View HTMLView PDF

Full-Text

Seismic Site Classifications and Site Amplifications for the Urban Centres in the Shallow Overburden Deposits

P. Anbazhagan, M. Neaz Sheikh. © 2012. 23 pages.

This paper presents seismic site classification practices for urban centres in Australia, China, and India with special emphasis on their suitability for shallow soil sites. The geotechnical aspects of seismic site classifications play a critical role in the development of site response spectra, which...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 3, Issue 1

Full-Text

International Journal of Geotechnical Earthquake Engineering (IJGEE)

T.G. Sitharam, J. S. Vinod. © 2010.

The International Journal of Geotechnical Earthquake Engineering (IJGEE) encourages publication and dissemination of research and development on geotechnical engineering, geophysics and geothermal engineering, pavement engineering, engineering seismology, engineering geology, disaster mitigation, and...

JournalShow Contents

Full-Text

International Journal of Geotechnical Earthquake Engineering, Volume 3, Issue 1

T.G. Sitharam, J. S. Vinod. © 2012.

Source: International Journal of Geotechnical Earthquake Engineering (IJGEE)

View HTMLView PDF

Full-Text

DEM Simulations in Geotechnical Earthquake Engineering Education

J. S. Vinod. © 2012. 10 pages.

Behaviour of geotechnical material is very complex. Most of the theoretical frame work to understand the behaviour of geotechnical materials under different loading conditions depends on the strong background of the basic civil engineering subjects and advanced mathematics. However, it is fact that the...

Source: Geotechnical Applications for Earthquake Engineering: Research Advancements

Full-Text

Geotechnical Applications for Earthquake Engineering: Research Advancements

T.G. Sitharam. © 2012. 392 pages.

Disaster preparedness and response management is a burgeoning field of technological research, and staying abreast of the latest developments within the field is a difficult task. Geotechnical Applications for Earthquake Engineering: Research Advancements has collected chapters from experts from around...

Reference BookShow Contents

View HTMLView PDF

Full-Text

Dem Simulations in Geotechnical Earthquake Engineering Education

J. S. Vinod. © 2010. 9 pages.

Behaviour of geotechnical material is very complex. Most of the theoretical frame work to understand the behaviour of geotechnical materials under different loading conditions depends on the strong background of the basic civil engineering subjects and advanced mathematics. However, it is fact that the...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 1, Issue 1

Full-Text

International Journal of Geotechnical Earthquake Engineering, Volume 1, Issue 1

T.G. Sitharam, J. S. Vinod. © 2010.

Source: International Journal of Geotechnical Earthquake Engineering (IJGEE)

Full-Text

Recent Challenges and Advances in Geotechnical Earthquake Engineering

T.G. Sitharam, J. S. Vinod. © 2019. 315 pages.

Solid design and craftsmanship are a necessity for structures and infrastructures that must stand up to natural disasters on a regular basis. Continuous research developments in the engineering field are imperative for sustaining buildings against the threat of earthquakes and other natural disasters....

Reference BookShow Contents

View HTMLView PDF

Full-Text

Evaluation of Peak Ground Acceleration and Response Spectra Considering the Local Site Effects: A Probabilistic Logic Tree Approach

Sitharam T. G., Vipin K. S. © 2012. 17 pages.

The local site effects play an important role in the evaluation of seismic hazard. The proper evaluation of the local site effects will help in evaluating the amplification factors for different locations. This article deals with the evaluation of peak ground acceleration and response spectra based on...

Source: Geotechnical Applications for Earthquake Engineering: Research Advancements

View HTMLView PDF

Full-Text

Static and Dynamic Elastic Modulus of Jointed Rock Mass: Influence of Joint Frequency, Joint Inclination and Joint Factor

T. G. Sitharam, M. Ramulu, V. B. Maji. © 2012. 24 pages.

In this paper the compressive strength/elastic modulus of the jointed rock mass was estimated as a function of intact rock strength/modulus and joint factor. The joint factor reflects the combined effect of joint frequency, joint inclination and joint strength. Therefore, having known the intact rock...

Source: Geotechnical Applications for Earthquake Engineering: Research Advancements

View HTMLView PDF

Full-Text

Blast Induced Damage Due to Repeated Vibrations in Jointed Gneiss Rock Formation

M. Ramulu, T. G. Sitharam. © 2012. 25 pages.

Blasting is the most common method of rock excavation technique in mining and civil construction and infrastructure projects. Rock blasting produces seismic waves similar to those produced by earthquakes, but with relatively high frequency and low amplitude. General blast induced damage was extensively...

Source: Geotechnical Applications for Earthquake Engineering: Research Advancements

View HTMLView PDF

Full-Text

Emerging Value Capture Innovative Urban Rail Funding and Financing: A Framework

Satya Sai Kumar Jillella, Sitharam T G, Anne Matan, Peter Newman. © 2016. 16 pages.

Urban rail transit is emerging around the world as a catalyzing developmental solution to enable 21st century sustainable cities. However, these transit systems are capital intensive and cities worldwide are seeking innovative funding and financing mechanisms. Recently, land based value capture (VC)...

Source: Handbook of Research on Emerging Innovations in Rail Transportation Engineering

View HTMLView PDF

Full-Text

Emerging Value Capture Innovative Urban Rail Funding and Financing: A Framework

Satya Sai Kumar Jillella, Sitharam T G, Anne Matan, Peter Newman. © 2017. 16 pages.

Urban rail transit is emerging around the world as a catalyzing developmental solution to enable 21st century sustainable cities. However, these transit systems are capital intensive and cities worldwide are seeking innovative funding and financing mechanisms. Recently, land based value capture (VC)...

Source: Natural Resources Management: Concepts, Methodologies, Tools, and Applications

View HTMLView PDF

Full-Text

Seismic Behavior and Dynamic Site Response of Municipal Solid Waste Landfill in India

Naveen B. P., Sitharam T. G., Sivapullaiah P. V. © 2019. 29 pages.

Seismic behavior of landfills need for a better understanding of the dynamic properties of municipal solid waste (MSW) and site response of MSW landfill during seismic events. This chapter presents unit weight, shear wave velocity, strain-dependent normalized shear modulus reduction, and material...

Source: Recent Challenges and Advances in Geotechnical Earthquake Engineering

View HTMLView PDF

Full-Text

DEM Studies on the Liquefaction Behavior of Particles With Different Aspect Ratios

Anitha Kumari S. D., Sitharam T. G. © 2019. 18 pages.

Discrete element method (DEM) provides insight into the fundamental physical principles leading to a better understanding of the complex behavior of granular materials under different loading conditions. In the reported studies adopting DEM, real particle shape is ignored, and the particles are modeled...

Source: Recent Challenges and Advances in Geotechnical Earthquake Engineering

View HTMLView PDF

Full-Text

Effect of Repeated Blast Vibrations on Rock Mass Damage in Tunnels

Ramulu More, T. G. Sitharam. © 2019. 30 pages.

Blasting is the most common method of rock excavation technique in mining and civil construction and infrastructure projects. General blast-induced damage was extensively studied globally, but the studies on repeated blast induced damage is not yet reported, quantitatively. This chapter deals with the...

Source: Recent Challenges and Advances in Geotechnical Earthquake Engineering

View HTMLView PDF

Full-Text

Evaluation of Peak Ground Acceleration and Response Spectra Considering the Local Site Effects: A Probabilistic Logic Tree Approach

T. G. Sitharam, K. S. Vipin. © 2010. 17 pages.

The local site effects play an important role in the evaluation of seismic hazard. The proper evaluation of the local site effects will help in evaluating the amplification factors for different locations. This article deals with the evaluation of peak ground acceleration and response spectra based on...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 1, Issue 1

View HTMLView PDF

Full-Text

Static and Dynamic Elastic Modulus of Jointed Rock Mass: Influence of Joint Frequency, Joint Inclination and Joint Factor

T. G. Sitharam, M. Ramulu, V. B. Maji. © 2010. 24 pages.

In this paper the compressive strength/elastic modulus of the jointed rock mass was estimated as a function of intact rock strength/modulus and joint factor. The joint factor reflects the combined effect of joint frequency, joint inclination and joint strength. Therefore, having known the intact rock...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 1, Issue 2

View HTMLView PDF

Full-Text

Liquefaction and Pore Water Pressure Generation in Sand: Cyclic Strain Controlled Triaxial Tests

T. G. Sitharam, B. V. Ravishankar, S. M. Patil. © 2012. 29 pages.

Cyclic strain controlled laboratory triaxial undrained tests were performed on sand samples collected from earthquake affected Ahmedabad City of Gujarat (India). To study the factors controlling the liquefaction potential and pore pressure generation, cyclic strain controlled triaxial tests were...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 3, Issue 1

View HTMLView PDF

Full-Text

Support Vector Classifiers for Prediction of Pile Foundation Performance in Liquefied Ground During Earthquakes

Pijush Samui, Subhamoy Bhattacharya, T. G. Sitharam. © 2012. 18 pages.

