

### Theme 3-2: Experimental and Computational Mechanics - 2021

Title	Authors	Scopus Source title	Volume	Issue	Pages	Source type	Publication type	Open Access
Absorption and Spreading of a Liquid Droplet over a Thick Porous Substrate	Chebbi, R.	ACS Omega	6	7	4649-4655	Journal	Article	Green
Modeling strategies of finite element simulation of reinforced concrete beams strengthened with frp: A review	Naser, M.Z.   Hawileh, R.A.   Abdalla, J.	Journal of Composites Science	5	1 -	-	Journal	Review	Gold
StructuresNet and FireNet: Benchmarking databases and machine learning algorithms in structural and fire engineering domains	Naser, M.Z.   Kodur, V.J.   Thai, H.T.   Hawileh, R.   Abdalla, J.   Degtyarev, V.V.	Journal of Building Engineering	44	-	-	Journal	Article	
FE modeling of concrete beams and columns reinforced with FRP composites	Abed, F.   Oucif, C.   Awera, Y.   Mhamma, H.H.   Alkhraisha, H.	Defence Technology	17	1	1-14	Journal	Article	Gold
Damage modeling of ballistic penetration and impact behavior of concrete panel under low and high velocities	Oucif, C.   Kalyana Rama, J.S.   Shankar Ram, K.   Abed, F.	Defence Technology	17	1	202-211	Journal	Article	Gold
Finite element parametric analysis of RC columns strengthened with FRCM	Kyaure, M.   Abed, F.	Composite Structures	275	-	-	Journal	Article	
FE Modeling of RC Beams Reinforced in Flexure with BFRP Bars Exposed to Harsh Conditions	Alkhraisha, H.   Mhamma, H.   Abed, F.	Sustainable Civil Infrastructures	-	-	3-13	Book Series	Chapter	
Nonlinear finite element models of reinforced concrete beams strengthened in bending with mechanically fastened aluminum alloy plates	Abuodeh, O.R.   Hawileh, R.A.   Abdalla, J.A.	Computers and Structures	253	-	-	Journal	Article	
Laboratory simulation of the influence of groundwater rise and drip irrigation on the settlement of a sample of collapsible desert soil	Vandanapu, R.   Omer, J.R.   Attom, M.F.	International Journal of Geotechnical Engineering	15	6	760-766	Journal	Article	Green
Probabilistic-Based Approach for Evaluating the Thermal Response of Concrete Slabs under Fire Loading	Karaki, G.   Hawileh, R.A.   Kodur, V.K.R.	Journal of Structural Engineering (United States)	147	7	-	Journal	Article	
The effect of compaction effort on shear strength parameters of low/high plasticity clay Soils	Yamin, M.   Attom, M.F.   Atabay, S.   Vandanapu, R.	Geotechnical Engineering	52	2	1-8	Journal	Article	
Models for predicting strength of RC columns strengthened with NSM-CFRP strips and CFRP-fabric wraps	Abdalla, J.A.   Abokwiek, R.   Hawileh, R.A.	Procedia Structural Integrity	37C	-	660-667	Conference Proceeding	Conference Paper	Gold
Applicability of codes equations to calculate concrete shear strength of fiber reinforced recycled aggregate concrete	Ghoneim, M.   Yehia, A.   Yehia, S.   Abuzaid, W.	fib Symposium	2021-	-	652-660	Conference Proceeding	Conference Paper	
A review on vibrating beam-based micro/nano-gyroscopes	Larkin, K.   Ghommem, M.   Serrano, M.   Abdelkefi, A.	Microsystem Technologies	27	12	4157-4181	Journal	Review	
Flutter control and mitigation of limit cycle oscillations in aircraft wings using distributed vibration absorbers	Basta, E.   Ghommem, M.   Eman, S.	Nonlinear Dynamics	106	3	1975-2003	Journal	Article	
Hybrid tail excitation for robotic fish: Modeling and performance analysis	Basta, E.   Ghommem, M.   Romdhane, L.   Hajj, M.R.	Ocean Engineering	234	-	-	Journal	Article	
On the aerodynamic analysis and conceptual design of bioinspired multi-flapping-wing drones	Billingsley, E.   Ghommem, M.   Vasconcellos, R.   Abdelkefi, A.	Drones	5	3	-	Journal	Article	Green
Toward better learning opportunities for undergraduate mechanical engineering students: A case study	Ghommem, M.   Gunn, C.	International Journal of Mechanical Engineering Education	49	3	195-213	Journal	Article	
Role of active morphing in the aerodynamic performance of flapping wings in formation flight	Billingsley, E.   Ghommem, M.   Vasconcellos, R.   Abdelkefi, A.	Drones	5	3	-	Journal	Article	Gold
Optimal aerodynamic design of multi-flapping wing vehicles with morphing capabilities	Billingsley, E.   Ghommem, M.   Vasconcellos, R.   Abdelkefi, A.	AIAA Scitech 2021 Forum	-	-	1-9	Conference Proceeding	Conference Paper	
Crack severity and size dependent effects on the effectiveness and operability of micro/nanogyroscopes	Larkin, K.   Ghommem, M.   Hunter, A.   Abdelkefi, A.	International Journal of Solids and Structures	216	-	94-107	Journal	Article	Bronze   Green
Biomimicry and aerodynamic performance of multi-flapping wing drones	Billingsley, E.   Ghommem, M.   Vasconcellos, R.   Abdelkefi, A.	AIAA Scitech 2021 Forum	-	-	1-8	Conference Proceeding	Conference Paper	