M., H.H. Zhu, Y. Shen, P.F. Guan and S.Z. Feng, 2025. "Carbon emission optimization method for operating tunnels: an evolutionary game-based analysis study," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp602-612.

Song, Y.M., Y. Shen and H.H. Zhu, 2023. "New Requirements for Tunnel Lighting Environment: A Review on Energy Saving and Visual Comfort," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp757-762.

Song, Zheng, Xu Shengyu, Zhu Xianchen, 2009. "An Underground Space Valuation Approach Expanding on Hotelling's Theory," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp385-388.

Sonoda, T., H. Hagiwara, H. Osaki, T. Noguchi and M. Nakamura, 1991. "Construction of underground space by new shield tunneling method – spiral tunneling and ramification of multi-circular face shield," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp291-298.

Sorlini A., 2002. "Archaeological Sites Preservation Design in Torino Metro Construction Works: the Counter-mine Tunnels of Cittadella," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Sotiropoulos, Nikolaos, Andreas Benardos, Athanassios Mavrikos, 2016. "Spatial Modelling for the Assessment of Geotechnical Parameters," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Sotiropoulou, A.G., 2009. "Subjective Evaluation of the Environmental Performance of Underground Train Stations in Athens; Multi-dimensional Description of Evaluations," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp253-258.

Sotiropoulou, A.G., G. Poulakos and I. Tzouvadakis, 2007. "Subjective evaluation of noise in underground train stations in Athens: multi-dimensional description of evaluations," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp563-570.

Sotiropoulou, A.G., J. Tzouvadakis, E. Triantis, G. Poulakos, 2009. "Measurements of Environmental Comfort Criteria, in Underground Train Stations in Athens," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp259-264.

Sourouvali, N., A. Benardos and A. Mavrikos, 2021. "Cost benefit analysis of the Athens metro line 3 expansion project," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Sousa, L.R. and R.L. Sousa, 2005. "Accidents and damage associated to underground works," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp248-255.

Speltz, J.J., 1983. "Sensitivity of earth sheltered building thermal performance to inside radiation exchange," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp337-344.

Speltz, J.J., 1986. "Analysis of thermal comfort conditions in earth sheltered buildings," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp122-126.

Sposetti, M.A., 2023. "New Sustainable Technologies for Application in the TBM Tunnelling Industry," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp921-928.

- Stanford, G., 1983. "Thermal environment of the lithotectural dugouts of White Cliffs, Australia," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp265-270.
- Stanford, G., 1983. "Thermal environment of the lithotectural dugouts of White Cliffs, N.S.W.," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppE49-54.
- Sterling, R., B. Anderson, A. Cisewski and J. Bidwell, 1986. "Waterproofing design and installation for the underground telecommunications facility at the University of Minnesota," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp277-281.
- Sterling, R., Z.Y. Zhao, J. Zhao, J. Carmody and J.C. Fan, 2014. "Conceptual master planning for underground space on the Nanyang Technological University Campus," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Sterling, R.L. and J. Carmody, 1992. "Merging geological and human use considerations in underground transit station design," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp376-385.
- Sterling, R.L. and J.C. Carmody, 1983. "Potential use of earth-sheltered structures in developing countries," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp15-18.
- Sterling, R.L., 1997. "The Warren Centre Report on Underground Space in Urban Areas in Australia," Workshop C-1, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).
- Sterling, R.L., 1997. "Trenchless Technologies and their Impact on Urban Utility Systems," Workshop D-6, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).
- Sterling, R.L., 2005. "Urban underground space use planning: a growing dilemma," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp3-7.
- Sterling, R.L., J. Carmody and W.H. Rockenstein II, 1988. "Development of life safety standards for large mined underground space facilities in Minneapolis, Minnesota, USA," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp496-501.
- Sterling, Raymond and Priscilla Nelson, 2012. "City Resiliency and Underground Space Use," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Sterling, Raymond, 1995. "Land use and environmental effects of underground space use," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp9-12.
- Sterling, Raymond, Shaurav Alam, Erez Allouche, Wendy Condit, John Matthews, Declan Downey, 2016. "Studying the Life-cycle Performance of Gravity Sewer Rehabilitation Liners in North America," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Stones, Peter, Tan Yoong Heng, 2016. "Underground Space Development Key Planning Factors," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Strachnov, G. and L. Strachnova, 1995. "Comprehensive development of underground area in central part of Moscow," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp593-600.

Strizhelchik, G.G., 1992. "Problems of engineering geology of urbanized territories," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp108-113.

Su, P.D., X.L. An, Y.B. Du, P. Qiu and Y.G. Li, 2025. "Research on safe thickness of rock mass in non-coal stratum tunnel with high-pressure gas blast based on energy method," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp441-451.

Su, Peidong, Yi Zhao, Zhengxuan Xu, Yuben Du, Peng Qiu, Dong Wang and Yougui Li, 2021. "Study on the distribution of sulfur-bearing formations in the Sichuan Basin and its damage to tunnel engineering," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf.), *Proc. IOP Conf. Series: Earth and Envir. Sci.*, Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Su, Xiaochao, Zhilong Chen, Ping Zhang, Xiaobin Yang and Bing Li, 2018. "Effect of underground space development on the outdoor thermal environment in a residential area," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp786-793.

Su, Ying, Adam Roberts, Chengwen Luo, Hui Shan Yap, Elliot Chan, Josip Car, Kian Woon Kwok, Chee Kiong Soh and Georgios. I. Christopoulos, 2018. "Shall we have underground office spaces? Underground workspaces do not affect office work's perception of workspace and job satisfaction," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp524-529.

Suddle S.I., 2002. "Multiple Use of Space: Spatial Perception and Complexity," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Sudhakar, Muley Pravin, Yang Yaowen, Sham Wai Lun and Kar Winn, 2012. "Fiber Optic Sensors for Underground Structural Health Monitoring: Survivability of Sensors Under Shotcreting and Drill-and-Blast Impacts," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDRom), ISBN-13: 978-981-07-3756-6.

Suen, B.W.Y. and L.T.H. Lee, 2018. "Use of drill-and-blast method to construct MTR caverns and tunnels for Hong Kong new railways," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp312-325.

Suen, H.M., S.M. Chiu, W.H. Tsang and Y.M. Sun, 2023. "A Conceptual Design of a Data Centre in Caverns," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1083-1090.

Sugita, H. and K. Kawashima, 1991. "Loading test of shield tunnel specimens subjected to alternative axial loading," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp403-411.

Sugiura, T., T. Yamazaki and N. Suzuki, 1991. "Calculation of escaping behavior related with smoke movement simulation in building fire," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp556-563.

Sugiura, T., T. Yamazaki and N. Suzuki, 1991. "Calculation of escaping behavior related with smoke movement simulation in building fire," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp423-428.

Sugiyaa, I., Y. Nakatani, M. Ohashi and T Wakamatsu, 1991. "Programming and design of underground car parking network," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp245-252.

Sugiyama, I., Y. Nakatani, M. Ohashi and T Wakamatsu, 1991. "Programming and design of underground car parking network," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp180-185.

Suh, J.K., H.S. Chung and C.H. Kim, 1988. "Study on the gas containment criterion in unlined rock caverns," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp127-132.

Sui, H.T. and Y. Cui, 2023. "Distribution Characteristics of Tunnel Point Cloud Obtained by Terrestrial Laser Scanning," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp273-280.

Sum, Don T C, Tony Y K Ho, Clayton Y K Chan and Leo K W Lo, 2018. "Exploring underground solution for accommodating concrete batching and asphalt production plants," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp467-477.

Summers, D.A. and G.B. Rupert, 1992. "Excavation of an underground theater below the St. Louis Arch," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp749-759.

Sun, J. and M. Wang, 1995. "Exploration of implementation pathways for underground space planning in key urban areas," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp104-111.

Sun, Jianping, Zhiye Zhao and U. Kar Winn, 2012. "Grouting Effects on the Seepage Field Around Underground Caverns," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Sun, Jinglai, Baoguo Liu, Lei Chen, Zhaofei Chu and Xin Li, 2018. "A novel Bayesian-based integrated risk assessment in tunnel construction," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp745-759.

Sun, Jun, 1988. "The characteristics of rock nature and the surrounding rock stability analysis of tunnel opening in overstressed ground regions," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp307-309.

Sun, W.X., H.L. Liu, W.G. Zhang, Y.Q. Li and S.L. Liu, 2023. "Investigation on Rectangular Tunnel Mechanical Response Under Groundwater Level Fluctuation Based on Model Test and Numerical Simulation," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1217-1220.

Sun, Xiyuan, 2012. "Study on the Axial Force Characteristic of a Steel Support for Excavation in Metro Construction," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDRom), ISBN-13: 978-981-07-3756-6.

Sun, Y., S.C. Gao, J.X. Shang, D. Wang, S. Jiang and S.G. Wang, 2023. "Research on Intelligent Ventilation Systems with Fan Frequency Regulation During Tunnel Construction," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp803-810.

Sunu M., 2002. "The Present State of Underground Cities in Anatolia, Turkey," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Supawit P., P. Jongpradist, T. Thongdetsri, P.W. Noppadol Phien-wej, D. Dias, S. Janrungautai, D. Amorndechaphon and A. Hasap, 2025. "Engineering geological assessment and ground behavior of tectonically disturbed rocks in northern Thailand. A case study of the Phayao railway tunnels," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp397-407.

Suzuki, Nanami, Tetsuya Shirane, Taira Morimura and Hiroyuki Nitta, 2021. "Construction of Underground Service Tunnels as Part of Disaster Management," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Suzuki, T. and N. Iguchi, 1991. "Planning of urban underground development by pedestrian flow estimation," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp132-139.

Suzuki, T. and N. Iguchi, 1991. "Planning of urban underground development by pedestrian flow estimation," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp85-89.