Collapse of pile-supported structures is still observed in liquefiable soils after most major earthquakes and remains a continuing concern to the geotechnical engineering community. Current methods for pile design in liquefiable soils concentrate on a bending mechanism arising from lateral loads due to...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 3, Issue 2

View HTMLView PDF

Full-Text

Site Response Evaluation of Agartala City Using Geophysical and Geotechnical Data

Arjun Sil, T. G. Sitharam. © 2013. 21 pages.

In this paper, the study addressed how the local geology and soil condition influences on incoming ground motion. Subsurface Geotechnical (SPT) and geophysical (MASW) data in 27 locations at Agartala city have been obtained and used to estimate the surface level response. The vulnerable seismic source...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 4, Issue 2

View HTMLView PDF

Full-Text

Dynamic Characterization and Site Response Studies for an Offshore Site Based on Detailed Geotechnical Tests

T. G. Sitharam, Naveen James, Monalisha Nayak. © 2015. 31 pages.

The uniqueness of this paper is large amount of field test data and in addition laboratory test results on undisturbed soil samples, has been analyzed to capture the effect of local site condition and material properties of overlying soil on seismic ground motion characteristics. This study involves...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 6, Issue 1

View HTMLView PDF

Full-Text

Seismic Analysis of Municipal Solid Waste Landfill in India

B.P. Naveem, T.G. Sitharam, P.V. Sivapullaiah. © 2015. 21 pages.

This paper presents, unit weight, shear wave velocity, strain-dependent normalized shear modulus reduction and material damping ratio relationships for Mavallipura landfill are developed based on field testing, laboratory measurements and also validated using semi-empirical methods. In addition...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 6, Issue 2

View HTMLView PDF

Full-Text

A Revisit to Seismic Hazard at Uttarakhand

Monalisha Nayak, T. G. Sitharam, Sreevalasa Kolathayar. © 2015. 18 pages.

This paper presents the seismic hazard of the state of Uttarakhand in India, located at the foothills of the seismically active Himalayan mountain ranges. In the present study, an updated catalog of earthquakes has been prepared for Uttarakhand which was homogenized into a unified moment magnitude...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 6, Issue 2

View HTMLView PDF

Full-Text

A Case Study of Probabilistic Seismic Slope Stability Analysis of Rock Fill Tailing Dam

Sitharam T.G., Amarnath M. Hegde. © 2019. 18 pages.

The article presents the case history of expansion of rock fill tailing dam of the Rampura-Agucha zinc mine in Rajasthan, India. Before raising the height of the dam from 27 m to 54 m, a detailed seismic stability analysis was performed considering the spatial variability of the soil. The safety values...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 10, Issue 1

otal results: 156

Sort by: Re

View HTMLView PDF

Full-Text

Blast Induced Damage Due to Repeated Vibrations in Jointed Gneiss Rock Formation

M. Ramulu, T. G. Sitharam. © 2010. 25 pages.

Blasting is the most common method of rock excavation technique in mining and civil construction and infrastructure projects. Rock blasting produces seismic waves similar to those produced by earthquakes, but with relatively high frequency and low amplitude. General blast induced damage was extensively...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 1, Issue 1

View HTMLView PDF

Full-Text

Dynamic Properties of Sandy Soils at Large Shear Strains with Special Reference to the Influence of Non-Plastic Fines

T. G. Sitharam, B. V. Ravishankar, J. S. Vinod. © 2011. 13 pages.

This paper presents the results of the dynamic properties such as shear modulus and damping ratio of sandy soils, especially at large shear strain levels (>0.2%). A series of strain controlled cyclic triaxial tests were carried out on sand samples collected from the earthquake affected areas of...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 2, Issue 2

View HTMLView PDF

Full-Text

Liquefaction and Dynamic Properties of Assemblies with Particles of Spherical and Ellipsoidal Shapes: A Discrete Element Approach

S. D Anitha Kumari, T. G. Sitharam. © 2012. 16 pages.

Understanding liquefaction and dynamic response of granular soils from a grain scale level has obtained significant attention during the recent times. Discrete Element method has been adopted to understand the particulate nature, but most of the studies have focused on modeling assemblies with...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 3, Issue 1

View HTMLView PDF

Full-Text

Assessment of Liquefaction Potential Index Using Deterministic and Probabilistic Approaches

Naveen James, T. G. Sitharam, K. S. Vipin. © 2012. 17 pages.

Liquefaction is a devastating effect of earthquakes resulting in sudden decrease in shear strength due to excess pore water pressure generation, resulting in differential settlement of structure, inducing severe damages. Assessment of liquefaction hazard for a given site is important for planning out...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 3, Issue 2

View HTMLView PDF

Full-Text

Liquefaction Hazard Mapping of Lucknow: A Part of Indo-Gangetic Basin (IGB)

Abhishek Kumar, P. Anbazhagan, T. G. Sitharam. © 2013. 25 pages.

Even though the size of the earthquake is moderate, presence of soft soil near the surface can cause devastating damage due to local site and induced effects like liquefaction. Evidence of liquefaction due to past Indian earthquakes was highlighted in many Paleo-seismic studies, particularly in the...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 4, Issue 1

View HTMLView PDF

Full-Text

Nepal Earthquake of April 25, 2015

T.G. Sitharam, J.S. Vinod. © 2015. 10 pages.

Source: International Journal of Geotechnical Earthquake Engineering, Volume 6, Issue 1

View HTMLView PDF

Full-Text

Effect of Earthquake on a Single Pile Located in Sloping Ground

R. Deendayal, T. G. Sitharam, K. Muthukkumaran. © 2016. 16 pages.

Piles are often constructed on natural slope such as sea bed slope in off-shore structures. When piles are constructed on sloping ground, the behaviour of piles under earthquake loading is different from the piles on horizontal ground surface. The dynamic response of a pile subjected to external...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 7, Issue 1

View HTMLView PDF

Full-Text

Seismic Zonations at Micro and Macro-Level for Regions in the Peninsular India

Naveen James, T.G Sitharam. © 2016. 29 pages.

Due to the lack of proper preparedness in the country against natural disasters, even an earthquake of moderate magnitude can cause extensive damage. This necessitates seismic zonation. Seismic zonation is a process in which a large region is demarcated into small zones based on the levels of...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 7, Issue 2

Full-Text

International Journal of Geotechnical Earthquake Engineering, Volume 7, Issue 2

T.G. Sitharam, J. S. Vinod. © 2016.

Source: International Journal of Geotechnical Earthquake Engineering (IJGEE)

Full-Text

International Journal of Geotechnical Earthquake Engineering, Volume 4, Issue 2

T.G. Sitharam, J. S. Vinod. © 2013.

Source: International Journal of Geotechnical Earthquake Engineering (IJGEE)

Full-Text

International Journal of Geotechnical Earthquake Engineering, Volume 10, Issue 1

T.G. Sitharam, J. S. Vinod. © 2019.

Source: International Journal of Geotechnical Earthquake Engineering (IJGEE)

View HTMLView PDF

Full-Text

A Review of Soft Computing Methods Application in Rock Mechanic Engineering

Nurcihan Ceryan. © 2016. 70 pages.

Engineering behavior of rock mass is controlled by many factors, related to its nature and the environmental conditions. Determining all the parameters, ranking their weights, and clarifying their relative effects are very difficult tasks to accomplish. To overcome these difficulties, many researchers...

Source: Handbook of Research on Advanced Computational Techniques for Simulation-Based...

View HTMLView PDF

Full-Text

A Review of Soft Computing Methods Application in Rock Mechanic Engineering

Nurcihan Ceryan. © 2016. 68 pages.

Engineering behavior of rock mass is controlled by many factors, related to its nature and the environmental conditions. Determining all the parameters, ranking their weights, and clarifying their relative effects are very difficult tasks to accomplish. To overcome these difficulties, many researchers...

