1. Record Nr. UNINA9911004842403321

Titolo	Deep and underground excavations : proceedings of the GeoShanghai 2010 International Conference, June 3-5, 2010 Shanghai, China / / edited by Fulvio Tonon, Xian Liu, Wei Wu
Pubbl/distr/stampa	Reston, VA, : American Society of Civil Engineers, c2010
ISBN	1-62870-590-6 0-7844-7346-3
Descrizione fisica	1 online resource (383 p.)
Collana	Geotechnical special publication ; ; no. 206
Altri autori (Persone)	TononFulvio LiuXian <1977-> WuWei <1961->
Disciplina	624.19
Soggetti	Excavation Civil engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	""Cover""; ""Contents""; ""Deep Excavations and Retaining Structures""; ""Design and Construction of Reinforced Steel Chain Wall""; ""Deformation Regularity and Simplified Calculation Method for Foundation Pit with Confined Water during Excavation and Dewatering""; ""Model Tests and Numerical Simulations on Pile-Soil Interaction of Passive Piles""; ""Design and Research of Circular Diaphragm Wall for Deep Excavation of Shanghai Tower""; ""Analysis of Case Histories on Deep Excavations in Marine Clay"" ""Analytic Method of Load-Displacement Curve for Tension Anchors Based on Hyperbolic Load-Transfer Function""""Experimental Research of Jet-Grouting Parameters in Different Soil Conditions""; ""Mitigation of Sheet Pile Movements during DDC by Open Trenches""; ""Deep Excavation Induced Pile Movement in Bangkok Subsoil A Numerical Investigation""; ""A Case Study of Retaining Wall with Soil-Cement Mixing Reinforcement for Korean Urban Site""; ""A Preliminary Study on the Behavior of Axially Loaded Single Pile Subjected to Lateral Soil Movement behind a Retaining Wall"" ""A Combined Retaining Structure and Its Application in Deep

Excavation"""""Interaction Effect of Retaining Wall and Existing Foundations in Braced Excavation""; ""Deformation Prediction of Deep Excavation Based on Unequal Interval Grey Model GM(1,1)""; ""Three Dimensional Performance Observed in an Irregular Deep Excavation in Shanghai Soft Clay""; ""Evaluation of Stability of Tailings Dam Based on Evolutionary Artificial Neural Network""; ""Identification of Landslide Susceptible Slopes and Risk Assessment Using a Coupled GIS-FEA-Module""
""Deformation of Anchor-Sheet Pile Wall Retaining System at Deep Excavations in Soft Soils Overlying Bedrock"""""Centrifuge Model Study of Impact on Existing Undercrossing Induced by Deep Excavation""; ""Tunneling and Underground Construction""; ""Effectiveness of Ground Improvement for a Cut-and-Cover Tunnel with a Backfill Slope Based on Finite Element Analysis""; ""Reconstruction of the Temperature Distribution on the Vertical Direction of Tunnel in Fire Accidents""; ""Determination of Stress Release Coefficient and Analysis of Influence Factors in Granular Soil Tunnel""
""Study on Rock Mass Stability Effect of High Water Pressure Tunnels by Hydraulic Fracturing Failure"""""Application of Single Pass Tunnel Lining with Steel Fibre Reinforced Shotcrete on the Ventilation Shaft of Mount Motian Tunnel""; ""Numerical Analyses and Elasto-Plastic Behavior Study on Surrounding Rock Mass of the Underground Caverns in a Hydropower Station during Deep Excavations""; ""Study on Mechanism of Simultaneous Backfilling Grouting for Shield Tunneling in Soft Soils""; ""Study on Shiziyang Tunnel Engineering Geology and Shield Tunneling""
""Numerical Analysis of the Thermo-Hydromechancial Behaviour of Underground Storages in Hard Rock""

Sommario/riassunto

Proceedings of sessions of GeoShanghai 2010, held in Shanghai, China, June 3-5, 2010. Hosted by Tongji University, China; Shanghai Society of Civil Engineering, China; Chinese Institution of Soil Mechanics and Geotechnical Engineering, China. In cooperation with Alaska University Transportation Center, USA; Geo-Institute of ASCE, USA; Deep Foundation Institute, USA; East China Architectural Design and Research Institute Company, China; Georgia Institute of Technology, USA; Nagoya Institute of Technology, Japan; Transportation Research Board, USA; University of Newcastle, Australia; University of Illinois at Urbana-Champaign, USA; University of Kansas, USA; University of Tennessee, USA; Vienna University of Natural Resources and Applied Life Sciences, Austria. This Geotechnical Special Publication contains 49 papers presenting the latest research into using the subsurface as a civil engineering dimension. The pressure exerted by increasing population, sensitivity toward the environment, and the ever-increasing cost of the land are a few of the reasons that underground excavations are necessary to society's health and future. Excavations below the surface provide space for services, transportation of people and goods, water supply and disposal, sanitation, and storage. These papers offer global examples of practical applications of excavations, especially in China. These papers analyze deep excavations and retaining structures, tunnels and underground excavations, and new frontiers in urban geotechnology.