Swamidurai, S. and S. Seerappalli, 2014. "Going underground to alleviate land use pressure in the core areas of Indian cities – Chennai City case," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Swamidurai, Santhakumar, 2018. "An integrated underground space use approach in core area of Indian cities – a case of George Town in Chennai," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp430-437.

Swe, Tint Lwin, 2012. "Interaction Between Mineral Constituents, Weathering, Fracturing and Strength and Hydraulic Properties of Bukit Timah Granite,"

Sylvie Lussier, Sylvie, 1997. La sécurité par le partenariat," Workshop A-2, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Taguchi, Masumi, Koichi Kawakami, Shinji Konishi, Takanori Miura, Kosuke Fukunaka, 2016. "Development of Maintenance Indicator to Evaluate Soundness of Subway Tunnels," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Takagi, A. and K. Maruyama, 1991. "Advanced construction technologies for LNG in ground storage tank," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp277-288.

Takagi, A. and K. Maruyama, 1991. "Advanced construction technologies for LNG inground storage tank," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp227-234.

Takahashi, Yoji, Masami Yokotsuka, Takeyuki Ebi, Yoshinori Satou, Hitoshi Asano, Chuzo Morimoto, Hideaki Yonekura, 2009. "A Feasibility Study on the Construction of Deep Underground Distribution Tunnels in the Tokyo Metropolitan Area," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp236-241.

Takamine, S. and S. Miyazaki, 2025. "Building a navigation system using digital twins of information from above and below ground," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp838-843.

Takayama, Eika, 1991. Keynote lecture, "Urban areas and the use of underground space," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp4-7.

Takayama, Eika, 1991. Keynote lecture, "Urban areas and the use of underground space," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp20-22.

Takeuchi, I. and K. Saito, 1991. "Study on communications in underground spaces," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp584-589.

Takeuchi, I. and K. Saito, 1991. "Study on communications in underground spaces," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp443-446.

Takeuchi, R., 1991. "Safety precautions against fire in urban subsurface space," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp429-432.

Takeuchi, Y., 1991. "Safety precautions against fire in urban subsurface space," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp564-569.

Talib, K. and A.A. Al-Zamil, 1983. "Enclosed and open spaces in the arid regions- Saudi Arabia," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp61-68.

Tan, W.Y., K.H. Goh, J. Kumarasamy, C. Veeresh, B. Zhang, and Z. Zhan, 2023. "A Study on the Effectiveness of Surface Protection Methods for Underground Tunnel Structures in Singapore," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp951-962.

Tan, Zheng, Adam Charles Roberts, Eun Hee Lee, Georgios Christopoulos, Kian-Woon Kwok, Josip Car and Chee Kiong Soh, 2018. "Architectural design, perception, and health in underground working environments," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp538-543.

Tanabashi, Yoshihiko and Yujing Jiang, 1999. "Dynamic and synthetic design evaluations of tunnel entrance and inside based on semantic differential method," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp504-509.

Tanabashi, Yoshihiko, 1997. "Development of Geo-Space Image Database as Educational Supporting Tool and Information Browser," Workshop D-1, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), *Proc. 7th Intl. Conf. Underground Space*, Montréal, Sep 29-Oct 3 (CD-ROM).

Tanaka M., Shinohara Y., Miyagawa M., Hirashima Y., Hagimori J., Masaki N., Suzuki M., Tomita T., 2002. "Studies on the Development of Multi-level Pedestrian Spaces in Districts Congested with Railroads and Highways," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Tanaka T., Shibagaki M., Nishi J., Okuyama K., 2002. "A Consideration about the Amenity of Lightning Space in Underground - At the Point of the Visual Elements," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Tanaka, A., T. Komai and T. Isei, 1992. "Design of a simulation system of evacuation from underground," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp137-143.

Tanaka, M., 2007. "Creation of new multi-level urban space for the northern Osaka Station area development," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp323-328.

Tanaka, S., K. Sato and S. Imamura, 1991. "Technology assessment technique on groundwater and land environment conservation concerning underground space development in urban area," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp327-332.

Tanaka, T., J. Nishi and T. Seiki, 1999. "A study of landscape for underground," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp273-280.

Tanaka, T., T. Kyogoku and I. Hanatani, 1991. "A planning of underground space by civil engineers," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp157-166.

Tanaka, T., T. Kyogoku and I. Hanatani, 1991. "A planning of underground space by civil engineers," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp102-107.

Tanaka, Takehiro and H. Wariishi, 2014. "Recent tendencies & typical examples of accidents to underground installation in Japan," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Tanakadate, Y., 2023. "Early Strength Enhancing Additive for High GGBS Replacement SFRC Segment," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1225-1226.

Tang, Ju-peng and Yi-shan Pan, 2005. "Numerical simulation for underground exploitation of sublevel stope of underhand pseudo-skew in Datai coal mine," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp181-185.

Tang, Y.Q., X.Y. Wang, X.Z. Wu, Y.C. Wu and A.S. Wu, 2023. "Research on Underground Public Space Planning of Metro Station Area Based on the Method of BIM + GIS—Taking Xietaizi Metro Station in Chongqing City as an Example," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp535-542.

Tanikaga, Nobuaki and Tadahiko Okumura, 2012. "Study on the Undergrounding of Overhead Transmission Lines in Densely Populated Urban Areas," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Tao, Zhenyu and H.H. Mo, 1988. "Under cyclic loading the experimental study and the numeric simulation of constitutive relation of rock," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp310-315.

Tengborg, P., 1992. "Natural gas storage – the process of localization," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp149-159.

Tengborg, Per and Ulf Lindblom, 2012. "Going Underground in Sweden, Past-Present-Future," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Thees, M. and R. Bielecki, 2007. "Ecological impact of underground construction methods: a methodology for evaluating and decision making," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp279-284.

Thewes, M. and S. Kamarianakis, 2012. "Multi-Criteria Decision Making of Construction Methods Using the Analytical Hierarchy Process Based on Fuzzy Scales," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Thewes, Markus and Goetz Vollmann, 2007. "A new approach for operating tunnel facilities," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp243-248.

Thibaud, Jean-Paul, 1995. "Visions du public en sous-sol," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp171-176.

Thibaud, Jean-Paul, 1997. "Les cadres sensibles de l'espace souterrain," Workshop A-1, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Thibault, Christian, 1997. "Utilisation de la ventilation d'urgence pour obtenir un endroit sécuritaire en station en cas d'évacuation," Workshop D-4, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Thierry P., Bourguin B., Debeglia N., Grandjean G., 2002. "Geostatistical and Geophysical Methods for constructing a 3D Geological Model in an Urban Environment as applied to Lyons and Orleans, France," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Thomas, T., R. Lentz, D. Look, D. Elifrits and L. Sieck, 1986. "The earth as insulation," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp86-93.

Tian, Qian, Zhiye Zhao and Huirong Bao, 2012. "Block Fracturing Analysis Using Nodal-Based Discontinuous Deformation Analysis with Double Minimization Procedure," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Tian, Yujia, 1988. "Study of downstream sidewall anchorage effect in Baishan underground powerhouse," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp211-215.

Tjiawi, H., A. Romagnoli, T. Massier, W. Wu, J. Lim, C. Chuah, J. Poh, L. Yang, D. Lu, A. Chidire, B. Veerasamy and J. Chan, 2023. "The First Deep Geothermal Exploratory Slimhole at Admiralty Lane, Singapore," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1167-1170.

Tochigi, Akane, Akane Imaizumi and Norikazu Shimizu, 2018. "Assessment of impressions of underground spaces based on questionnaires using virtual reality images," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp515-523.

Togashi, Y., T. Umetsu, K. Nakai, F. Mizuno and K. Sakai, 2025. "Laboratory loading test of tunnel support with yielding elements in isotropic stress field," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp408-415.

Togashi, Yota, Takanobu Imano and Masahiko Osada, 2021. "Deformation characteristics of sedimentary rock due to continuous changes of moisture content in wetting process," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., *Proc. IOP Conf. Series: Earth and Envir. Sci.*, Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Tojyo, T. and K. Fukada, 1991. "Construction management of a large-scale excavation in soft ground," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp289-298.

Tojyo, T. and K. Fukada, 1991. "Construction management of a large-scale excavation in soft ground," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp235-241.

Tokikawa, T., N. Yokota, Y. Inada and K. Tachibana, 1991, "Basic research on the characteristics of basement," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp450-459.

Tomihisa N., Niitani Y., Shimizu K., Shindo A., Iida Y., Tomita T., 2002. "A Study on Improving Transportation Nodes for Barrier-Free Movement in Large Cities," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Tong, Linxu, 1999. "Preparing sufficient underground space resources for urban development in the 21st century," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp90-96.

Tong, Linxu, 2007. "An outstanding project of underground space utilization in urban redevelopment of Beijing," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp89-92.

Tong, Yuzhe, 1999. "The salutary surroundings of cave dwelling house and quadrangular residence," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, p49.

Torihama, H. and T. Tanaka, 2014. "Risk evaluation method for underground space form the standpoint of business continuity in Japan," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Towson, P.G. and M.R. Hausman, 1983. "Geotextiles for earth structures," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppD2-6.

Towson, P.G. and M.R. Hausmann, 1983. "Geotextiles for earth structures," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp363-366.

Trebbi, Jean-Charles, 1995. "Patrimoine troglodytique & architectures-paysages," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp523-528.

Tremblay, Pierre, 1997. "Évaluation des effets de la ta télésurveillance sur la criminalité dans 13 stations du métro de Montréal," Workshop B-1, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), *Proc. 7th Intl. Conf. Underground Space*, Montréal, Sep 29-Oct 3 (CD-ROM).

Tremblay, Sylvie, 1995. "Plan directeur de signalisation dans les réseaux piétonniers souterrains et sentiment de sécurité : Le projet de Montréal," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp63-68.

Triantis, E.S., I. Tzouvadakis and A. Sotiropoulou, 2007. "Environmental performance of underground railway stations in Athens," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp249-254.