Source: Civil and Environmental Engineering: Concepts, Methodologies, Tools, and...

Full-Text

Handbook of Research on Advanced Computational Techniques for Simulation-Based Engineering

Pijush Samui. © 2016. 616 pages.

Recent developments in information processing systems have driven the advancement of computational methods in the engineering realm. New models and simulations enable better solutions for problem-solving and overall process improvement. The Handbook of Research on Advanced Computational Techniques for...

Reference BookShow Contents

Full-Text

Civil and Environmental Engineering: Concepts, Methodologies, Tools, and Applications

Information Resources Management Association. © 2016. 1670 pages.

Civil and environmental engineers work together to develop, build, and maintain the man-made and natural environments that make up the infrastructures and ecosystems in which we live and thrive. Civil and Environmental Engineering: Concepts, Methodologies, Tools, and Applications is a comprehensive...

Reference BookShow Contents

View HTMLView PDF

Full-Text

SPT-Based Probabilistic Method for Evaluation of Liquefaction Potential of Soil Using Multi-Gene Genetic Programming

Pradyut Kumar Muduli, Sarat Kumar Das. © 2013. 19 pages.

The present study discusses about evaluation of liquefaction potential of soil within a probabilistic framework based on the standard penetration test (SPT) dataset using evolutionary artificial intelligence technique, multi-gene genetic programming (MGGP). Based on the developed limit state function...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 4, Issue 1

View HTMLView PDF

Full-Text

Site Characterization and Evaluation of Seismic Sources for Amaravati Region

Madhusudhan Reddy, Rajashekara Reddy Konda, Gonavaram Kalyan Kumar, Asadi S.S. © 2020. 16 pages.

After the bifurcation of Telangana from Andhra Pradesh (AP) state in 2014, the Amaravati and adjoining localities has been proposed as a new capital region to the state of AP, India. As per the seismic zonation map of India, the proposed region falls in zone III. However, the prediction of damage level...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 11, Issue 1

Full-Text

International Journal of Geotechnical Earthquake Engineering, Volume 4, Issue 1

T.G. Sitharam, J. S. Vinod. © 2013.

Source: International Journal of Geotechnical Earthquake Engineering (IJGEE)

Full-Text

International Journal of Geotechnical Earthquake Engineering, Volume 11, Issue 1

T.G. Sitharam, J. S. Vinod. © 2020.

Source: International Journal of Geotechnical Earthquake Engineering (IJGEE)

View HTMLView PDF

Full-Text

Evaluation of Liquefaction Potential of Soil at a Power Plant Site in Chittagong, Bangladesh

Soumyadeep Sengupta, Sreevalsa Kolathayar. © 2020. 16 pages.

This study presents an evaluation of liquefaction potential for combined cycle power plant site located in the Chittagong district, Bangladesh, using standard penetration test blow counts (SPT-N values). The peak ground acceleration (PGA) values at a bedrock level were estimated deterministically using...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 11, Issue 1

View HTMLView PDF

Full-Text

A Site Specific Study on Evaluation of Design Ground Motion Parameters

A. Boominathan, Krishna Kumar S. © 2012. 25 pages.

Design ground motions are usually developed by one of the two approaches: site-specific analyses or from provisions of building codes. Although contemporary codes do consider approximately the site effects, they provide more conservative estimates. Hence it is preferred to carry out site specific...

Source: Geotechnical Applications for Earthquake Engineering: Research Advancements

View HTMLView PDF

Full-Text

Effect of Soil on Ground Motion Amplification of Kolkata City

Amit Shiuly, R. B. Sahu, S. Mandal. © 2014. 20 pages.

This paper presents the ground motion amplification factors at different time period bands and fundamental time period of soft sedimentary deposit in densely populated Kolkata city for seismic microzonation. 1D seismic wave propagation technique SHAKE2000 is used for ground motion amplifications at...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 5, Issue 1

Full-Text

International Journal of Geotechnical Earthquake Engineering, Volume 5, Issue 1

T.G. Sitharam, J. S. Vinod. © 2014.

Source: International Journal of Geotechnical Earthquake Engineering (IJGEE)

View HTMLView PDF

Full-Text

A Site Specific Study on Evaluation of Design Ground Motion Parameters

A. Boominathan, S. Krishna Kumar. © 2010. 24 pages.

Design ground motions are usually developed by one of the two approaches: site-specific analyses or from provisions of building codes. Although contemporary codes do consider approximately the site effects, they provide more conservative estimates. Hence it is preferred to carry out site specific...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 1, Issue 1

View HTMLView PDF

Full-Text

Prediction of The Uniaxial Compressive Strength of Rocks Materials

Nurcihan Ceryan, Nuray Korkmaz Can. © 2018. 66 pages.

This study briefly will review determining UCS including direct and indirect methods including regression model soft computing techniques such as fuzzy interface system (FIS), artifical neural network (ANN) and least sqeares support vector machine (LS-SVM). These has advantages and disadvantages of...

Source: Handbook of Research on Trends and Digital Advances in Engineering Geology

Total results: 156

Sort by: Re

Full-Text

International Journal of Geotechnical Earthquake Engineering, Volume 3, Issue 2

T.G. Sitharam, J. S. Vinod. © 2012.

Source: International Journal of Geotechnical Earthquake Engineering (IJGEE)

Full-Text

Handbook of Research on Trends and Digital Advances in Engineering Geology

Nurcihan Ceryan. © 2018. 765 pages.

Engineering geologists face the task of addressing geological factors that can affect planning with little time and with few resources. A solution is using the right tools to save time searching for answers and devote attention to making critical engineering decisions. The Handbook of Research on...

Reference BookShow Contents

View HTMLView PDF

Full-Text

Site-Specific Ground Motion Studies for a Deep Soil Site Near Ahmedabad, Gujarat

A. Boominathan, Krishna Kumar, R. Vijaya. © 2019. 35 pages.

Design ground motions are usually developed by one of two approaches: by performing site-specific analyses or from provisions of building codes. Although contemporary codes consider the site effects to an extent, they provide more conservative estimates. Hence, site-specific analysis, which involves...

Source: Recent Challenges and Advances in Geotechnical Earthquake Engineering

View HTMLView PDF

Full-Text

Lateral Displacement of Liquefaction Induced Ground Using Least Square Support Vector Machine

Sarat Kumar Das, Pijush Samui, Dookie Kim, N. Sivakugan, Rajanikanta Biswal. © 2011. 11 pages.

The determination of lateral displacement of liquefaction induced ground during an earthquake is an imperative task in disaster mitigation. This study investigates the possibility of using least square support vector machine (LSSVM) for the prediction of lateral displacement of liquefaction induced...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 2, Issue 2

Full-Text

International Journal of Geotechnical Earthquake Engineering, Volume 2, Issue 2

T.G. Sitharam, J. S. Vinod. © 2011.

Source: International Journal of Geotechnical Earthquake Engineering (IJGEE)

Full-Text

International Journal of Geotechnical Earthquake Engineering, Volume 6, Issue 2

T.G. Sitharam, J. S. Vinod. © 2015.

Source: International Journal of Geotechnical Earthquake Engineering (IJGEE)

Full-Text

International Journal of Geotechnical Earthquake Engineering, Volume 9, Issue 1

T.G. Sitharam, J. S. Vinod. © 2018.

Source: International Journal of Geotechnical Earthquake Engineering (IJGEE)

Full-Text

International Journal of Geotechnical Earthquake Engineering, Volume 6, Issue 1

T.G. Sitharam, J. S. Vinod. © 2015.

Source: International Journal of Geotechnical Earthquake Engineering (IJGEE)

View HTMLView PDF

Full-Text

Probabilistic Seismic Hazard Analysis and Synthetic Ground Motion Generation for Seismic Risk Assessment of Structures in the Northeast India

Swarup Ghosh, Subrata Chakraborty. © 2017. 21 pages.

This article outlines the performance-based seismic risk assessment (PBSRA) of structures requiring probabilistic seismic hazard analysis (PSHA) to obtain hazard curves and an evaluation of the demand model by a nonlinear structural response analysis under properly selected ground motion records....

Source: International Journal of Geotechnical Earthquake Engineering, Volume 8, Issue 2

Full-Text

International Journal of Geotechnical Earthquake Engineering, Volume 7, Issue 1

T.G. Sitharam, J. S. Vinod. © 2016.

