

Theme 3-2: Experimental and Computational Mechanics - 2022

Title	Authors	Scopus Source title	Volume	Issue	Pages	Publication type
A Finite Element Model for the Analysis of Seepage Flow of Water Under Concrete Dams	Abokwiek, R. Al Sharabati, M. Hawileh, R. Abdalla, J.A. Sabouni, R. Hussein, G.A.	Geotechnical and Geological Engineering	40	5	2823-2841	Article
Replaceable fuse buckling-restrained brace (BRB): Experimental cyclic qualification testing and NLFEA modeling	Al-Sadoon, Z.A. Saboor Karzad, A. Sagheer, A. AlHamaydeh, M.	Structures	39	-	997-1015	Article
Nonlinear Finite Element Analysis (NLFEA) of Pre-stressed RC Beams Reinforced with Iron-Based Shape Memory Alloy (Fe-SMA)	Elkafrawy, M.E. Mohsen Khalil, A. Abuzaid, W. Hawileh, R.A. Alhamaydeh, M.	2022 Advances in Science and Engineering Technology International Conferences, ASET 2022	-	-	-	Conference Paper
Finite Element Modeling and Prediction of Tensile Behavior of PE-ECC Dogbones	Mahmoudi, F. Selim, A.H. Abdalla, J.A. Hawileh, R.A. Abed, F. Kyaure, M.	2022 Advances in Science and Engineering Technology International Conferences, ASET 2022	-	-	-	Conference Paper
Finite Element Modeling of Engineered Cementitious Composite (ECC) Prisms and Beams	Selim, A.H. Mahmoudi, F. Abdalla, J.A. Hawileh, R.A. Abed, F. Kyaure, M.	2022 Advances in Science and Engineering Technology International Conferences, ASET 2022	-	-	-	Conference Paper
FEA Investigation of Elastic Buckling for Functionally Graded Material (FGM) Thin Plates with Different Hole Shapes under Uniaxial Loading	Elkafrawy, M. Alashkar, A. Hawileh, R. Alhamaydeh, M.	Buildings	12	-	6	Article
A Finite Element Model for the Analysis of Seepage Flow of Water Under Concrete Dams	Abokwiek, R. Al Sharabati, M. Hawileh, R. Abdalla, J.A. Sabouni, R. Hussein, G.A.	Geotechnical and Geological Engineering	40	5	2823-2841	Article
AI-based shear capacity of FRP-reinforced concrete deep beams without stirrups	AlHamaydeh, M. Markou, G. Bakas, N. Papadarakakis, M.	Engineering Structures	264	-	-	Article
Three dimensional finite element analyses of ground settlement and structural damage caused by irrigation of desert landscapes overlying collapsible soil strata	Vandanapu, R. Omer, J.R. Attom, M.F.	International Journal of Geotechnical Engineering	16	1	90-102	Article
FEA of Strengthened RC Columns with PBO FRCM Exposed to Fire	Talo, R. Khalaf, S. Kyaure, M. Abed, F.	2022 Advances in Science and Engineering Technology International Conferences, ASET 2022	-	-	-	Conference Paper
Buckling Analysis of Functionally Graded Materials (FGM) Thin Plates with Various Circular Cutout Arrangements	Alashkar, A. Elkafrawy, M. Hawileh, R. Alhamaydeh, M.	Journal of Composites Science	6	-	9	Article
Heat Transfer Analysis of Reinforced Concrete Walls in ANSYS and ABAQUS: A Comparative Study	Assad, M. Hawileh, R.A. Abdalla, J.A. Abed, F.	2022 Advances in Science and Engineering Technology International Conferences, ASET 2022	-	-	-	Conference Paper
Novel evaluation of mass polar moment of inertia of the drive plate in resonant column	Khan, Z.H. Cascante, G. Ahmed, R.E.	Geotechnique Letters	12	3	1-5	Article
Finite Element Simulation of FRP-Strengthened Thin RC Slabs	Assad, M. Hawileh, R. Abdalla, J.	Journal of Composites Science	6	-	9	Article
FINITE ELEMENT ANALYSIS OF FRCM RETROFITTED PRE-DAMAGED SLENDER CIRCULAR RC COLUMNS	Kyaure, M. Abed, F.	Proceedings of International Structural Engineering and Construction	9	1	48-STR-48-6	Conference Paper
PROOF-OF-CONCEPT AND EXPERIMENTAL QUALIFICATION FOR A REPAIRABLE BUCKLING RESTRAINED BRACE (BRB)	Al-Sadoon, Z.A. Karzad, A.S. Sagheer, A. Alhamaydeh, M.	CESARE Conference Publications	-	-	-	Conference Paper
Dynamic Properties of Calcareous Sands from Urban Areas of Abu Dhabi	Khalil, A. Khan, Z.H. Attom, M. El Emam, M. Fattah, K.	Applied Sciences (Switzerland)	12	-	7	Article
Numerical investigation of hydrodynamic performance of flapping foils for energy harvesting	Farooq, H. Ghommem, M. Khalid, M.S.U. Akhtar, I.	Ocean Engineering	260	-	-	Article
A novel multi-flapping-wing air vehicle: conceptual design and aerodynamic analysis	Billingsley, E. Ghommem, M. Vasconcellos, R. Abdelkefi, A.	AIAA Science and Technology Forum and Exposition, AIAA SciTech Forum 2022	-	-	-	Conference Paper
Stress Concentration Induced by Synergistically Interacting Geometric Discontinuities	Shendy, M. Alkhalder, M. Abu-Nabab, B.A.	2022 Advances in Science and Engineering Technology International Conferences, ASET 2022	-	-	-	Conference Paper
Nonlinear modeling and effective design of dual-functional piezoelectric energy harvesting microscopes	Serrano, M. Larkin, K. Ghommem, M. Tretiak, S. Abdelkefi, A.	AIAA Science and Technology Forum and Exposition, AIAA SciTech Forum 2022	-	-	-	Conference Paper
Wrinkling suppression in thin membranes using designed geometrical features	Nazzal, M. Alkhalder, M. Agha, A. Abu-Farha, F. Ali, Z. AlDamaty, W.	Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science	236	19	10163-10174	Article
Utilizing aluminum sheets with FeCu deposits as cheap water cleaning electrodes	Hawili, A.A. Ghommem, M. Alami, A.H. Alasad, S. Eglimez, M. Zaid, W.A.	Applied Surface Science Advances	7	-	-	Article
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	-	-	-	Article