Tricaud, Etienne, 1995. "Quelques pensées pratiques sur l'architecture souterraine des gares du projet EOLE," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp195-198.

Trimbos, Jeroen, 1995. "Future of urban underground planning and infrastructure in the Netherlands," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp13-14.

Trimbos, Jeroen, 1995. "research and development of sound-proof earth-sheltered housing in the Netherlands (spes-housing)," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp407-412.

Trinh, Nghia Quoc, 2012. "Controlling of Groundwater Inflow: From Norwegian Sub-Sea Tunnels to Tunnel in Large Cities," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Tsakiri, M. K. Sigizis, H. Billiris and S. Dogouris, 2007. "3D laser scanning for the documentation of cave environments," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Bernardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp403-408.

Tsang, N.F., H.H. Chan and G.H. Au, 2023. "Fire Safety Design of the First Cavern Laboratory in Hong Kong: Challenges and Innovations," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp819-828.

Tsui, Yuji Tsu, Keigo Ikeda and Keigo Kita, 2021. "Initiatives for Formation and Effective Utilization of Underground Pedestrian Networks in Japan," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703
<https://iopscience.iop.org/issue/1755-1315/703/1>

Tsukaguchi, Hiroshi and Yuki Ohashi, 2007. "Modelling pedestrian route choice behaviour and its application to the planning of underground shopping streets," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Bernardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp527-532.

Tsukaguchi, Hiroshi, Yan Li, Kuang-Yih Yeh, 2009. "A Hybrid Method for Estimating Pedestrian Flow In Underground Shopping Streets," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp223-228.

Tukio, Yoshio, 1991. (Chm.) Panel Discussion, "Can we live in the underground space?," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp12-29.

Tukio, Yoshio, 1991. (Chm.) Panel Discussion, "Can we live in the underground space?," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp23-32.

Tully, D.F., 1983. "Creating healthy lifestyles underground," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp271-274.

Tung, L., 1992. "Investigation and evaluation of underground space resources for Beijing central area," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp42-49.

Tung, L.H. and H. Jing, 1986. "Developing underground shopping space in Qianmen business district of Beijing," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp295-300.

Tung, Linhsu, 1988. "Urban underground shopping mall: the essential experience of Japan," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp100-104.

Tung, Lin-Hsu, 2002. "The New Achievements in Development of Urban Underground Space Resources in China," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Twum-Ampofo, S., I. Chan and H. Chen, 2025. "Lessons from BIM and AI for indoor environmental quality management: applications to underground space environmental quality research," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp796-807.

Tzouvadakis, I. and D.V. Batsos, 2007. "The aesthetics of the Athens metro stations," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp337-344.

Tzouvadakis, J. and D.V. Batsos, 2007. "Public acceptance of the Athens urban underground metropolitan railway (metro)," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp513-518.

Uchino, Y., 1991. "Utilization of underground space of Ginza area," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp140-142.

Uchino, Y., 1991. "Utilization of underground space of Ginza area," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp90-91.

Uffink, Ton and Han Admiraal, 2012. "Underground Transport of Cargo: A Sustainable Alternative," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Ujigawa, M., H. Muto, M. Yashuoka, K. Hirate and Y. Tsuchida, 1992. "Experimental study on the improvement of underground office environments," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp283-292.

Ujigawa, M., H. Muto, M. Yasuoka, K. Hirata and Y. Tsuchida, 1991. "An experimental studies on the improvement of the underground office environment," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp505-511.

Ujigawa, M., H. Muto, M. Yasuoka, K. Hirata and Y. Tsuchida, 1991. "An experimental study on the improvement of the underground office environment," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp377-381.

Urano, K. and K. Matsubara, 1991. "Seismic design method of shield tunnels with axial prestressing by means of rubber and PC bar," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp412-422.

Urano, K. and K. Matsubara, 1991. "Seismic design method of shield tunnels with axial prestressing," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp316-322.

Urbanski, A., K. Podles, T. Zimmermann and S.A. Yufin, 2005. "Numerical simulation of underground construction works. Case of a subway tunnel in urban environment," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp146-154.

Ushakova, Antonina, 2016. "Development of Underground Space as Transportation Problem Solution in St. Petersburg," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Utudjian, Pierre, 1995. "Le socle de la Grande Arche," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp263-270.

Vähäaho, I. and M. Pentti, 2025. "Underground small modular reactors for district heating," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp543-550.

Vähäaho, Ilkka, 2012. "0-Land_Use: Underground Resources and Master Plan in Helsinki," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Vähäaho, Ilkka, 2018. "Urban underground space - sustainable property development and current status of the Helsinki underground master plan," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp1-9.

Vähäaho, Ilkka, 2021. "Could ground heat and geothermal energy be the answer to climate change prevention and energy demand?" *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Valdemarin F., Parboni S., 2002. "GIS Oriented Monitoring Systems for Large Infrastructural Works Realisation," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Vallabhan, C.V.G. and E.W. Kiesling, 1986. "Boundary element methods for heat transfer analysis in earth sheltered buildings," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp201-204.

Van der Krogt, R.A.A., J. Edelenbos and R.A.H. Monnikhof, 1999. "Developing long term strategies for the underground space," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp123-137.

Van Lohuizen, H.P.S., 1991. Keynote lecture, "Exploring new dimensions for our cities," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp2-3.

Van Lohuizen, H.P.S., 1991. Keynote lecture, "Exploring new dimensions for our cities," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp17-19.

Vandewalle, M., 1992. "Use of steel fiber reinforced concrete for tunnel construction," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp683-692.

Varriale, R., 2005. "Building underground towns: the case of Napoli," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp138-145.

Veach, K.C. and L.F. Goldberg, 1986. "A simplified experimental evaluation of an earth-coupled heating tube in Minnesota," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp210-214.

Veeresh, Chepurthy, Choon Yeang Ng, Rama Venkta and Mahatma Subbaiyan, 2012. "Underground Station Construction Next to West Coast Highway Viaduct Structure," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Villis, P. and R. Tossani, 1983. "Earth-sheltered houses, South Australia," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, Appendix A1-6.

- Villot, Michel and Philippe Jean, 1995. "Protéger les bâtiments reverains des vibrations acoustiques," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp447-452.
- Visser, B., 1992. "Software for long-term planning for sewerage systems," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp538-543.
- Volchko, Y., T. Söderqvist, E. Frisk, P. Lindgren, L. Melgaço, M. Zurita, F. Mossmark, V. Svahn, O. Sandström and J. Norrman, 2023. "Geosystem Services for Subsurface Planning in Sweden: A Pilot Survey," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1181-1184.
- Von Der Tann, L., N. Metje, B. Collins and M. Melo Zurita, 2021. "A perspective on the governance of London's subsurface," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., *Proc. IOP Conf. Series: Earth and Envir. Sci.*, Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>
- Von der Tann, Loretta, Brian Collins, Nicole Metje, 2016. "Predetermined? – Systems Thinking for the Urban Subsurface," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Von der Tann, Loretta, Nicole Metje and Brian Collins, 2018. "How to distinguish different uses of the (urban) subsurface –a missing discourse," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp394-404.
- Vrkljjan, I., T. Zenko and N. Ozanic, 2005. "Problems with water during tunnel construction," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp256-259.
- Wade, H.J., 1983. "Integrating passive solar heating and passive cooling into earth-sheltered residences," (abstract only) *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, p97.
- Wade, H.J., 1983. "Integrating passive solar heating and passive cooling into earth-sheltered residences," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppF40-44.
- Wagner, Harald and Davorin Kolic, 1999. "Underground caverns in design and construction," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp494-503.
- Wallace, M., 2025. "Underground space opportunities and tunneling in the Philippines," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp380-396.
- Wallace, M., K.J. Roberts and V. Lau, 2014. "A geographic information systems approach for regional cavern suitability mapping for Hong Kong," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Wallace, M.I., Y. K. Ho and S. Ross, 2018. "Conceptual framework for an advanced underground physics research laboratory in Hong Kong," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp457-466.

- Wan, Guoan, 1988. "Specific features of layout of mausoleum in China and the thinking behind them," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp59-62.
- Wang B., D.J. Guo, L.M. Huang and Z.L. Chen, 2009. "Integration of above and under-ground design of cultural square in western cities – Wuwei cultural square in Gansu province," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp182-187.
- Wang Xuan, Shu Yu, Gong Jiehua, 2002. "The Sub-Road Space Utilization in Shanghai," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).
- Wang Xuan, Shu Yu, Zhao Penglin, 2002. "The New Development of Underground Space Planning in China," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).
- Wang, C.W., M.Q. Zhu, H.H. Zhu and S.Q. Dou, 2025. "Towards low-carbon tunnel engineering: a comprehensive review of emission estimation and forecasting techniques," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp613-627.
- Wang, Cheng-bing and Gao Wen-sheng, 2009. "Numerical Simulation on Crossing Construction of Subway Station under Building," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp567-572.
- Wang, D.P. and X. Wang, 2023. "Induced Seismicity Caused by Sudden Failure of Rock Joints with Different Undulation," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp75-80.
- Wang, F.H., X. Gu and Y.Z. Tang, 2007. "Shenzhen – exploration of the utilization of underground space resource in the period of transition to market economy," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp285-290.
- Wang, H.S., 1988. "Boundary element analysis for viscoelastic contact problems in underground geotechnical engineering structures," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp388-392.
- Wang, H.Y., D.J. Guo, X.X. Zhao, J. Huang, Y.H. Wu and Y.L. Chen, 2025. "Exploration for upgrading of urban underground space plan in China: underground plan," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp26-38.
- Wang, Hai-lin, Peng Fang-le, 2009. "A Semi-analytical Solution for Surface Settlement Induced by Pneumatic Caisson Construction," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp437-441.
- Wang, Haiming, Thorsten Tatzki and Honggang Quan, 2012. "EPB TBM Tunnelling in Beijing Waterless Pebble Ground," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDRom), ISBN-13: 978-981-07-3756-6.
- Wang, Hongjun, 2016. "Earth Human Settlement Ecosystem and Underground Space Research," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Wang, J. and Y. Xia, 1992. "Potentiality of using underground space on the campus in China," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp50-56.