Source: International Journal of Geotechnical Earthquake Engineering (IJGEE)

Full-Text

International Journal of Geotechnical Earthquake Engineering, Volume 8, Issue 2

T.G. Sitharam, J. S. Vinod. © 2017.

Source: International Journal of Geotechnical Earthquake Engineering (IJGEE)

View HTMLView PDF

Full-Text

A Conceptual Model on the Challenges Affecting the Growth, Sustainability, and Survival of Small, Medium, and Micro Enterprise

Ayansola Olatunji Ayandibu, Irrshad Kaseeram, Elizabeth Oluwakemi Ayandibu. © 2021. 16 pages.

This chapter addresses the changes (finance, human resources management, supply chain management, and regulatory) that affect the growth, sustainability, and survival of SMMEs world. These challenges are common among SMMEs in every country. In order for SMMEs to achieve growth, sustainability, as well...

Source: Reshaping Entrepreneurship Education With Strategy and Innovation

View HTMLView PDF

Full-Text

Dynamic Characterization of Settled Pond Ash Using Measured Shear Wave Velocity (Vs) and SPT-N Values: Correlation Between Vs & N

Ravi Sankar Jakka, B. Janaki Ramaiah, G. V. Ramana. © 2011. 15 pages.

Reclamation of abandoned ash ponds for the construction of engineered facilities like gas based power plants, light weight structures, or parking lots often requires site specific response analysis to assess associated seismic hazards in seismically active areas. This requires dynamic site...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 2, Issue 1

View HTMLView PDF

Full-Text

Behavior of Flexible Buried Pipes Under Geocell Reinforced Subbase Subjected to Repeated Loading

Mohammed Yousif Fattah, Waqed Hammed Hassan, Sajjad Emad Rasheed. © 2018. 20 pages.

The present article constitutes an experimental investigation of the behavior of buried PVC pipes. A number of laboratory experiments were conducted using PVC pipes which were buried in a medium sand layer, below a subbase layer, reinforced with geocells. They were subject to repeated dynamic load...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 9, Issue 1

Full-Text

Handbook of Research on Emerging Innovations in Rail Transportation Engineering

B. Umesh Rai. © 2016. 664 pages.

The rail-based transit system is a popular public transportation option, not just with members of the public but also with policy makers looking to install a form of convenient and rapid travel. Even for moving bulk freight long distances, a rail-based system is the most sustainable transportation...

Reference BookShow Contents

Full-Text

Reshaping Entrepreneurship Education With Strategy and Innovation

Ayansola Olatunji Ayandibu. © 2021. 422 pages.

New small business owners are constantly pressured to play a major role in the economic growth of their respected nation. However, revitalizing how individuals think, research, teach, and implement performance strategies to improve the operations of these small businesses is critical to entrepreneurial...

Reference BookShow Contents

Full-Text

International Journal of Geotechnical Earthquake Engineering, Volume 2, Issue 1

T.G. Sitharam, J. S. Vinod. © 2011.

Source: International Journal of Geotechnical Earthquake Engineering (IJGEE)

View HTMLView PDF

Full-Text

Shear Wave Velocity Investigation for Ten Representative Sites of National Capital Territory, New Delhi, India

A.K. Mahajan, A.K. Shukla, Ajit Pandey, Mukesh Chauhan, Neetu Chauhan, Nitesh Rai. © 2011. 15 pages.

In this paper, shear wave velocity (Vs) investigations are carried out using Multichannel analysis of surface waves (MASW) method at ten representative sites in the NCT region, New Delhi. The analysis shows that the Vs obtained from the sites located on Alwar quartzites of Delhi Super Group ranges from...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 2, Issue 1

View HTMLView PDF

Full-Text

Liquefaction Modelling of Granular Soils using Discrete Element Method

Neelima Satyam. © 2016. 61 pages.

The damage induced by seismic events is well known among the civil engineering, geological and seismological community. Seismologists and geologists who study this hazard at a deeper level are concerned more with the history and cause of earthquake events rather than their effects. When seismic energy...

Source: Handbook of Research on Advanced Computational Techniques for Simulation-Based...

Full-Text

International Journal of Geotechnical Earthquake Engineering, Volume 5, Issue 2

T.G. Sitharam, J. S. Vinod. © 2014.

Source: International Journal of Geotechnical Earthquake Engineering (IJGEE)

Full-Text

International Journal of Geotechnical Earthquake Engineering, Volume 8, Issue 1

T.G. Sitharam, J. S. Vinod. © 2017.

Source: International Journal of Geotechnical Earthquake Engineering (IJGEE)

Full-Text

International Journal of Geotechnical Earthquake Engineering, Volume 9, Issue 2

T.G. Sitharam, J. S. Vinod. © 2018.

Source: International Journal of Geotechnical Earthquake Engineering (IJGEE)

Full-Text

International Journal of Geotechnical Earthquake Engineering, Volume 10, Issue 2

T.G. Sitharam, J. S. Vinod. © 2019.

Source: International Journal of Geotechnical Earthquake Engineering (IJGEE)

Full-Text

International Journal of Geotechnical Earthquake Engineering, Volume 11, Issue 2

T.G. Sitharam, J. S. Vinod. © 2020.

Source: International Journal of Geotechnical Earthquake Engineering (IJGEE)

View HTMLView PDF

Full-Text

Performance of Buildings Using Site Specific Ground Motion of Kolkata, India

Amit Shiuly. © 2019. 13 pages.

Kolkata, capital of West Bengal, India, is presently congested with moderate to high rise buildings, and may undergo damage during future earthquakes due to the amplification of seismic waves by the soft alluvial soil. Further, most of the buildings are open ground storey (OGS), which is very...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 10, Issue 1

Total results: 156

Sort by: Re

View HTMLView PDF

Full-Text

Determination of Spatial Variability of Rock Depth of Chennai

Pijush Samui, Viswanathan R., Jagan J., Pradeep U. Kurup. © 2018. 18 pages.

This study adopts four modeling techniques Ordinary Kriging(OK), Generalized Regression Neural Network (GRNN), Genetic Programming(GP) and Minimax Probability Machine Regression(MPMR) for prediction of rock depth(d) at Chennai(India). Latitude (Lx) and Longitude(Ly) have been used as inputs of the...

Source: Handbook of Research on Modeling, Analysis, and Application of Nature-Inspired...

View HTMLView PDF

Full-Text

One-Dimensional Effective Stress Non-Masing Nonlinear Ground Response Analysis of IIT Guwahati

Devdeep Basu, Arindam Dey, Shiv Shankar Kumar. © 2017. 27 pages.

Ground response analysis (GRA) helps to assess the influence of the soil medium on the propagating shear waves and indicates about the characteristics of the waves reaching the ground surface from the bedrock level. Such a study becomes imperative for the urbanized alluvial banks of North-Eastern...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 8, Issue 1

Full-Text

Handbook of Research on Modeling, Analysis, and Application of Nature-Inspired Metaheuristic Algorithms

Sujata Dash, B.K. Tripathy, Atta ur Rahman. © 2018. 538 pages.

The digital age is ripe with emerging advances and applications in technological innovations. Mimicking the structure of complex systems in nature can provide new ideas on how to organize mechanical and personal systems. The Handbook of Research on Modeling, Analysis, and Application of Nature-Inspired...

Reference BookShow Contents

View PDF

Full-Text

Introduction

Chetan Sankar, Karl-Heinz Rau. © 2006. 24 pages.

• Identify why Enterprise Resource Systems (ERP) have emerged as a critical success factor for companies • Understand that the market for ERP systems is growing rapidly • Know that skills to effectively implement ERP systems are valued by industry • Understand the rationale supporting the selection of...

Source: Implementation Strategies for SAP R/3 in a Multinational Organization: Lessons...

View HTMLView PDF

Full-Text

Spatial Variability Analysis of Soil Properties using Geostatistics

Anand J Puppala, Tejo V Bheemasetti, Haifeng Zou, Xinbao Yu, Aravind Pedarla, Guojun Cai. © 2016. 32 pages.

Spatial variability in soil properties is still in the exploratory stage and, despite of an increase in probabilistic and statistical analysis, many challenges remain in using spatial variability of soil properties in practical designs. This chapter addresses the problem of how to incorporate spatial...

Source: Handbook of Research on Advanced Computational Techniques for Simulation-Based...

View HTMLView PDF

Full-Text

Determination of the Cyclic Properties of Silty Sands

Eyyüb Karakan, Selim Altun. © 2018. 30 pages.

