

### Theme 3-2: Experimental and Computational Mechanics - 2020

Title	Authors	Scopus Source title	Volume	Issue	Pages	Source type	Publication type	Open Access
Prediction of shear strength and behavior of RC beams strengthened with externally bonded FRP sheets using machine learning techniques	Abuodeh, O.R.   Abdalla, J.A.   Hawileh, R.A.	Composite Structures	234	-	-	Journal	Article	
Assessment of compressive strength of Ultra-high Performance Concrete using deep machine learning techniques	Abuodeh, O.R.   Abdalla, J.A.   Hawileh, R.A.	Applied Soft Computing Journal	95	-	-	Journal	Article	
Performance of preloaded CFRP-strengthened fiber reinforced concrete beams	Helal, K.   Yehia, S.   Hawileh, R.   Abdalla, J.	Composite Structures	244	-	-	Journal	Article	
Flexural strengthening of reinforced concrete beams with externally bonded hybrid systems	Abdalla, J.A.   Mohammed, A.   Hawileh, R.A.	Procedia Structural Integrity	28	-	2312-2319	Conference Proceeding	Conference Paper	Gold
Lap splices in confined self-compacting lightweight concrete	Nawaz, W.   Yehia, S.   Elchalakani, M.	Construction and Building Materials	263	-	-	Journal	Article	
A Bayesian model for truncated regression for the estimation of empirical ground-motion models	Kuehn, N.M.   Kishida, T.   AlHamaydeh, M.   Lavrentiadis, G.   Bozorgnia, Y.	Bulletin of Earthquake Engineering	18	14	6149-6179	Journal	Article	
Ballistic behavior of plain and reinforced concrete slabs under high velocity impact	Ducif, C.   Mauludin, L.M.   Abed, F.	Frontiers of Structural and Civil Engineering	14	2	299-310	Journal	Article	
Performance of MMFX Steel Rebar at Elevated Temperatures	Abed, F.   Abdul-Latif, A.   Voyiadjis, G.Z.	Journal of Engineering Mechanics	146	11	-	Journal	Article	
Lateral Response of Drilled Shafts in A Moving Cohesive Soil	Yamin, M.M.   Attom, M.F.   Khan, Z.	International Journal of Civil Engineering	18	7	735-742	Journal	Article	
Finite element analysis of a thin-shell concrete sandwich panel under eccentric loading	Alchaar, A.   Abed, F.	Journal of Building Engineering	32	-	-	Journal	Article	
Up-to-date earthquake and focal mechanism solutions datasets for the assessment of seismic hazard in the vicinity of the United Arab Emirates	Sawires, R.   Peláez, J.A.   AlHamaydeh, M.   Henares, J.	Data in Brief	28	-	-	Journal	Data Paper	Gold Green
Axial capacity of circular concrete columns reinforced with GFRP bars and spirals using FEA	Awera, Y.   Abed, F.	2020 Advances in Science and Engineering Technology International Conferences, ASET 2020	-	-	-	Conference Proceeding	Conference Paper	
Performance of steel fiber reinforced lightweight concrete exposed to elevated temperature	Yehia, S.   Elsayed, O.   Oways, I.   Mohamed, R.   Alshar, M.   Alhamad, A.	Proceedings of the fib Symposium 2020: Concrete Structures for Resilient Society	-	-	204-209	Conference Proceeding	Conference Paper	
Efficacy of sand columns to increase the sub-soil moisture content of clay	Attom, M.F.   Khan, Z.   Vandanapu, R.	SN Applied Sciences	2	5	-	Journal	Article	Bronze
Effect of admixture's formulation on the damping of engineered sand	Khan, Z.   Attom, M.   El Emam, M.	International Journal of Geotechnical Engineering	14	3	322-328	Journal	Article	
FE modeling of concrete beams reinforced in flexure using BFRP bars	Mhanna, H.H.   Alkhraisha, H.   Abed, F.	2020 Advances in Science and Engineering Technology International Conferences, ASET 2020	-	-	-	Conference Proceeding	Conference Paper	
Vibration suppression and optimization of conserved-mass metamaterial beam	Basta, E.E.   Ghommem, M.   Emam, S.A.	International Journal of Non-Linear Mechanics	120	-	-	Journal	Article	
Nonlinear size dependent analysis and effectiveness of nanocrystalline micro/nanogroscopes	Larkin, K.   Ghommem, M.   Hunter, A.   Abdelkefi, A.	Physica E: Low-Dimensional Systems and Nanostructures	117	-	-	Journal	Article	Bronze Green
Vibration suppression of nonlinear rotating metamaterial beams	Basta, E.   Ghommem, M.   Emam, S.	Nonlinear Dynamics	101	1	311-332	Journal	Article	
Modeling and experimental comparative analysis on the performance of small-scale wind turbines	Basta, E.   Ghommem, M.   Romdhane, L.   Abdelkefi, A.	Wind and Structures, An International Journal	30	3	261-273	Journal	Article	
Nonlinear modeling and performance analysis of cracked beam microgroscopes	Larkin, K.   Ghommem, M.   Hunter, A.   Abdelkefi, A.	International Journal of Mechanical Sciences	188	-	-	Journal	Article	Bronze
Multifidelity modeling and comparative analysis of electrically coupled microbeams under squeeze-film damping effect	Najar, F.   Ghommem, M.   Abdelkefi, A.	Nonlinear Dynamics	99	1	445-460	Journal	Article	
Hydrodynamic modeling and performance analysis of bio-inspired swimming	Ghommem, M.   Bourantas, G.   Wittek, A.   Miller, K.   Hajj, M.R.	Ocean Engineering	197	-	-	Journal	Article	Green
Modeling of fiber bridging in fluid flow for well stimulation applications	Ghommem, M.   Abbad, M.   Aidagulov, G.   Dyer, S.   Brady, D.	Petroleum Science	17	3	671-686	Journal	Article	Gold Green
Computational modeling and optimization of small-scale wind turbines for low-power applications	Yossri, W.   Ayed, S.B.   Ghommem, M.   Abdelkefi, A.	AIAA AVIATION 2020 FORUM	1	-	-	Conference Proceeding	Conference Paper	