Wang, J.X., X. Li, M.C. Sun, K. Wang and W.Q. Bao, 1999. "Studies on urban underground space planning," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp116-122.

Wang, J.X., Y.X. Long, T.Z. Cui, H.M. Wang, X.L. Huang, Y.B. Gao, J.Z. Wu and W.Q. Pan, 2025. "Influencing factors analysis of bearing capacity of deep underground space and evaluation methods in a coastal soft soil mega city: a case study of Shanghai," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp496-506.

Wang, Jian, 2012. "Study on Planning and Design of a Multi Utility Tunnel in Suzhou – Singapore Industrial Park," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDRom), ISBN-13: 978-981-07-3756-6.

Wang, Jun, 1999. "Initial probe into the cave dwelling culture of Qing Dynasty of China," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, p38.

Wang, M., F. Ma and X.Q. Cao, 2023. "Exploration of Underground Space Planning in Station-City Integration Area in the Context of High-Quality Development—A Case Study of Hangzhouxi Railway Station Area," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp439-445.

Wang, M., X.Q. Cao and F. Ma, 2023. "Exploration on the Development and Utilization of Underground Space in Urban Renewal in Port Area—A Case Study of Qingdao Cruise Port," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp445-452.

Wang, Q. and Y. Yuan, 2023. "Seismic Response of a Ground-Penetrating Ultra-Shallow Embedded Shield Tunnel: Shaking Table Test," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp829-834.

Wang, W.Q. and X.W. Wang, 1999. "Urban development and underground space's utilization," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp176-183.

Wang, W.X., Y.H. Dong, C.X. Ma and F.L. Peng, 2023. "Underground Space Planning in New Urban District Based on the Chinese Modern Garden City Concept: A Case Study of Sub-Central City in Jinan, China," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp411-416.

Wang, X.B., 2005. "Instability criteria of rock burst considering strain localization," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp271-276.

Wang, X.R. and Z.Y. Yin, 2023. "Coupling Vitality Simulation of Pedestrian System in Subway-Transit Area Based on Walkability," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp491-496.

Wang, Xu-dong, Jiang Xang, Ruan Yong-ping, Xu Jian-long, "Response of Deep Excavation in Complex Site of Soft Clay and Stiff Clay," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp426-432.

Wang, Y.J., S.L. Shen and A.N. Zhou, 2025. "Vulnerability of metro system due flooding in large Asian cities," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp628-634.

Wang, Y.R., X. Li and J.C. Li, 2023. "A BIM-Based Numerical Simulation Framework for Tunnels Under Complex Geological Conditions," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp865-872.

Wang, Y.Z., S.M. Liao, Z.Q. Gong and F. Deng, 2023. "Digital Twin Practice for Long Linear Engineering Management: A Case Study of Nantong Ring Expressway," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp267-272.

Wang, Yongnian, 1988. "Analysis of in-situ test results of rock stress and deformation in the thirteen-tomb underground power station, Beijing," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp344-351.

Wang, Yu, Jie He and Jinrui Hu, 2018. "Reconstruction of regional underground space network and optimization of slow traffic system through metro station: a case study of Gangxia North Hub of Shenzhen," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp576-589.

Wang, Yupeng and John Zacharias, 2018. "The potential of underground space renovation in central CBD district for traffic congestion mitigation," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp249-254.

Wang, Z. and L.H. Tung, 1986. "Water damage and its control for cave dwellings in loess," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp62-67.

Wang, Z., Y. He, Q. Wei and L.M. Li, 1999. "The practical research of green settlement on the loess plateau – a pilot project in Zao Yuan village," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp226-231.

Wang, Z.X., 1988. "The first metro line in Shanghai," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp105-109.

Wang, Z.Y. and Y. Pan, 2023. "Dynamic Prediction on Driving Attitude of Tunnel Boring Machine (TBM): An Automated Deep Learning Approach," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp173-184.

Wang, Z.Z., Q.S. Xue, X.Y. Guo and G.J. Zhang, 2014. "Identification of risk factors of a metro underground station construction in China," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Wang, Zhiyi and Jiaping Liu, 1999. "Primary investigation on the heat and humidity distribution models of yard with water reservoir in summer," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp470-473.

Wariishi, Hiroyuki, T. Tanaka and Y. Mikami, 2014. "Study on safety and quality improvement technique for construction and maintenance of underground space in Japan," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Watanabe, Hiroshi, Takeshi Watanabe, Shuji Sugimori, 2009. "Review and Forecast: Development and Disaster Control of Underground Shopping Mall in Japan," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp287-291.

Watanabe, I., S. Ueno, M. Koga, K. Muramoto, T. Abe and T. Goto, 1991. "Examination on safety and disaster prevention measure for underground space based on analysis of disaster cases," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp570-577.

Watanabe, I., S. Ueno, M. Koga, K. Muramoto, T. Abe and T. Goto, 1991. "Examination on safety and disaster prevention measure for underground space based on analysis of disaster cases," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp433-438.

Watanabe, Sadao, 1991. (Chm.) Panel Discussion, "Impact of land use transition by urban underground utilization," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp54-71.

Watanabe, Sadao, 1991. (Chm.) Panel Discussion, "Impact of land use transition by urban underground utilization," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp39-46.

Watanabe, Y. and H. Kondo, 1992. "City planning and underground utilization in Japan," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, p75.

Watanabe, Y., 1991. "Cosmopolitan city system planning utilizing the new frontier," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp127-131.

Watanabe, Y., 1991. "Cosmopolitan city system planning utilizing the new frontier," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp82-84.

Wei, Li, F. Yin, H.Q. Wu and J.Y. Shi, 2014. "Study of development and design of underground commercial street in old urban," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Wei, Meng, Pengbo Chen and Yunlong Su, 2021. "Study on Implementation Strategies of Multifunctional Linear Underground Space: A Case Study in Beijing's sub-center," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703
<https://iopscience.iop.org/issue/1755-1315/703/1>

Wen, Yueming and Jiawei Leng, 2021. "A spatial prototype of natural ventilation in underground public spaces combining courtyard with wind tower," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703
<https://iopscience.iop.org/issue/1755-1315/703/1>

Weng, Qiping, Zhonghua Xu, Zhihou Wu, Ruobiao Liu, 2016. "Design and Performance of the Deep Excavation of a Substation Constructed by top-down Method in Shanghai Soft Soils," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

- Wetzig, Volker, 2007. "L-Surf – large scale underground research facility for safety and security," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp67-71.
- White, B.M., 1983. "A guide to soil investigation and analysis for earth-covered buildings," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppC51-55.
- Wijkmark, Bo, 1995. "Infrastructure in conflict with beauty and history: a challenge for planning in the heart of Stockholm," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp335-338.
- Wimble, E.D., 1983. "The need for embankment and berm stabilisation in the construction and landscape establishment of erosion control vegetation for earth-covered buildings," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (Australian Papers)*, Aug 1-6, 1983, ppC63-66.
- Windyawati Winota, Reny, 2014. "The challenges of underground development in Indonesia: policy and implementation: case of Jakarta City," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Winn, Kar and Melvin Ng, 2012. "Rock Support Design for Underground Hydrocarbon Storage Caverns in Singapore," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDRM), ISBN-13: 978-981-07-3756-6.
- Winterberg, Ralf, 2012. "Fibers Boost Performance and Productivity of Segmental Linings," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDRM), ISBN-13: 978-981-07-3756-6.
- Wittke, Walter, 2007. "New high-speed railway lines Stuttgart 21 and Wendlingen-Ulm – approximately 100 km of tunnels," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp193-200.
- Woldmo, Ola and Eivind Grø, 2012. "Planning for Water Inflow Control in Tunnels and Caverns," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDRM), ISBN-13: 978-981-07-3756-6.
- Wong, Jeffrey C.F., Mann M.H. Chow and Johnny C.Y. Cheuk, 2018. "Opportunities and challenges of underground space development in densely developed urban areas," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp228-237.
- Wong, Louis Ngai Yuen and Maurice A. Ponti, 2012. "Constraints, Design and Implementation of Rock Discontinuity Survey for Underground Engineering Purposes," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDRM), ISBN-13: 978-981-07-3756-6.
- Wong, Man Sing, Keru Lu, Guanjing Xiong, Coco Y.T. Kwok, Kimberly Anne Sheen and Roy Kam, 2018. "Using Ibeacon technology for underground and indoor positioning," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp735-744.

Wong, Siu Tee, Tiong Yong Teo, Pui Chih Chong and Melvin Ng, 2012. "Development of Jurong Rock Caverns in Singapore," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Wright, David, 1986. "Earth – how much," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp1-5.

Wu, H.Z., S.L. Shen and A.N. Zhou, 2025. "Evaluation of segment uplift risk during shield tunnelling based on cloud model," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp330-336.

Wu, Kejie and Xiaodong Shi, 2012. "Opportunities and Challenges for Utilizing Underground Space Along the Subways in Beijing," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Wu, T., Y. Cao and Z.L. Chen, 2009. "Modeling the characters of exterior configuration of underground common constructions," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp120-126.

Wu, Tao and Z.G. Ruan, 2007. "Consideration on the key elements of exterior environment of underground public architectures and their integrations," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp351-358.

Wu, Tao, B. Li, J.R. Xie, C. Qian and J.J. Wang, 2014. "Comprehensive performance evaluation of entrance of underground architecture based on BIM," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Wu, Tao, B. Li, J.R. Xie, T. Wei and J.J. Wang, 2014. "Study on application modes of BIM in underground architecture," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Wu, Tao, Jinrong Xie and Qianxiang Jia, 2012. "Discussion on Human-Oriented Design of Emergency Evacuation in Underground Commercial Pedestrian Street," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Wu, Yuanuan and Hong Yuan, 2018. "Study on the influence mechanism of underground space in the development of land diversity — taking Shapingba station as an example," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp412-419.