Liquefaction may be triggered by cyclic loading on saturated silty sands, which is responsible of severe geotechnical problems. Development of excess pore water pressure in soil results in a liquid-like behavior and may be the reason of unavoidable superstructural damage. In this study, in order to...

Source: Handbook of Research on Trends and Digital Advances in Engineering Geology

Full-Text

Implementation Strategies for SAP R/3 in a Multinational Organization: Lessons from a Real-World Case Study

Chetan Sankar, Karl-Heinz Rau. © 2006. 345 pages.

It is important for those in charge of implementing an enterprise resource planning (ERP) system to identify and understand the issues they face. Implementation Strategies for SAP R/3 in a Multinational Organization: Lessons from a Real-World Case Study provides readers with an instructive insight in...

Reference BookShow Contents

View HTMLView PDF

Full-Text

Production Blast-Induced Vibrations in Longhole Open Stoping: A Case Study

John Henning, Hani Mitri. © 2012. 11 pages.

This paper examines stope design approaches employed at a metal mining operation in Canada for extraction of transverse primary, transverse secondary, and longitudinal stopes. Variations in stope and slot design, blast design, and blast vibration attenuation are presented in detail. It is shown that...

Source: Geotechnical Applications for Earthquake Engineering: Research Advancements

Full-Text

Global Perspectives on Air Pollution Prevention and Control System Design

G. Venkatesan, Jaganthan Thirumal. © 2019. 345 pages.

Once pollutants are released into the atmosphere, they cannot be removed easily nor can the reaction with atmospheric constituents be ceased. However, through enhancing our understanding of control technology, further addition of pollution can be forestalled. Through better understanding of innovations...

Reference BookShow Contents

Full-Text

Advanced Agro-Engineering Technologies for Rural Business Development

Valeriy Kharchenko, Pandian Vasant. © 2019. 484 pages.

Developing countries need access to the technological advancements of the modern world in order to apply these advancements to their small-scale operations. Applying newly discovered information concerning efficient energy to remote corners of the world will ensure small-scale businesses can conduct...

Reference BookShow Contents

Full-Text

Global Initiatives for Waste Reduction and Cutting Food Loss

Aparna B. Gunjal, Meghmala S. Waghmode, Neha N. Patil, Pankaj Bhatt. © 2019. 328 pages.

The world population is expected to increase exponentially within the next decade, which means that the food demand will increase and so will waste production. There is a need for effective food waste management as wasted food leads to overutilization of water and fossil fuels and increasing greenhouse...

Reference BookShow Contents

Full-Text

Spatial Planning in the Big Data Revolution

Angioletta Voghera, Luigi La Riccia. © 2019. 359 pages.

Through interaction with other databases such as social media, geographic information systems have the ability to build and obtain not only statistics defined on the flows of people, things, and information but also on perceptions, impressions, and opinions about specific places, territories, and...

Reference BookShow Contents

Full-Text

Amelioration Technology for Soil Sustainability

Ashok K. Rathoure. © 2019. 280 pages.

Soil erosion is a complex process that depends on soil properties, ground slope, vegetation, and rainfall amount and intensity. Erosion can be significantly reduced through sustainable agricultural practices and sustainable nutrient management techniques that allow farmers to maintain healthy...

Reference BookShow Contents

Full-Text

Novel Advancements in Electrical Power Planning and Performance

Smita Shandilya, Shishir Kumar Shandilya, Tripta Thakur, Atulya K. Nagar. © 2020. 388 pages.

As the demand for efficient energy sources continues to grow, electrical systems are becoming more essential to meet these increased needs. Electrical generation and transmission plans must remain cost-effective, reliable, and flexible for further future expansion. As these systems are being utilized...

Reference BookShow Contents

Full-Text

Advanced Multi-Criteria Decision Making for Addressing Complex Sustainability Issues

Prasenjit Chatterjee, Morteza Yazdani, Shankar Chakraborty, Dilbagh Panchal, Siddhartha Bhattacharyya. © 2019. 360 pages.

Sustainability issues have gained more importance in contemporary globalization, pushing decision makers to find a systematic mathematical approach to conduct analyses of this real-world problem. The growing complexity in modern social-economics or engineering environments or systems has forced...

Reference BookShow Contents

Full-Text

Retrofitting for Optimal Energy Performance

Adrian Tantau. © 2019. 339 pages.

Retrofitting expresses, in a traditional approach, the process of improving something after it has been manufactured, constructed, or assembled. These systems integrate new technologies, new functions, and new services that increase the energy performance in existing private, public, and commercial...

Reference BookShow Contents

Full-Text

Fuzzy Expert Systems and Applications in Agricultural Diagnosis

A.V. Senthil Kumar, M. Kalpana. © 2020. 335 pages.

Decision-making is a frequent problem in today’s financial, business, and industrial world. Thus, fuzzy expert systems are increasingly being used to solve decision-making problems by attempting to solve a part or whole of a practical problem. These expert systems have proven that they can solve...

Reference BookShow Contents

Full-Text

Handbook of Research on Energy-Saving Technologies for Environmentally-Friendly Agricultural Development

Valeriy Kharchenko, Pandian Vasant. © 2020. 554 pages.

World population growth and the related increase in the demand for food and other goods has intensified agricultural production throughout the world. Some of today's technologies are characterized by relatively low productivity and high consumption of energy resources. The Handbook of Research on...

Reference BookShow Contents

Full-Text

Advanced Design of Wastewater Treatment Plants: Emerging Research and Opportunities

Athar Hussain, Ayushman Bhattacharya. © 2019. 350 pages.

With the advancement of new technologies, existing wastewater treatment units need to be reexamined to make them more efficient and to release the load currently placed on them. Thus, there is an urgent need to develop and adopt the latest design methodology to determine and remove harmful impurities...

Reference BookShow Contents

Full-Text

Handbook of Research on Environmental and Human Health Impacts of Plastic Pollution

Khursheed Ahmad Wani, Lutfah Ariana, S.M. Zuber. © 2020. 600 pages.

Due to the non-biodegradability of plastic substances, coupled with poor waste management practices, plastic pollution has become a major environmental issue within the past decade. However, the negative effects of plastic pollution are rarely opposed, or the solutions proposed are costly or still...

Reference BookShow Contents

Full-Text

Modern Techniques for Agricultural Disease Management and Crop Yield Prediction

N. Pradeep, Sandeep Kautish, C.R. Nirmala, Vishal Goyal, Sonia Abdellatif. © 2020. 291 pages.

Since agriculture is one of the key parameters in assessing the gross domestic product (GDP) of any country, it has become crucial to transition from traditional agricultural practices to smart agriculture. New agricultural technologies provide numerous opportunities to maximize crop yield by...

Reference BookShow Contents

Full-Text

Decision Support Methods for Assessing Flood Risk and Vulnerability

Ahmed Karmaoui. © 2020. 332 pages.

Each year, floods cause an enormous amount of global economic and social damage, impacting transportation systems, water supplies, agriculture, and health. Response management to catastrophic floods require increased measures involving integrated planning, adaptation, and recovery strategies in order...

Reference BookShow Contents

Full-Text

Global Food Politics and Approaches to Sustainable Consumption: Emerging Research and Opportunities

Luke Amadi, Fidelis Allen. © 2020. 242 pages.

Food production and consumption processes are largely governed via control mechanisms that affect food accessibility and environmental efficiency. Food resource marginalization, inequality, and deleterious consumption urgently require new governance and developmental systems that will provide food...

Reference BookShow Contents

Full-Text

Hydrology and Water Resources Management in Arid, Semi-Arid, and Tropical Regions

Christopher Misati Ondieki, Johnson Utu Kitheka. © 2019. 356 pages.

Hydrology is a key influence on water security, environmental sustainability, agricultural production, energy, and transport, especially in unique environments such as arid regions and the tropics, where degradation issues on water and land can threaten the livelihoods of poor communities. With...

Reference BookShow Contents

Full-Text

Handbook of Research on Smart Computing for Renewable Energy and Agro-Engineering

Valeriy Kharchenko, Pandian Vasant. © 2020. 537 pages.

The rise in population and the concurrently growing consumption rate necessitates the evolution of agriculture to adopt current computational technologies to increase production at a faster and smoother scale. While existing technologies may help in crop processing, there is a need for studies that...

results: 156

Sort by: Re

Full-Text

Green Public Procurement Strategies for Environmental Sustainability

Rajesh Kumar Shakya. © 2019. 228 pages.

