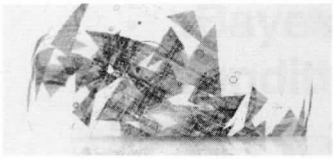


國立高雄科技大學 108. 12. 18 書館期刊

JOURNAL OF
Engineering Mechanics

DECEMBER 2019 • VOLUME 145 • ISSUE 12

Contents

PUBLICATIONS
Angela Cochran, *Managing Director and Publisher*

EDITORIAL DEPARTMENT
Dana Compton, *Editorial Director*
Kelly Anderson, *Executive Editor*
Holly Koppel, *Senior Managing Editor, Peer Review*
Jennifer Chapman, *Managing Editor*
Patricia Jones Kershaw, *Managing Editor*
Taryn Dollings, *Manager, Journal Systems*
Jimmy Cloutier, *Assistant Managing Editor*
Candice Gooch, *Assistant Managing Editor*
Laurie Hertneky, *Assistant Manager, Publications*

PRODUCTION DEPARTMENT
Maxine Aldred, *Director*
Heather DiAngelis, *Senior Manager*
Katie Thacher, *Assistant Manager*
Holly R. Collins, *Production Editor*
Michele Esposito, *Production Editor*
Kathryn Gannon, *Production Editor*
Nikolle Waffle, *Production Editor*

TECHNICAL PAPERS

Bayesian Updating of Structural Model with a Conditionally Heteroscedastic Error Distribution 04019091
Gideon Arthur Lyngdoh, Mohammad Arshad Rahman, and Sudib Kumar Mishra

A Mechanical Approach for Evaluating the Distribution of Confinement Pressure in FRP-Wrapped Rectangular Columns 04019092
Giovanni Minafò, Mohsen Rezaee-Hajidehi, and Giuseppe Giambanco

Seismic Response and Vibration Transmission Characteristics of Laminated Rubber Bearings with Single Disorder 04019093
Lan Ding, Hong-Ping Zhu, and Qiao-yun Wu

Group Velocity–Driven Inverse Metamaterial Design 04019094
Heedong Goh and Loukas F. Kallivokas

Monolithic and Staggered Strategies Using Solid-Shell Formulations for Nonlinear Coupled Thermoelasticity 04019095
Wenya Shu and Ilinca Stanciulescu

Efficient Estimation of Seismic Response of Large-Span Structures Considering the Effect of Multiple-Support Excitation 04019096
Han Qin, Luyu Li, and Billie F. Spencer Jr.

Evaluation and Characterization of Probabilistic Alongwind and Crosswind Responses of Base-Isolated Tall Buildings 04019097
Changda Feng and Xinzhong Chen

Nonlinear Simulation of Viscoelastic Fingering Instability in Miscible Displacement through Homogeneous and Heterogeneous Porous Media 04019098
Hosna Shokri, Mohammad Hassan Kayhani, and Mahmood Norouzi

New Axisymmetric Slip-Line Theory for Metal and Its Application in Indentation Problem 04019099
Guo-Jun Xiong, Jin-Jian Chen, Jian-Hua Wang, and Ming-Guang Li

Nonstationary Seismic Responses of Nonlinear Structural Systems to Modulated Earthquake Excitations 04019100
Siu-Siu Guo, Qingxuan Shi, and Zhao-Dong Xu

Piezoelectric Metamaterial with Negative and Zero Poisson's Ratios 04019101
K. A. Khan, S. Al-Mansoor, S. Z. Khan, and M. A. Khan

Eliminating Beating Effects in Damping Estimation of High-Rise Buildings 04019102
Kang Zhou, Qiu-Sheng Li, and Xiao Li

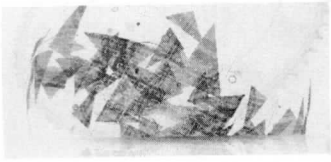
Strength Characteristics of Heat-Affected Zones in Welded Aluminum Connections 04019103
Navid Nazemi and Faouzi Ghrib

Effects of Reynolds Number on Flow-Mediated Interaction between Two Cylinders 04019104
Zhonglu Lin, Dongfang Liang, and Ming Zhao

Graph-Theoretic-Approach-Assisted Gaussian Process for Nonlinear Stochastic Dynamic Analysis under Generalized Loading 04019105
Souvik Chakraborty and Rajib Chowdhury

ASCE
AMERICAN SOCIETY OF CIVIL ENGINEERS

PUBLISHING OFFICE
Journals Department
ASCE
1801 Alexander Bell Drive
Reston, VA 20191-4382
Telephone: (703) 295-6290
Email: journal-services@asce.org



JOURNAL OF
Engineering Mechanics

DECEMBER 2019 • VOLUME 145 • ISSUE 12

Theoretical and Experimental Study on Critical Separation Distance of Adjacent Buildings Based on Seismic Pounding Fragility 04019106
Qiao-Yun Wu, Wan-Cheng He, Min Wei, and Hong-Ping Zhu

Developing New Numerical Modeling for Sloshing Behavior in Two-Dimensional Tanks Based on Nonlinear Finite-Element Method 04019107
Sajedeh Farmani, Mahnaz Ghaeini-Hessaroeyeh, and Saleh Hamzehei-Javaran

Tests and Modeling of Viscoelastic Damper Considering Microstructures and Displacement Amplitude Influence 04019108
Yeshou Xu, Zhao-Dong Xu, Ying-Qing Guo, Yaorong Dong, Teng Ge, and Chao Xu

CASE STUDIES

Prediction of Pore Pressure–Induced Stress Changes during Hydraulic Fracturing of Heterogeneous Reservoirs through Coupled Fluid Flow/Geomechanics 05019001
Zhao Jinzhou, Qiang Wang, Hu Yongquan, Zhao Chaoneng, and Zhao Jin