Wu, Zhen-zhi, Yang Guo-xiang, Yang Lin-de, Wang Ji-yun, 2009. "Prediction and Control of Ground Deformation and Displacement due to large Slurry Shield Tunneling using Stochastic Medium Theory," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp507-514.

Wukasch, E., 1992. "Improving aesthetics of underground structures," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp399-405.

Wukash, Eugene, 1983. "The integrated design process of the passive environmentally designed structure," *Proc. 1st Intl. Conf on Energy Efficient Buildings with Earth Shelter Protection (International Papers)*, Aug 1-6, 1983, pp187-190.

- Wulian, Yangzhiwei, 1999. "Studied of loess cave waterproof technology," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, p474.
- Xenios, Z. and A. Benardos, 2021. "Prediction of blast-induced ground vibrations with the use of artificial neural networks. A case study in Greece," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703
<https://iopscience.iop.org/issue/1755-1315/703/1>
- Xhu, Keshan, Z.Y. Hu, Z.R. Zhu, Y.G. Zhong and Q.M. Wang, 1988. "Multiplepurpose uses of a street traffic tunnel in a mountainous city," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp246-250.
- Xi, J.L., M. Zhu and Z.L. Chen, 2005. "Integrated development of underground space in China," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp85-89.
- Xia, S.T., G. Cheng, R. Zeng, Z. Li and X. Yang, 2023. "A Study on the Perceptual Evaluation of Public Space Around Elevated Areas from the Perspective of Inventory Renewal," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp215-234.
- Xia, Y. and Y.R. Zhang, 1988. "Go underground to get building space," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp7-10.
- Xia, Y., S. Guang, Y. Cheng and Y. Shi, 1986. "Experiences in using earth sheltered buildings and underground spaces in Shaanxi, China," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp41-44.
- Xiang, G.L., M. Tao, R. Zhao, H. Luo, K. Du and K. Liu, 2023. "Dynamic Response for Deep Buried Water Diversion Tunnel Under the Action of Near-Field Disturbance," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp121-126.
- Xiao, Shuan, 1999. "Some aspects of regulations on underground construction in Switzerland," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp359-366.
- Xiaozhao Li, Qian Gu, Huanqing Li, Rui Wang, Dankun Zhou and Jialing Dai, 2018. "The recent situation and prospect analysis of the development of urban underground space in China," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp420-429.
- Xie, Jinrong, Dongjun Guo, Zhilong Chen and Dexin Liang, 2012. "Thoughts for Underground Logistics System in China," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDRom), ISBN-13: 978-981-07-3756-6.
- Xie, Xingbao and Qian Xie, 1999. "On Wuhan subway and underground space construction," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp340-345.
- Xie, Y.P, J.S. Yang and J.Y. Fu, 2023. "Multiscale Modelling and Analysis of Soil Arching in Granular Soils," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp163-172.

Xin, Y.X. and Y.Q. Wang, 2025. "Experimental study on the smoke spreading characteristics of fire in the merging section of the arch bifurcation tunnel," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp671-678.

Xin, Y.X., W. Zhang, X.Z. Li, J.J. Ma and Y.H. Shi, 2023. "Experimental Study on the Mechanical Response of a Buried Pipeline Under Shear Deformation of Non-cohesive Strata," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp751-756.

Xin, Yunxiao, Jialing Dai and Xiaozhao Li, 2018. "Impacts of subway development on historical buildings," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp661-668.

Xing, Z.L., L. Zhang, M.L. Tan, M.L. Zhou and H.W. Huang, 2023. "Numerical Study on the Influence of Water Level Change on the Stability of Subsea Tunnel Excavation," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1113-1120.

Xu, C., Z. Liu, B.T. Cao, G. Meschke, Y. Yuan and X. Liu, 2025. "A multi-fidelity deep operator framework with generative adversarial network for load prediction and displacement reconstruction of tunnel structures," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp948-955.

Xu, Guangliang, 1988. "Design of inspection passage to power tunnel for Yuzixi hydropower station," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp283-285.

Xu, H., X.Z. Li and J. Che, 2014. "Study on the influencing factors of urban underground space development at different stages of urbanization," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Xu, L.K., H.H. Zhu, R.Q. Fang, Y. Shen, T. Liu and S.Z. Feng, 2025. "Effects of guidance facilities on driving safety in road tunnels during foggy weather," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp679-686.

Xu, Na and Hong Yuan, 2018. "Research on the influence mechanism of underground space in the compact development of Tokyo station area from the perspective of network connectivity," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp963-971.

Xu, Shengyu and Xiancheng Zhu, 2012. "Research on Current Legislation for Urban Underground Space in China," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Xu, Shengyu, 2012. "A Research on Optimal Utilization of Urban Underground Space in China," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Xu, Sheng-yu, Zhu Xian-chen, 2009. "Analysis on the Property Right of Urban Underground Space Resources," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp377-384.

Xu, Sishu, 1986. "Development and utilization of underground space for public entertainment and cultural activities in China," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp301-306.

Xu, Sishu, 1988. "Development and utilization of underground space in the Chinese cities," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp241-245.

Xu, Y.J., X. Bai and K.F. Chu, 2021. "Underground space in metro area: constituent, influencing factors and improving strategies of the spatial vitality,"

Xynou, V., M. Karagianni, A. Benardos and D. Damigos, 2023. "Modelling of a Road Tunnel Ventilation System Under Fire Conditions," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp763-768.

Yagi, K., K. Oshima, K. Yashiro, M. Murase and M. Chatani, 1995. "Openness of Underground living spaces in Japan," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp91-98.

Yamashita, T., T. Seiki and J. Nishi, 1997. "The study of the present situation analysis and space design in the connective space: The situation of ventilation facilities in the underground spaces," Workshop B-3, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Yan, S.H. and C.Y. Wang, 1988. "Seismic stresses and displacements of underground circular tunnel," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp377-382.

Yan, Shenghai and Jianli Guo, 1999. "Dynamic response of the tunnel in the soft soil," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp395-407.

Yan, Wai Man, L. G. Tham and Ka-Veng Yuen, 2012. "Reliability of the Design Formula of Blast-Induced Vibrations," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDRom), ISBN-13: 978-981-07-3756-6.

Yan, X., Y. Xiao, L.Y. Tong, W.Y. Liu and W.B. Gu, 2023. "Deformation Analysis of Adjacent Structures Caused by Diaphragm Wall Construction Based on Machine Learning," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp937-942.

Yan, Yi-Lan, Yoram Rubin, Çağrı Gökdemir, He-Hua Zhu, Xiao-Jun Li and Yan-Dong Li, 2018. "Remote-sensing based estimation of the groundwater table position," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp794-803.

Yan, Z.F. and J.P. Liu 1999. "Indoor thermal environment in yaodong," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp81-88.

Yanagi, H., T. Fukuhara and S. Matuoka, 1995. "Mechanism and estimation of leakage through concrete crack," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp629-636.

Yang, Chao and Fang-Le Peng, 2016. "Discussion on the Development of Underground Utility Tunnels in China," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Yang, Chao and Fang-Le Peng, 2018. "Research on underground utility tunnel planning theory based on GIS technology," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp864-875.

Yang, Linde, S.B. Tao and Y. Wang, 1988. "Design and construction of TES Project," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp267-271.

Yang, Mingju, 2005. "Stability analysis of surrounding rock during the construction of super-large underground multi-chamber," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp213-217.

Yang, Soo-in, 2014. "Symbolic art work for green campus project at Yonsei University," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Yang, Y.F., S.M. Liao and W. Wang, 2023. "Semantic Segmentation-based Visual Detection of Construction Objects on Oversized Excavation Sites," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp737-744.

Yang, Yi, Xinggao Li and Youmian Wang, 2018. "Tests for agitating and volume shrinkages of a new single-component grout," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp946-955.

Yang, Z.F., 2025. "Research on digital modeling path based on IFC extension and BIM," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp853-859.

Yao, Aijun, Zhang Jiantao, Zhou Yijun, 2016. "Study on the Dynamic Response of the Steel Pipe Pile Foundation During Construction of Neighborhood Deep Excavation," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Yao, D.S., M.Q. Zhu and H.H. Zhu, 2025. "Application of improved machine learning methods toward better accuracies in predicting TBM performance," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp844-852.

Yao, Jian and Shousheng Wang, 2012. "Structure Design Ideas and Key Problems Study of Underground Garage Circle Corridor Engineerings," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Yao, Yan-Ming, 2009. "Analysis on the Influence of A Road Tunnel Caused By Huge Excavation in the Tunnel Protection Area," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp585-589.

Yashiro K., Kajita F., Nakayama N., Sugiyama J., 2002. "Study on Urban Tunneling Under and Parallel to a Railway Line," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Yashiro, K., M. Chatani and K. Yagi, 1992. "Research on spatial recognition of Chinese children living in Yao Dong (cave dwellings)," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp265-274.

Yashiro, Katsuhiko, 1997. "The transformation of underground cave settlement in China," Workshop B-4, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

Yasufuku, M., T. Negishi and M. Chida, 1995. "Role of the master plan for underground utilization," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp157-162.

Yasumara, N., T. Sakamoto, K. Noda and N. Masaki, 1999. "Underground mall / underground car park plans of Kamiya-cho, Hiroshima City," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp323-329.

Yavorsky, D.E. and N. Secker, 1992. "Burying the world's biggest accelerator," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp735-748.

Yeung, J.S. and Y.D. Wong, 2014. "Drivers' visual attention in urban road tunnels," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Yeung, N.K.W., M.J. Bezzano, O.Y.P. Wong and B.C.P. Yu, 2018. "Construction and operation of large underground MTR stations – Homantin station, Admiralty station and West Kowloon station," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp190-199.