This title is an IGI Global Core Reference for 2019 as it was edited by an e-procurement expert who has conducted research and worked for the World Bank, United States Agency for International Development, Asian Development Bank, Inter-American Development Bank, Caribbean Development Bank, and...

Reference BookShow Contents

Full-Text

Climate Change and Its Impact on Ecosystem Services and Biodiversity in Arid and Semi-Arid Zones

Ahmed Karmaoui. © 2019. 408 pages.

Ecosystems provide services that are crucial and beneficial to the human population. The management and conservation of these services can assure the wellbeing of the local population. Climate Change and Its Impact on Ecosystem Services and Biodiversity in Arid and Semi-Arid Zones is an essential...

Reference BookShow Contents

Full-Text

Unique Sequence Signatures in Plant Lipolytic Enzymes: Emerging Research and Opportunities

Nihed Ben Halima. © 2019. 197 pages.

Lipids are biomolecules that constitute a significant amount of biomass in the earth, and plant lipids are rapidly growing in interest due to their roles in improving food technology, medicine, nutrition, and biotechnology. With recent advances in protein chemistry, biochemistry, and enzymology...

Reference BookShow Contents

Full-Text

Building Sustainability Through Environmental Education

Lynn A. Wilson, Carolyn N. Stevenson. © 2019. 335 pages.

Global climate change will alter the environmental forces of today and increasingly affect weather patterns, rises in temperature, and government policies for decades to come. To provide future generations with the knowledge and resources needed to develop solutions for these ongoing issues, current...

Reference BookShow Contents

Full-Text

Handbook of Research on Global Environmental Changes and Human Health

Kholoud Kahime, Moulay Abdelmonaim El Hidan, Omar El Hiba, Denis Sereno, Lahouari Bounoua. © 2019. 653 pages.

The faster climate change affects the globe, the faster individuals will see the negative consequences, which include the decline of general human health. Comprehension of all climate change-related etiologies is essential to understanding the importance of global environmental stability. The Handbook...

Reference BookShow Contents

Full-Text

Green Finance for Sustainable Global Growth

Sang-Bing Tsai, Chung-Hua Shen, Hua Song, Baozhuang Niu. © 2019. 397 pages.

Businesses working under green finance models consider the potential environmental impact in investment and financing decisions and merge the potential return, risk, and cost correlated with environmental conditions into day-to-day financial business. Under this model, the ecological environment and...

Reference BookShow Contents

Full-Text

Applications of Image Processing and Soft Computing Systems in Agriculture

Navid Razmjooy, Vania Vieira Estrela. © 2019. 337 pages.

The variety and abundance of qualitative characteristics of agricultural products have been the main reasons for the development of different types of non-destructive methods (NDTs). Quality control of these products is one of the most important tasks in manufacturing processes. The use of control and...

Reference BookShow Contents

View HTMLView PDF

Full-Text

Dynamic Tensile Test of Coal, Shale and Sandstone Using Split Hopkinson Pressure Bar: A Tool for Blast and Impact Assessment

Kaiwen Xia, Sheng Huang, Ajay Kumar Jha. © 2012. 15 pages.

The dynamic tensile strength plays a pivotal role in rock fragmentation affecting the overall economics under the present 'Mine to Mill Concept'. In this paper, a modified SHPB technique and Brazilian test method is presented to test the dynamic tensile strength of coal, shale and sandstone rock...

Source: Geotechnical Applications for Earthquake Engineering: Research Advancements

View HTMLView PDF

Full-Text

Numerical Prediction of Rock Fracturing During the Process of Excavation

Zhangtao Zhou, Zheming Zhu, XinXing Jin, Hao Tang. © 2012. 13 pages.

During the process of excavation, blasting can induce cracking inside the surrounding rock. Considering the effects of material properties and loading conditions, a rock blasting excavation model with two successive excavation steps was developed through the use of AUTODYN code. Four kinds of equation...

Source: Geotechnical Applications for Earthquake Engineering: Research Advancements

View HTMLView PDF

Full-Text

Investigations on Impact of Blasting in Tunnels

Kaushik Dey, V. M. S. R. Murthy. © 2012. 11 pages.

Blasting with longer advance per round leaves an impact both visible (in the form of overbreak) and invisible (cracks) in the surrounding rockmass, however, a number of controlled-blasting techniques, that is line drilling, pre-splitting, and smooth blasting, have been developed to minimise this...

Source: Geotechnical Applications for Earthquake Engineering: Research Advancements

View HTMLView PDF

Full-Text

Effect of Epicenter Data Inconsistency in Determining Bandwidth and Its Subsequent Use in Hazard Analysis for Chennai Using Kernel Smoothing Approach

C. K. Ramanna, G. R. Dodagoudar. © 2016. 15 pages.

The most important parameter in the kernel density estimator is the bandwidth or spread or window width. The bandwidth of the kernel density estimator, which follows the power law, is determined using the nearest neighborhood technique for the earthquake catalog which is divided into bins. For reliable...

Source: Civil and Environmental Engineering: Concepts, Methodologies, Tools, and...

View HTMLView PDF

Full-Text

Seismic Design and Parametric Study of Rigid Retaining Walls

Swami Saran, Hasan Rangwala. © 2014. 13 pages.

The main objective of the paper is to develop a simplified procedure for the seismic design of a rigid retaining wall. For the design of a rigid retaining wall various parameters that are taken in to consideration include height of the wall, angle of inclination of backfill, backface angle of the wall...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 5, Issue 2

Full-Text

Effects of Emerging Chemical Contaminants on Water Resources and Environmental Health

Victor Shikuku. © 2020. 339 pages.

A major issue that has remained prevalent in today's modern world has been the presence of chemicals within water sources that the public uses for drinking. The associated health risks that accompany these contaminants are unknown but have sparked serious concern and emotive arguments among the global...

Reference BookShow Contents

Full-Text

Physiological Aspects of Imprinting and Homing Migration in Salmon: Emerging Research and Opportunities

Hiroshi Ueda. © 2020. 160 pages.

Salmon are one of the most popular and commonly eaten fish and are among the most important fishery resources in the world. They are born and die in fresh water but can live in both fresh water and seawater where they migrate between rivers and oceans, showing amazing abilities to home to their natal...

Reference BookShow Contents

Full-Text

Climate Change and Anthropogenic Impacts on Health in Tropical and Subtropical Regions

Ahmed Karmaoui, Abdelkrim Ben Salem, Ashfaq Ahmad Shah. © 2020. 177 pages.

Climate change and environmental pollution remain two primary areas of concern in today's world. These detrimental influences continue to have a strong impact on various aspects of humanity, specifically public health in tropical regions. Researchers have seen neglected tropical diseases (NTDs)...

Reference BookShow Contents

Full-Text

Analyzing the Physics of Radio Telescopes and Radio Astronomy

Kim Ho Yeap, Kazuhiro Hirasawa. © 2020. 324 pages.

In the field of astrophysics, modern developments of practice are emerging in order to further understand the spectral information derived from cosmic sources. Radio telescopes are a current mode of practice used to observe these occurrences. Despite the various accommodations that this technology...

Reference BookShow Contents

Full-Text

Impacts of Climate Change on Agriculture and Aquaculture

Ahmed Karmaoui, Kirby Barrick, Michael Reed, Mirza Barjees Baig. © 2021. 333 pages.

Climate change is expected to influence several productive sectors, the most significant of which is agriculture. Agriculture comprises an important sector of the global economy that includes crops, livestock, and seafood. Agriculture, aquaculture, and fisheries are closely linked to the climate, with...

Reference BookShow Contents

Full-Text

Energy-Efficient Underwater Wireless Communications and Networking

Nitin Goyal, Luxmi Sapra, Jasminder Kaur Sandhu. © 2021. 339 pages.

Underwater wireless sensor networks (UWSN) are envisioned as an aquatic medium for a variety of applications including oceanographic data collection, disaster management or prevention, assisted navigation, attack protection, and pollution monitoring. Similar to terrestrial wireless sensor networks...

Reference BookShow Contents

Full-Text

Solar Concentrating Modules With Louvered Heliostats: Emerging Research and Opportunities

Dmitry Strebkov, Natalya Filippchenkova, Anatoly Irodionov. © 2021. 267 pages.

