

Theme 3-2: Experimental and Computational Mechanics - 2023

Title	Authors	Scopus Source title	Source type
INSPECT-SPSW: INelastic Seismic Performance Evaluation Computational Tool for Steel Plate Shear Wall Modeling in OpenSees	AlHamaydeh, M. Maky, A.M. Elkafrawy, M.	Buildings	Journal
Finite element analysis of reinforced concrete deep beams with square web openings using damage plasticity model	Saleh, M. AlHamaydeh, M. Zakaria, M.	Engineering Structures	Journal
Enhancing the Shear Capacity of RC Beams with Web Openings in Shear Zones Using Pre-Stressed Fe-SMA Bars: Numerical Study	Elkafrawy, M. Khalil, A. AlHamaydeh, M. Hawileh, R. Abuzaid, W.	Buildings	Journal
Shear capacity prediction for reinforced concrete deep beams with web openings using artificial intelligence methods	Saleh, M. AlHamaydeh, M. Zakaria, M.	Engineering Structures	Journal
Numerical Investigation of Flexural Behavior of Reinforced Concrete (RC) T-Beams Strengthened with Pre-Stressed Iron-Based (FeMnSiCrNi) Shape Memory Alloy Bars	Khalil, A. Elkafrawy, M. Hawileh, R. AlHamaydeh, M. Abuzaid, W.	Journal of Composites Science	Journal
Constitutive modelling of thermomechanical abnormalities due to dynamic strain aging in commercially pure titanium	Hassan, A. Abed, F.	Journal of Materials Research and Technology	Journal
Constitutive modeling of dynamic strain aging in commercially pure bcc metals	Hassan, A. Abed, F.	Mechanics of Advanced Materials and Structures	Journal
Probabilistic Incremental Dynamic Analysis for Seismic Isolation Systems through Integration with the NHERI-SimCenter Performance-Based Engineering Application	AlHamaydeh, M. Maky, A. Elkafrawy, M.	Buildings	Journal
Heat Transfer in Ultra-High-Performance Concrete-Filled Double-Skin Tubes Under Fire Conditions	Abdelrahman, A.H.A. Ghannam, M. Lotfy, S. AlHamaydeh, M.	Fire Technology	Journal
Axial Compressive Behavior of Slender Circular Columns Made of Green Concrete and Double Layers of Steel and GFRP Reinforcement	Alhamaydeh, M. Awera, Y. Elkafrawy, M.	Journal of Composites for Construction	Journal
Simulation of RC Beams during Fire Events Using a Nonlinear Numerical Fully Coupled Thermal-Stress Analysis	Elshorbagi, M. AlHamaydeh, M.	Fire	Journal
Unsteady aerodynamic analysis and effectiveness of bio-inspired flapping wings in V-formation flight	Billingsley, E. Ghommem, M. Vasconcellos, R. Abdelkefi, A.	Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering	Journal
Broadband piezoelectric energy harvesting microgyroscopes: Design and nonlinear analysis	Serrano, M. Larkin, K. Ghommem, M. Tretiak, S. Abdelkefi, A.	European Journal of Mechanics, A/Solids	Journal
Computational Analysis of Machining Induced Stress Distribution during Dry and Cryogenic Orthogonal Cutting of 7075 Aluminium Closed Cell Syntactic Foams	Thomas, K.K. Kannan, S. Pervaiz, S. Nazzal, M. Karthikeyan, R.	Micromachines	Journal
Machine learning assisted approach to design lattice materials with prescribed band gap characteristics	Shendy, M. Alkhader, M. Abu-Nabah, B.A. Jaradat, M.A. Venkatesh, T.A.	European Journal of Mechanics, A/Solids	Journal
Enhancing the multifunctionality of open-cell foams through tailoring their thermal and mechanical properties using coatings	Al-Osman, O. Alkhader, M. Abuzaid, W.	European Journal of Mechanics, A/Solids	Journal