Yi, Qiong, Chihao Cheng, Shaoming Liao, Lisheng Chen, Jiwen Zhu and Weizhong Xu, 2018. "The planning and construction of underground stereo garage in muddy soft ground: a case study of SPC method in Wenzhou, China," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp446-456.

Yifeng Li, Juntao Yuan, Wei Li, Zhengqiang Hong, Yingxu Huo, 2025. "Research on carbon accounting and low-carbon construction path for a super large cavern project in Hong Kong," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp973-991.

Ying, H.W. and Y.F. Xiong, 2023. "A Semi-analytical Solution of Time-Dependent Ground Settlement Induced by Excavation in Soft Clay," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp157-162.

Yokotsuka, M., S. Matozaki, T. Kasuya and S. Ohmura, 2014. "A study for carbon reduction in the field of energy in underground space of the Yaesu-Kyobashi-Nihonbashi District," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Yokotsuka, M., T. Kasuya and T. Okumura, 2007. "A proposal of metropolitan area deep underground distribution tunnel," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp213-220.

Yokotsuka, Masami, Kenichi Nakamura, Satoshi Ohmura, Taro Kasuya, 2016. "Study on the Underground Energy Network in Yaesu, Kyobashi and Nihonbashi Area," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Yokotsuka, Masami, Satoshi Ohmura, Taro Kasuya and Satoshi Matozaki, 2012. "Study of a Pedestrian Network for Urban Renewal in the Yaesu-Kyobashi-Nihonbashi District," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Yoshida, K. M. Tanaka, M. Murano and Y. Nishida, 2009. "Study on the underground network by the new being concept in urban area," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp103-109.

- Yoshimura, M., S. Seta, M. Shioda and H. Chikahisa, 1999. "Acoustics characteristics in an underground hemisphere exhibition space of Takayama Festival Art Museum," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp202-212.
- Yoshino, H. M. Nakatomo, S. Matsumoto and T. Sakanishi, 1991. "Five-years measurement for thermal performance of a semi-underground test house," *Proc. UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp521-529.
- Yoshino, H., S. Matsumoto and F. Hasegawa, 1986. "Optimum utilization technique of solar energy in semi-underground house," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp224-229.
- Yoshino, H., S. Matsumoto and M. Nagatomo, 1991. "Five-years measurement for thermal performance of a semi-underground test house," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp389-396.
- Yoshino, Y., J.A. Yoshida, K. Sekiguchi, T. Kawanishi, J.P. Liu, Z. Wang and S.P. Zhang, 1999. "The environmental questionnaire survey and the additional future problems about yao-dong dwellings," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp54-55.
- Yoshioka, M., H. Ogi, K. Nakamura, T. Hiyeda and K. Iwai, 1986. "Measurement of the thermal behavior of a basement and its surroundings," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp195-200.
- You Zhang, Y., Q.B. Zhang, Y.Y. Jiao, F. Tan and X. Zhang, 2023. "Spatial Distribution and Susceptibility Mapping of Urban Sinkholes in Shenzhen, China," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp81-86.
- You, Guangming, Zhiyan Zhou and Yanfeng Shen, 2012. "Project of the First Underwater Shield Tunnel at Jiangyin in China," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDRom), ISBN-13: 978-981-07-3756-6.
- You, M.L., F. Tan, Y. Zhang, D.J. Sheng and C.Q. Zuo, 2023. "Inversion of Rock Strength Parameters Using PSO-SVM Based on Monitoring Parameters with Drilling," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp289-314.
- Youm, Sang Hoon, 2014. "Application of undulating surface on semi-underground structure – Tonyong Golf Club house," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Youta-Mitra, P., K. Kaliakakis, P.P. Nomikos and A.I. Sofianos, 2007. "Bifurcating and widening tunnels in urban environments," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp151-156.
- Yu Xiao, Y., X. Yan, W.Y. Liu, L.Y. Tong and W.B. Gu, 2023. "Study on Coupling Effect of a Complex Deep Foundation Pit Group Excavation in a Soft Soil Area," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp93-100.
- Yu, Andong, 1988. "An improved shape of underground triangle shell," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp272-274.

Yu, J., Z.Z. Wang and Q.F. Luo, 2023. "Seismic Performance Analysis of Soil-Tunnel-Ground Buildings Considering the Fuzziness of Damage States," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp911-920.

Yu, Jinjun, 1999. "Consideration on the subway mural design," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp281-283.

Yu, M.J., H. Wang and D. Ni, 2009. "Underground space development of expo axis of Shanghai Expo Park," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp110-114.

Yu, Mingjian and Yiqun Fan, 2012. "Research on the Preparation of the Chinese Standard 'Standard for Basic Terms of Urban Underground Space'," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Yu, Mingjian, J.H. Luo, Y. Liu and D.J. Guo, 2007. "Urban underground road and urban CBD traffic – underground #-shaped corridor in CBD core area of Shanghai," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp93-98.

Yu, Mingjian, Jianhui Luo, Kesi You, Yiqun Fan, 2016. "Challenges to Design of the North Bypass Road of Shanghai and Innovative Technology," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Yu, Rong-hua, Chen Zhi-long, Zhang Cheng, Yang Hong-yu, 2009. "The Appraisal of Construction Methods for Underground Projects Based On DEA Model," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp409-412.

Yu, S. X. Wang, F.L. Peng and L. He, 2007. "The current actuality and developing trend of Chinese urban underground space utility," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp187-192.

Yu, S., G. We, G. Shen and L. Pang, 1992. "Application of acoustic logging method to the model and parametric identification of rock mass," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp825-833.

Yu, T.S. and Z.G. Yan, 2023. "Full Life Cycle Multi-hazard Scenarios and Structural Response Analysis of Metro Shield Tunnels," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp729-736.

Yu, X.B., C. Dinis da Gama and Y.F. Liu, 2005. "Numerical simulations on stability of the underground stopes of Ximai ore-body, Tongkeng tin mine, China," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp265-270.

Yu, X.B., C. Dinis da Gama, S.Y. Li, Q.R. Wang, Q. Xie and Z.P. Song 2005. "Investigation on the deformation of rocks under axial tension and compression," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp260-264.

Yuan, Dajun, Zhicong Chen, Fei Ding and Hui Jin, 2018. "Experimental study on staircase evacuation in double-layer tunnel," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp355-363.

- Yuan, H., X.R. Liu, Z.Z. Dai, 2009. "Research of the underground space planning and underground building design in mountain city – take Chongqing City for example," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp188-192.
- Yuan, Hong, 2014. "Mode and characteristics of underground space in central business district of mountainous city? The case of Chongqing," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Yuan, Hong, Yuan He, Kun Pan and Poyan Sayed Mustafa, 2018. "Enlightenment of historical function evolution of urban underground space," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp810-821.
- Yufin S., Postolskaya O.K., 2002. "Educating Civil Engineers for Urban Underground Space Development," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).
- Yufin S., Sousa L., Rechitsky V., Braxein A., Jensen J., 2002. "Risk Criteria Assessment for Urban Underground Construction," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).
- Zacharias J. and B. Wang, 2021. "Willingness to walk in underground space – evidence from Singapore," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., *Proc. IOP Conf. Series: Earth and Envir. Sci.*, Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>
- Zacharias J., 2002. "Choosing a Path in the Underground: Visual Information and Preference," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).
- Zacharias, J., 2025. "The dynamics of travellers for moving people in underground space," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp697-704.
- Zacharias, John, 1999. "Predicting trading level in the underground of Montreal: significance of office building location," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp332-337.
- Zacharias, John, 2007. "Planning underground urban space – where, when and how?" *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp37-42.
- Zacharias, John, 2012. "Underground Space in Planned New Territories in Macau," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Zacharias, John, 2014. "Underachievement in underground space in the Chinese CBD," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Zaini, F., K. Hussin and S.R.A. Zakaria, 2014. "Legislation implementation in underground land development in Malaysia," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Zaini, Farah Binti, Khadijah Bt Hussin and Arfaliza Bt Arrifin, 2012. "Underground MRT Project: A Review on the Possibility of Legal Framework for the Implementation Between LAA 1960 and NLC 1965," *Proc.*

13th Intl. Conf. ACUUS, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Zámečník, J., J. Veselský, I. Baník and F. Culík, 1992. "Application of percolation theory for determination of thermal properties of soils and building materials," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp610-616.

Zang, Xiaolong, Hongwei Huang, Zixin Zhang, 2002. "The Influence Analysis on the Longitudinal Settlement of the Shield Tunnel," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Zargarian, Roya, Dexter Hunt and Chris Rogers, 2012. "The Role of Underground Space in a Sustainable UK Urban Environment," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Zartman, R.E. and K.S. Hutmacher, 1986. "Temperature variation within the soil envelope above an earth sheltered church," *Proc. 2nd Intl. Earth Sheltered Buildings Conf.*, Minneapolis, Jun 16-19, 1986, pp169-174.

Zertsalov, M.G. and A.V. Deineko, 2005. "Formalization of rock mass mechanical characteristics and rock type identification on the basis of the Q-system," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp277-280.

Zhang H., H.H. Liu, J. Dong, Y. Guan, P. Yu, J. Wang and J.N. Fu, 2023. "Urban Underground Space Developing-Utilization in Qingdao," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp403-410.

Zhang Ping, Z.L. Chen and W. Xu, 2007. "Utilization model of underground space to protect historical relics," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Benardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp373-378.

Zhang, C. and W. Wu, 2023. "Multi-dimensional Detection of Underground Utilities Using a Data Mining Method," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1227-1230.

Zhang, Cheng, Yang Xiu-jing, Chen Liang, Yu Yong-hua, Guo Dong-jun, 2009. "Comprehensive Evaluation on the Conception of Underground Container Transportation Lines," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp280-284.

Zhang, Ding-li, Li Bing, Fang Qian, Li Peng-fei, 2009. "Safety Risk Analysis and Control of Subsea Tunnel Construction," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp334-340.