The development of solar energy is becoming increasingly widespread all over the world. One significant way to reduce the cost of energy generated by solar modules, as well as reduce the need for centralized energy supply, is the use of non-tracking concentrator solar modules integrated into the...

Reference BookShow Contents

Full-Text

Molecular Plant Breeding and Genome Editing Tools for Crop Improvement

Pradip Chandra Deka. © 2021. 489 pages.

Plant breeders have used mutagenic agents to create variability for their use in crop improvement. However, application of mutagenic agents has its own drawbacks, such as non-specificity and random nature, simultaneous effect on large numbers of genes, and induction of chromosomal aberrations. To...

Reference BookShow Contents

Full-Text

Recent Advancements in Bioremediation of Metal Contaminants

Satarupa Dey, Biswaranjan Acharya. © 2021. 363 pages.

Pollution and ways to combat it have become topics of great concern for researchers. One of the most important dimensions of this global crisis is wastewater, which can often become contaminated with heavy metals such as lead, mercury, and arsenic, which are released from different industrial wastes...

Reference BookShow Contents

Full-Text

Eco-Friendly Energy Processes and Technologies for Achieving Sustainable Development

Mir Sayed Shah Danish, Tomonobu Shah Senjyu. © 2021. 340 pages.

Rapid changes in technology and lifestyle have led to a dramatic increase in energy demand. Growing energy demand is the main cause of environmental pollution, but the efficient use of renewable resources and technologies for residential, commercial, industrial, and agricultural sectors offers the...

Reference BookShow Contents

Full-Text

Precision Agriculture Technologies for Food Security and Sustainability

Sherine M. Abd El-Kader, Basma M. Mohammad El-Basioni. © 2021. 437 pages.

Precision agriculture integrates new technologies with the agronomic experience to intelligently manage the high spatial variability of all agricultural variables and the time scales at which these variables change. The right application of this approach increases the size and quality of the...

Reference BookShow Contents

Full-Text

Smart Agricultural Services Using Deep Learning, Big Data, and IoT

Amit Kumar Gupta, Dinesh Goyal, Vijander Singh, Harish Sharma. © 2021. 280 pages.

The agricultural sector can benefit immensely from developments in the field of smart farming. However, this research area focuses on providing specific fixes to particular situations and falls short on implementing data-driven frameworks that provide large-scale benefits to the industry as a whole....

Reference BookShow Contents

Full-Text

Spatial Information Science for Natural Resource Management

Suraj Kumar Singh, Shruti Kanga, Varun Narayan Mishra. © 2020. 355 pages.

Stress on natural resources has recently increased due to commercialization and the need to provide livelihoods for locals. Because they are such core parts of everyday life, ensuring sustainability in resource management is of paramount importance. Only by integrating the tools of spatial information...

Total results: 156

Sort by: Re

Full-Text

Nano-Phytoremediation Technologies for Groundwater Contaminates: Emerging Research and Opportunities

Khushboo Chaudhary, Suphiya Khan, Pankaj Kumar Saraswat. © 2020. 198 pages.

In the modern world, industries and factories are rising exponentially. This has led to the mass cultivation of non-biodegradable products, like heavy metals, that have polluted the environment and become a major threat to plant growth, crop yield, and human health. Conventional remediation...

Reference BookShow Contents

Full-Text

Handbook of Research on Agricultural Policy, Rural Development, and Entrepreneurship in Contemporary Economies

Andrei Jean Vasile, Jonel Subic, Aleksander Grubor, Donatella Privitera. © 2020. 573 pages.

Promoting rural entrepreneurship is a necessary step to limit the negative effects of classical agricultural policy based on a linear process and attracting secondary resources to the economic process. The analysis of agricultural policy and rural development in conjunction to entrepreneurship in terms...

Reference BookShow Contents

Full-Text

Handbook of Research on Resource Management for Pollution and Waste Treatment

Augustine Chioma Affam, Ezerie Henry Ezechi. © 2020. 795 pages.

It is necessary to understand the extent of pollution in the environment in terms of the air, water, and soil in order for both humans and animals to live healthier lives. Poor waste treatment or pollution monitoring can lead to massive environmental issues, such as diminishing valuable resources, and...

Reference BookShow Contents

Full-Text

Handbook of Research on Globalized Agricultural Trade and New Challenges for Food Security

Vasilii Erokhin, Tianming Gao. © 2020. 574 pages.

Free trade promotes economic growth through international competition and the efficient allocation of resources while also helping to stabilize food supplies between countries that have an overabundance of product and countries that have a shortage. However, sudden price surges can threaten the social...

Reference BookShow Contents

Full-Text

Current State and Future Impacts of Climate Change on Biodiversity

Ashok Kumar Rathoure, Pawan Bharati Chauhan. © 2020. 313 pages.

Understanding the balance of society and nature is imperative when researching ecosystems and their global influence. A method of studying the health of these ecosystems is biodiversity. The more diverse the species that live in an ecosystem, the healthier it is. As the climate continues to transform...

Reference BookShow Contents

Full-Text

Handbook of Research on Emerging Developments and Environmental Impacts of Ecological Chemistry

Gheorghe Duca, Ashok Vaseashta. © 2020. 649 pages.

Pollution has been a developing problem for quite some time in the modern world, and it is no secret how these chemicals negatively affect the environment. With these contaminants penetrating the earth’s water supply, affecting weather patterns, and threatening human health, it is critical to study the...

Reference BookShow Contents

Full-Text

Implementation and Evaluation of Green Materials in Technology Development: Emerging Research and Opportunities

M.T. Mastura, S.M. Sapuan. © 2020. 174 pages.

Due to legal and consumer demands, eco-friendly resources that comply with environmental concerns while maintaining or improving performance are highly sought amongst manufacturers. Green materials are a specific material that are widely found in many product markets and are popular choices as...

Reference BookShow Contents

Full-Text

Predicting, Monitoring, and Assessing Forest Fire Dangers and Risks

Nikolay Viktorovich Baranovskiy. © 2020. 417 pages.

To understand the catastrophic processes of forest fire danger, different deterministic, probabilistic, and empiric models must be used. Simulating various surface and crown forest fires using predictive information technology could lead to the improvement of existing systems and the examination of the...

Reference BookShow Contents

Full-Text

Technological Developments in Food Preservation, Processing, and Storage

Seydi Yıkmış. © 2020. 256 pages.

In recent years, professionals have combined nutrition, health, and engineering sciences to develop new technologies within the food industry. As we are beginning to shift focus on how we view the health benefits of various food products, perseveration and processing techniques have become much more...

Reference BookShow Contents

Full-Text

Waste Management Techniques for Improved Environmental and Public Health: Emerging Research and Opportunities

Sang-Bing Tsai, Zhengxi Yuan, Jian Yu, Xuexin Liu. © 2020. 229 pages.

A central concern that has remained relevant in recent years has been the management of waste and pollution. Improper disposal methods such as open-air burning and unsafe recycling have led to significant public and environmental health issues including respiratory disorders, resource depletion, and...

Reference BookShow Contents

View HTMLView PDF

Full-Text

Effect of Superstructure Stiffness on Liquefaction-Induced Failure Mechanisms

S.P.G. Madabhushi, S.K. Haigh. © 2012. 15 pages.

Soil liquefaction following strong earthquakes causes extensive damage to civil engineering structures. Foundations of buildings, bridges etc can suffer excessive rotation/settlement due to liquefaction. Many of the recent earthquakes bear testimony for such damage. In this article a hypothesis that...

Source: Geotechnical Applications for Earthquake Engineering: Research Advancements

View HTMLView PDF

Full-Text

Experimental Validation of an Identification Procedure of Soil Profile Characteristics from Free Field Acceleration Records

Z. Harichane, H. Afra, R. Bahar. © 2012. 17 pages.

In this paper, a new approach for soil profile characterization is validated. The soil characteristics are calculated by fitting the theoretical amplification functions to those obtained experimentally. The identified characteristics have been observed to agree well with those obtained by in situ and...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 3, Issue 1

View HTMLView PDF

Full-Text

Seismic Hazard Assessment of the City of Khoy and Its Vicinity, NW of Iran

Davood Fereidooni. © 2015. 13 pages.