Zhang, F., W. De Corte, X. Liu, Y.H. Bao and L. Taerwe, 2025. "Study on the influence of mechanical properties of FRC on the mechanical performance of shield tunnel segments," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp269-280.

Zhang, Hong Wei, 1997. "Legal aspects of developing the underground pedestrian and commercial facilities in China," Workshop B-5, *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).

- Zhang, J.F., M.Z. Yang and Y. Zhang, 2009. "The geological environment suitability assessment of Guangzhou underground space resources," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp75-80.
- Zhang, J.Q., C. Tang and L. Li, 2023. "Future Elevated City: Simulation of Vehicle Exhaust Diversion by Wall-Mounted Air Duct in Traffic Space," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1143-1146.
- Zhang, J.Z., D.M. Zhang and H.W. Huang, 2023. "Effect of Adjacent Excavation on Existing Tunnels in Spatially Variable Soil," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1063-1070.
- Zhang, M. and S.T. Jing, 1988. "Recent development of railway tunnelling in China," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp202-207.
- Zhang, M.X. and B. Lu, 2023. "A Study on Encoding of Urban Underground Space Facilities Based on Omniclass," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp357-362.
- Zhang, Mingju, Tiecheng Sun, Qian Yang, Liang Dong, 2002. "A Field Test of Soil Nailing for Deep Excavation," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).
- Zhang, P. and Z.J. Zhu, 2023. "Research on Components of Entrance and Exit Function Area of Urban Central Business District Underground Parking System," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp569-576.
- Zhang, Ping and Z.L. Chen, 2014. "Research on the method of development and controlling urban underground space based on planning control process," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Zhang, Ping and Zhilong Chen, 2012. "Protecting, Developing and Utilizing the Underground Space of the Spring City—Jinan, China," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Zhang, Ping, Chen Zhi-long, Zheng Hui, Wang Hui, Yin Feng, 2009. "Research on Supply and Demand Balance Model of Urban Underground Parking," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp275-279.
- Zhang, Ping, Zhilong Chen and Hui Wang, 2012. "The Planning and Design of Common Tunnel System of Qianjiang New Central Business District in Hangzhou, China," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.
- Zhang, Ping, Zhi-long Chen and Xiao-chao Su, 2018. "Four different internal traffic organization modes of underground parking system for urban center district," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp831-842.
- Zhang, Qihui, Seamine Eandi, Deniele Cappello, Giuseppe Astore and Piergiorgio Grasso, 2012. "Fire Sizing in Longitudinally Ventilated Tunnel," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Zhang, Qin-Shi, 2009. "Application of Chinese Standard [Geological Classification of Surrounding Rocks] on the Design & Execution of Underground Chambers," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp606-610.

Zhang, R.X., D. Su, X.T Lin and X.S. Chen, 2023. "Effect of Existing Tunnel on the Evolution of Soil Arching Effect," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1213-1216.

Zhang, T.J. and Z.X. Liao, 2009. "The discussion on regulatory plan for underground space in key urban areas – with underground space plan for Beijing central business districts (CBD) as the case," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp158-164.

Zhang, Wengang and Anthony Teck Chee Goh, 2012. "Reliability Assessment of Underground Rock Cavern Limit States," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Zhang, Wenyuan and John Zacharias, 2009. "Predicting the Level of Use of Underground Routes in a Multi-level Urban Environment," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp211-216.

Zhang, X. and S.Y. Liu, 2023. "Development of Serpentine Carbon Sequestration Foamed Concrete with Self-Carbonation Mechanism," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1163-1166.

Zhang, X.P., P.Q. Ji, H. Zhang and Q. Zhang, 2023. "Numerical Study of Hydraulic Fracturing Assisted Rock Breaking Based on Discrete Element Method," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp983-992.

Zhang, Xiang-dong, Du Dong-ning, Chen He, 2009. "Simulation Analysis of the Determination of Optimal Excavation Scheme of Dalian Ship Building Deep Foundation Pit," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp595-600.

Zhang, Y., R.H. Wang and L. He, 2023. "ANP-Based Disaster Persistence Evaluation System of Urban Underground Infrastructure from the Perspective of Time Evolution," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp631-642.

Zhang, Y.F. and J.F. Tang, 2023. "Planning for Adaptability to the Future, the Case of Underground Space Scenario Planning of Hengli Station and Its Adjacent Areas in the Greater Bay Area, China," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp377-382.

Zhang, Yang-Song, Xiao-Zhao Li and Jin Fan, 2012. "Estimation of Peak Strength of Jointed Rock Masses Using GSI System," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Zhang, Yu, Shao-ming Liao, Meng-bo Liu and Hang Li, 2018. "Risk countermeasures of a large-scale underground space development project in the soft clay area," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp935-945.

Zhang, Z.H., Z. Li, J.Y. Xu, Y.X. Guo and S.Y. Li, 2023. "Study on Urban Spatial Reshaping Using Algorithmic Generation Method," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp207-214.

Zhang, Z.M., J. Ji and X.F Guo, 2023. "Reliability Analysis and Design for Tunnel Face Stability in Spatially Random Soils," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp711-716.

Zhang, Z.Q., Y.Q. Yang and Y. Shen, 2023. "Ground Fault Effect on Utility Tunnel in Loess Stratum," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp903-910.

Zhang, Z.Y., C.X. Ma and F.L. Peng, 2021. "Renovation mode for growing underground pedestrian system within station area: a case study of Shanghai Jing'an Temple Station," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., *Proc. IOP Conf. Series: Earth and Envir. Sci.*, Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Zhang, Z.Y., C.X. Ma, Y.K. Qiao and F.L. Peng, 2023. "Planning Strategies for Underground Space Use in Recreational Business Districts: A Case of South Parcel of Shanghai International Resort," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp417-422.

Zhang, Zhiqiang and Fei Sun, 2018. "Study on new lining structures with openings applicable to ultra-thick open-cut tunnel," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp925-934.

Zhang, Zhong-Tin and Li-Hong Zhang, 1995. "A fire disaster intelligence alarm system applicable to underground space," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp39-44.

Zhang, Zi-tai and Yang Qing, 2009. "Analysis on Shield Machines Selection for Shenzhen Metro Construction," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp590-594.

Zhao, Axing, 1992. "Fast method to test long-term rock strength and its application," *Proc. 5th Intl. Conf. on Underground Space and Earth Sheltered Structures*, Delft, Aug 2-5, 1992, Delft Univ. Press, pp818-824.

Zhao, Guang, W.J. Shi, Y. Xiao and W. Lu, 2014. "The study of Tianjin Central City underground space planning," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Zhao, J. and J.G. Cai, 2009. "Planning and architectural considerations of Underground Science City in Singapore," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp127-132.

Zhao, J.W., Y. Sun, H.Q. Li and Y.G. Zhu, 2025. "Research on the distribution, development quality and driving forces for the development quality of urban underground space in China," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp48-62.

Zhao, Kexin, 1999. "The underground district underground space research in urban residential district," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp252-257.

Zhao, M., Q. Zhang, X.Y. Xie and L. Sun, 2009. "Integrated design: an innovative experiment to inspire urban vitality," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp176-181.

Zhao, S., S.M. Liao, Y.F. Yang and W. Wang, 2023. "Real-Time Detection of Construction Objects on Oversized Excavation Sites by Enhanced YOLO_v7 Network Using UAV-Captured Videos," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp975-982.

Zhao, W.H, F. Liu and W.J. Kong, 2025. "An experimental study on visual comfort of tunnel portals in virtual reality environments," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp756-764.

Zhao, W.W., S.L. Shen, A.N. Zhou and Y.N. Wang, 2025. "Flood risk assessment using a literature-based approach," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp942-947.

Zhao, X.M., Y.F. Gao, W.J. Lei, Y. Qi, C.M. Tai, D.B. Wang and C.L. Song, 2023. "Study on the Effect of Makeup Air Supplementation on Fire Smoke Control in Subway Tunnel," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp789-796.

Zhao, X.X., Z.L. Chen, D.J. Guo, X.P. Zhu and Y.H. Wu, 2023. "Underground Space Use: Supporting Urban Ecosystem Services," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp15-25.

Zhao, X.Y. and Y.D. Xue, 2023. "Resilience Evaluation Strategy of Undersea Shield Tunnel Based on Knowledge Graphs," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp665-674.

Zhao, Y.T. and K.J. Wu, 2023. "Planning Strategies on the Integrated Development of the Station and City in Large All-Underground Transportation Hub Area—Take the Beijing Sub-Center Station as an Example," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp389-396.

Zhao, Y.T., K.J. Wu, X.D. Shi and L.Q. Lin, 2025. "Evaluation and planning of underground space resources in complex built-up environment from the perspective of multi-dimensional values-- taking the core area of the capital in Beijing as an example," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp121-132.

Zhao, Yiting and Kejie Wu, 2016. "Quantitative Evaluation of the Potential of Underground Space Resources in Urban Central Areas Based on Multiple Factors: A Case Study of Xicheng District, Beijing," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Zhao, Z.Q., B. Hou and Z.Q. Zheng, 2023. "Extending Regularity of Acid Fracturing in Deep Fractured-Vuggy Carbonate rocks—A Case Study of Qixia Formation in Western Sichuan," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp127-132.

Zhao, Zhiye, Yingxin Zhou and Xinmei An, 2012. "Underground Technology and Rock Engineering Program in Nanyang Technological University, Singapore," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Zhao, Ziwei, Jinrong Xie, Chenhao Zhang, Dongjun Guo, Yulu Chen and Yuan Yuan, 2021. "The network pattern of underground pedestrian system and its role to urban resilience," *Proc. 17th World Conference ACUUS*, Feb 3-4, Helsinki, Finland (Virtual Conf)., Proc. IOP Conf. Series: Earth and Envir. Sci., Vol. 703 <https://iopscience.iop.org/issue/1755-1315/703/1>

Zhao, Ziwei, Xiaobin Yang, Dongjun Guo and Jinrong Xie, 2018. "Discussion on underground space planning strategy for disaster prevention in urban high-density area," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp1003-1011.

Zhao, Ziwei, Zhilong Chen and Dongjun Guo, 2012. "The Study of Development of Urban Underground Space in Perspective of Political Economy," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Zhe, S., W. Bai, L.K. Tiong, T.Y. Teo and K.W. Ng, 2014. "DAT modifications and its applications in large-scale cavern construction," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Zheng, Xianchang, L. G Tham and W. M. Yan, 2012. "A New Evaluation Method for Urban Underground Space Resources in the Vector Unit Way," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Zheng, Xian-chang, Zheng Weif-eng, 2009. "A Practical Two-Dimensional Method for the Evaluation of Urban Three-Dimensional Underground Space Resource," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp470-474.

Zheng, Xuan, 2014. "Underground space disaster prevention: discussion on countermeasures in Beijing by learning from overseas experiences," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Zheng, Y.L., Z.J. Ma, X.B. Zhao, and J.C. Li, 2023. "Effect of Irradiation Spacing on Fracturing of Hard Rocks Using an Open-Ended Microwave Antenna," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp139-148.

Zheng, Y.R. and Y.F. Lin, 1988. "The application of semi-analytical finite element method to analysing stability of three-dimensional elasto-plastic problem of underground opening," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp302-306.

Zhong L., X.X. Zhang and H.B. Guo, 2009. "A study of the development and utilization of the multi-purpose pipeline corridors in Beijing," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp36-41.

Zhong, B.Y., Z.G. Shi and N.F. Jiang, 1988. "The application of diaphragm walls in China," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp221-226.

Zhou, C. and L. He, 2023. "Resilience Study for Underground Space Development Considering the Safety of Surrounding Built Environment," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp623-630.

Zhou, D.K., P.X. Zhang, X.Z. Li and W.Y. Ge, 2023. "Characterization of Multiple Resource Endowment in Urban Underground: A Case Study of Danyang City," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp61-68.

Zhou, Junzheng and Hong Yuan, 2018. "Research on the influence mechanism of underground space in the compact development of Shenzhen Futian station — based on GIS technology," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp1012-1021.

Zhou, K. and J.W. Leng, 2025. "Research on the performance-driven spatial interface design for climate-adaptive urban underground space," *Proc. 19th ACUUS Conf.*, Nov 4-7, Belgrade, ISBN 978-86-901646-7-7, pp1008-1009.

Zhou, Wenfeng and Shaoming Liao, 2016. "The Analysis and Control of Inrush and Mud Gushing in the Broken Rock Tunnel Under high Water Pressure," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.

Zhou, Wenfeng, Shaoming Liao, Qingyang Qin, Changhong Pan and Qunhua He, 2018. "Study on the blasting vibration and rock damage in the construction of mountain tunnel," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp876-885.

Zhou, X.H. and S.L. Shen, 2023. "A Computational Framework for Predictive Risk Assessment of Shield Tunnel Construction," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp1205-1208.

Zhou, Yingxin, 2014. "Planning and development of underground space – a systems perspective," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Zhou, Zhi, Xuyuan Sun and Chaoyang Heng, 2012. "Temperature Influence to the Steel Brace in Piles in Row-Steel Bracing System," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Zhu, Aimin and Yili Zhu, 1999. "The utilization of the underground space and the research," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp193-198.

Zhu, G.Y., 1999. "Evaluation and preservation and case study of the underground architectural heritage," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp30-33.

Zhu, He-hua, Dong Wen-peng, Li Xiao-jun, 2009. "Integration from 3D Digital model to Numerical Analysis for Underground Construction," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp521-527.

Zhu, L.C., Z. Liu and Q. Chen, 2023. "Review and Prospect of Urban Underground Space Planning Practices in China," *Proc. 18th ACUUS Conf.*, Nov 1-4, Singapore, ISBN 978-981-97-1257-1, pp577-590.

Zhu, Liangcheng, 2014. "The evaluation of connectivity planning and practice of underground stations and surrounding underground space in Shanghai," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Zhu, Maming, 1999. "The role of underground space in the construction of Chinese "Shan-Shui City"," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp245-250.

Zhu, W.J. and L. Xin, 2014. "Peace time value of civil air defense engineering: a case of Beijing City," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Zhu, W.J., H. Wang, C.B. Li and L.J. Wei, 2007. "Case studies of master planning for sustainable urban underground space utilization," *Proc. 11th Intl. Conf. ACUUS*, Sep 10-13, Athens, Kaliampakos, D. and A. Bernardos (Eds), NTUA Press, ISBN 978-960-254-666-6, pp303-308.

Zhu, W.J., J.Y. Fu, J. Yang and L.X. Tong, 2009. "Urban underground space value: case study of Kaisheng Square planning in Lanzhou City," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp151-157.

Zhu, Wei-shen, Zhou Kui, Sun Lin-feng, Li Yong, Yong Min, 2009. "Optimizing Study on the Reasonable Direction of Longitudinal Axis of Deep Underground Caverns," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp601-605.

Zhu, Wenjun and Miaomiao Liu, 2018. "Experience and sustainability indicators of underground high-speed railway passing urban areas," *Proc. 16th Intl. Conf. ACUUS*, Nov 5-7, Hong Kong, Wallace, Mark (Ed), pp611-621.

Zhu, Wenjun and Xingde Kan, 2012. "Coordination Analysis for Urban Underground Space and Rail Transit Based on Space Syntax," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Zhu, Wen-Jun, 2002. "A Survey and Evaluation of Underground Space Resources in Beijing Central District for Urban Planning," *Proc. 9th Intl. Conf. ACUUS*, Torino, Nov 14-16, Politecnico di Torino, (CD-ROM).

Zhu, Wenjun, 2014. "Integrated underground space administration in China: demand & framework, present & future," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).

Zhu, Wenjun, Jun Yang and Xingde Kan, 2012. "Integrated Administration of Urban Underground Space in China: Laws & Regulations, Present & Future," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Zhu, Wenjun, Jun Yang, Zhenbin Liang and Songjian Xu, 2012. "Status Quo and Improvement of Urban Underground Space Use in Beijing City: Case as Supplementary Accommodation," *Proc. 13th Intl. Conf. ACUUS*, Nov 7-9, Singapore, Zhou, Y.X., J. Cai and R. Sterling (Eds), Research Publ., Singapore (Full papers on CDROM), ISBN-13: 978-981-07-3756-6.

Zhu, Wen-jun, Yang Jun, Zhu Ling, Wang Liang, 2009. "Cost-benefit Analysis for Route Laying Mode Decision of Beijing Metro Line 15," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp366-371.

Zhu, Z.R. and Z.Y. Hu, 1991. "On selection of underground traffic alternatives in Chongqing," *Final Report UUU'91: 4th Intl. Conf on Underground Space and Earth Sheltered Buildings*, Dec 3-5, 1991, Tokyo, pp212-217.

- Zhuang Y.C. and S.M. Liu, 2009. "Research on development intensity of urban underground space," *Proc. 12th Intl. Conf. ACUUS*, Shenzhen, Nov. 18-19, (Qian, Zhao and Yuan (Eds)), China Translation & Publ., Beijing, pp54-59.
- Zhukov, V.N., D.V. Ustinov and M.G. Zertsalov, 2005. "Three dimensional FEM analysis and monitoring of underground structures at the Deriner project," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp281-284.
- Zhussupbekov, Askar and Abdulla Omarov, 2016. "Modern Advances in the Field Geotechnical Testing Investigations of Pile Foundations," *Proc. 15th Intl. Conf. ACUUS*, Sep 12-15, 2016, St. Petersburg *Procedia Engineering* 165.
- Zimmermann, M. and S. Rouby, 1995. "Les mobiliers émergences de réseaux dans l'espace public," *Proc. 6th Intl. Conf. Underground Space and Urban Planning*, Barles, S. (Ed.), Laboratoire Theorie des Mutations Urbaines, pp419-426.
- Zlatanovic, Sanja, 2014. "Crowded cities think BIG UNDERGROUND for their infrastructure solutions," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Zlatanovic, Sanja, 2014. "The Alaskan Way viaduct gave way to Alaskan Way tunnel," *Proc. 14th Intl. Conf. ACUUS*, Seoul, Sep 24-26 (Rhim, Hong Chul (Ed)).
- Zuffi, Enrico, 1997. "Swissmetro, le futur aujourd'hui , un nouveau système de transport souterrain," *Underground Space: Indoor Cities of Tomorrow*, Besner, J. (Ed.), Proc. 7th Intl. Conf. Underground Space, Montréal, Sep 29-Oct 3 (CD-ROM).
- Zuo, G.B., H. Dong, X.H. Tian and Y. Chen, 1999. "On the planning and design of cave dwelling building in the Chengguan village of Gu County," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, p73.
- Zuo, G.B., Q.C. Zheng, J.P. Li, D.Q. Feng and H.P. Cheng, 1999. "A probe into mankind cave dwelling," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, pp40-42.
- Zuo, G.B., Y.S. Wang and Y. Zhang, 1999. "Researches on consolidating measures to unsafe rocks of Tianlongshan Grottoes," *Proc. 8th Intl. Underground Space Conf. of ACUUS*, Xi'an, China, Sep 27-30, Xian Univ. of Arch. and Tech, p29.
- Zuo, Guobao, 1988. "Loessial dwelling cave – its covering pressure and excavation span," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp54-58.
- Zuo, Guo-Bao, 1988. "Stability of the caves excavated in loess and their reinforcement measures," *Proc. 3rd Intl. Conf. on Underground Space and Earth Sheltered Buildings*, Shanghai, Sep 1-6, 1988, pp27-30.
- Zviadadze, U.I., M.L. Mardashova, T.L. Berdzenishvili and G. Melikadze, 2005. "Ground waters as a powerful factor of construction and exploitation of buildings in Tbilisi (Georgia)," *Proc. 10th Intl. Conf. ACUUS*, Moscow, Jan 24-28, Yufin, S. (Ed), Moscow State Univ. of Civil Eng., pp158-160.