Analyses have been carried out considering the occurred earthquakes, geologic and seismotectonic conditions of the region covering a radius of 100 Km keeping Khoy as the center. The major seismic sources are small and large faults identified in the study area mostly directed in NW-SE. The MCE and PGA...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 6, Issue 1

View HTMLView PDF

Full-Text

Analysis of Passive Earth Pressure and Displacements of Retaining Walls Using Pseudo-Dynamic Approach

B. Munwar Basha, G. L. Sivakumar. © 2012. 23 pages.

Using additional dynamic parameters in the pseudo-static method like shear wave and primary wave velocities of soil, phase change in the shear and primary waves, and soil amplification for seismic accelerations, one can benefit from another useful tool called pseudo-dynamic method to solve the problem...

Source: Geotechnical Applications for Earthquake Engineering: Research Advancements

View HTMLView PDF

Full-Text

Cyclic Pore Pressure Generation, Dissipation and Densification in Granular Mixes

S. Thevanayagam, T. Shenthan. © 2012. 19 pages.

Knowledge of cyclic load induced pore pressure generation, post-liquefaction dissipation and volumetric densification characteristics of sands, silty sands, and silts are important for the analysis of performance of loose saturated granular deposits in seismic areas. This article presents results from...

Source: Geotechnical Applications for Earthquake Engineering: Research Advancements

View HTMLView PDF

Full-Text

Development of a New Blast Vibration Prediction Model Incorporating Burden Variations in Surface Blasting

M. Ramulu. © 2012. 17 pages.

The globally followed common vibration predictor model includes distance from source to vibration monitoring location and quantity of explosive charge per delay without giving much consideration to blast design parameters. Though there are qualitative assertions on the influence of burden on the...

Source: Geotechnical Applications for Earthquake Engineering: Research Advancements

View HTMLView PDF

Full-Text

Post Disaster Housing Management for Sustainable Urban Development: A Review

Kanu Kumar Das, Nagendra Kumar Sharma. © 2018. 19 pages.

Developing countries have still shortage of housing due to natural disasters. Houses get destroyed wholly or partly and it causes the increase of lack of housing stock of a country. In disaster management cycle, rehabilitation or reconstruction is an important issue to protect, reduce or mitigate the...

Source: E-Planning and Collaboration: Concepts, Methodologies, Tools, and Applications

View HTMLView PDF

Full-Text

Post Disaster Housing Management for Sustainable Urban Development: A Review

Kanu Kumar Das, Nagendra Kumar Sharma. © 2019. 19 pages.

Developing countries have still shortage of housing due to natural disasters. Houses get destroyed wholly or partly and it causes the increase of lack of housing stock of a country. In disaster management cycle, rehabilitation or reconstruction is an important issue to protect, reduce or mitigate the...

Source: Emergency and Disaster Management: Concepts, Methodologies, Tools, and...

View HTMLView PDF

Full-Text

The Effects of Vertical Stress on the Liquefaction Potential Originated from Buildings in The Urban Areas: A Case Study

Mehmet Ozcelik. © 2020. 22 pages.

Main purpose of this paper is to study the influence of vertical stress on soil liquefaction in urban areas. The literature provides limited information on vertical stress analysis of multiple footings, and, as a result, there is no accurate way to account for the effect of the foundation depth on...

Source: Sustainable Infrastructure: Breakthroughs in Research and Practice

View HTMLView PDF

Full-Text

Impact Analysis of Seismic Source Area Extent on Hazard Estimate for Chennai City

C. K. Ramanna, G. R. Dodagoudar. © 2014. 26 pages.

The present work is intended to study the effect of variation of seismic area source zone on hazard value for Chennai, India. In the conventional Cornell-McGuire approach to probabilistic seismic hazard analysis, the seismic activity rate for an area source is most often determined using the...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 5, Issue 1

View HTMLView PDF

Full-Text

Importance of Site-Specific Dynamic Soil Properties for Seismic Ground Response Studies: Ground Response Analysis

Shiv Shankar Kumar, Arindam Dey, A. Murali Krishna. © 2018. 21 pages.

This article highlights the implication of site-specific properties on seismic ground response studies. One-dimensional equivalent linear ground response analysis was carried out using site-specific dynamic properties of locally available soils of Guwahati city, and the results are compared with those...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 9, Issue 1

Full-Text

International Journal of Geotechnical Earthquake Engineering, Volume 1, Issue 2

T.G. Sitharam, J. S. Vinod. © 2010.

Source: International Journal of Geotechnical Earthquake Engineering (IJGEE)

Full-Text

E-Planning and Collaboration: Concepts, Methodologies, Tools, and Applications

Information Resources Management Association. © 2018. 1742 pages.

As population growth accelerates, researchers and professionals face challenges as they attempt to plan for the future. E-planning is a significant component in addressing the key concerns as the world population moves towards urban environments. E-Planning and Collaboration: Concepts, Methodologies...

Reference BookShow Contents

Full-Text

Emergency and Disaster Management: Concepts, Methodologies, Tools, and Applications

Information Resources Management Association. © 2019. 1723 pages.

In a world of earthquakes, tsunamis, and terrorist attacks, emergency response plans are crucial to solving problems, overcoming challenges, and restoring and improving communities that have been affected by these catastrophic events. Although the necessity for quick and efficient aid is understood...

Reference BookShow Contents

Full-Text

Sustainable Infrastructure: Breakthroughs in Research and Practice

Information Resources Management Association. © 2020. 1044 pages.

The continued growth of any nation depends largely on the development of their built infrastructures and communities. By creating stable infrastructures, countries can more easily thrive in competitive international markets. Sustainable Infrastructure: Breakthroughs in Research and Practice examines...

s: 156

Sort by: Re

Full-Text

Natural Resources Management: Concepts, Methodologies, Tools, and Applications

Information Resources Management Association. © 2017. 1647 pages.

The perseveration of our natural environment has become a critical objective of environmental scientists, business owners, and citizens alike. Because we depend on natural resources to survive, uncovering methods for preserving and maintaining these resources has become a focal point to ensure a high...

Reference BookShow Contents

View HTMLView PDF

Full-Text

A Numerical Approach for Simulation of Rock Fracturing in Engineering Blasting

Mani Ram Saharan, Hani Mitri. © 2012. 22 pages.

An approach for simulation of rock fracturing as a result of engineering blasting is presented in this paper. The approach uses element elimination technique within the framework of finite element method to capture the physics of engineering blasting. The approach does not require pre-placement of...

Source: Geotechnical Applications for Earthquake Engineering: Research Advancements

View HTMLView PDF

Full-Text

Intelligent Models Applied to Elastic Modulus of Jointed Rock Mass

Jagan Jayabalan, Sanjiban Sekhar Roy, Pijush Samui, Pradeep Kurup. © 2018. 30 pages.

Elastic Modulus (Ej) of jointed rock mass is a key parameter for deformation analysis of rock mass. This chapter adopts three intelligent models {Extreme Learning Machine (ELM), Minimax Probability Machine Regression (MPMR) and Generalized Regression Neural Network (GRNN)} for determination of Ej of...

Source: Handbook of Research on Trends and Digital Advances in Engineering Geology

View HTMLView PDF

Full-Text

Liquefaction Susceptibility of Silty Sands and Low Plastic Clay Soils

Akhila M., Rangaswamy K., Sankar N. © 2019. 17 pages.

The present study evaluates the liquefaction susceptibility of non-plastic silty sands and low plastic clay soils at different cyclic stress levels under undrained triaxial loading conditions. Six different types of soil combinations were prepared after blending the silt and clay fractions into the...

Source: International Journal of Geotechnical Earthquake Engineering, Volume 10, Issue 2

View HTMLView PDF

Full-Text

Innovations in Recycling for Sustainable Management of Solid Wastes

Nazia Parveen, Dig Vijay Singh, Rifat Azam. © 2020. 34 pages.

Rapid generation and accumulation of waste in developing countries is due to the increase in development, urbanization, industrialization, poor government policies, and population explosion. Various kinds of waste are produced in the developing countries but due to non-availability of ecofriendly...

Source: Innovative Waste Management Technologies for Sustainable Development

Full-Text

Innovative Waste Management Technologies for Sustainable Development

Rouf Ahmad Bhat, Humaira Qadri, Khursheed Ahmad Wani, Gowhar Hamid Dar, Mohammad Aneesul Mehmood. 373 pages.

A rapidly growing population, industrialization, modernization, luxury life style, and overall urbanization are associated with the generation of enhanced wastes. The inadequate management of the ever-growing amount of waste has degraded the quality of the natural resources on a regional, state, and...

Reference Book