Ramin Sedaghati

List of Publications by Year
in descending order

59	1,397	304743	377865
papers	citations	22	34
		h-index	g-index

59	59	59	1085
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Development of an RVE using a DEMâ€"FEM scheme under modified approximate periodic boundary condition to estimate the elastic mechanical properties of open foams. Engineering With Computers, 2022, 38, 1767-1785.	6.1	3
2	Development of New Phenomenological Models for Predicting Magnetic Permeability of Isotropic and Anisotropic Magneto-Rheological Elastomers. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-10.	4.7	7
3	Vertical Transient Response Analysis of a Cracked Jeffcott Rotor Based on Improved Empirical Mode Decomposition. Vibration, 2022, 5, 408-428.	1.9	0
4	A novel methodology for accurate estimation of magnetic permeability of magnetorheological elastomers. Journal of Magnetism and Magnetic Materials, 2022, 560, 169669.	2.3	7
5	Neural-Network-Based Sliding-Mode Control of an Uncertain Robot Using Dynamic Model Approximated Switching Gain. IEEE Transactions on Cybernetics, 2021, 51, 2339-2346.	9.5	73
6	Finite deformation analysis of isotropic magnetoactive elastomers. Continuum Mechanics and Thermodynamics, 2021, 33, 163-178.	2.2	5
7	Characterization and modeling of hard magnetic particleâ€"based magnetorheological elastomers. Journal of Intelligent Material Systems and Structures, 2021, 32, 909-920.	2.5	4
8	A non-uniform cellular automata framework for topology and sizing optimization of truss structures subjected to stress and displacement constraints. Computers and Structures, 2021, 242, 106394.	4.4	9
9	Effect of pre-strain on compression mode properties of magnetorheological elastomers. Polymer Testing, 2021, 93, 106888.	4.8	19
10	Transversely isotropic magnetoactive elastomers: theory and experiments. Archive of Applied Mechanics, 2021, 91, 375-392.	2.2	7
11	Compensation of Magnetic Force of an Electromagnet for Compression Mode Characterization of Magnetorheological Elastomers. IEEE Transactions on Magnetics, 2021, 57, 1-14.	2.1	9
12	Dynamic analysis of a functionally graded piezoelectric energy harvester under magnetic interaction. Journal of Intelligent Material Systems and Structures, 2021, 32, 986-1000.	2.5	5
13	Effects of iron particlesâ€™ volume fraction on compression mode properties of magnetorheological elastomers. Journal of Magnetism and Magnetic Materials, 2021, 522, 167552.	2.3	14
14	Adaptive dynamic moduli of magnetorheological elastomers: From experimental identification to microstructure-based modeling. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 267, 115083.	3.5	4
15	A novel semi-active switching control scheme for magnetorheological elastomer-based vibration isolator under dynamic input saturation. Smart Materials and Structures, 2021, 30, 095008.	3.5	5
16	Effect of shape factor on compression mode dynamic properties of magnetorheological elastomers. Journal of Intelligent Material Systems and Structures, 2021, 32, 1678-1699.	2.5	7
17	Temperature dependency of magnetorheological fluidsâ€™ properties under varying strain amplitude and rate. Journal of Magnetism and Magnetic Materials, 2020, 498, 166109.	2.3	21
18	Dynamic characterization of isotropic and anisotropic magnetorheological elastomers in the oscillatory squeeze mode superimposed on large static pre-strain. Composites Part B: Engineering, 2020, 182, 107648.	12.0	51

#	Article	IF	Citations
19	Multidisciplinary Design Optimization of a Novel Sandwich Beam-Based Adaptive Tuned Vibration Absorber Featuring Magnetorheological Elastomer. Materials, 2020, 13, 2261.	2.9	16
20	Analysis and design optimization of double-sided deep cold rolling process of a Ti-6Al-4V blade. International Journal of Advanced Manufacturing Technology, 2020, 108, 2103-2120.	3.0	7
21	Development of a small-deformation material model for an isotropic magneto-active elastomer. Acta Mechanica, 2020, 231, 2287-2301.	2.1	3
22	Development and Control of Magnetorheological Elastomer-Based Semi-active Seat Suspension Isolator Using Adaptive Neural Network. Frontiers in Materials, 2020, 7, .	2.4	15
23	Design optimization and experimental characterization of a rotary magneto-rheological fluid damper to control torsional vibration. Smart Materials and Structures, 2020, 29, 045010.	3.5	9
24	Characterization and modeling of temperature effect on the shear mode properties of magnetorheological elastomers. Smart Materials and Structures, 2020, 29, 115001.	3.5	13
25	A novel magnetorheological elastomer-based adaptive tuned vibration absorber: design, analysis and experimental characterization. Smart Materials and Structures, 2020, 29, 115042.	3.5	9
26	Design optimization of a bi-fold MR energy absorber subjected to impact loading for skid landing gear applications. Smart Materials and Structures, 2019, 28, 035031.	3.5	9
27	Modeling and dynamic analysis of a vehicle-flexible pavement coupled system subjected to road surface excitation. Journal of Mechanical Science and Technology, 2019, 33, 3115-3125.	1.5	19
28	Experimental characterization and microscale modeling of isotropic and anisotropic magnetorheological elastomers. Composites Part B: Engineering, 2019, 176, 107311.	12.0	49
29	Development of a field dependent Prandtl-Ishlinskii model for magnetorheological elastomers. Materials and Design, 2019, 166, 107608.	7.0	38
30	Modeling pavement damage and predicting fatigue cracking of flexible pavements based on a combination of deterministic method with stochastic approach using Miner's hypothesis. SN Applied Sciences, 2019, 1, 1.	2.9	5
31	Investigation on thermal relaxation of residual stresses induced in deep cold rolling of Ti–6Al–4V alloy. International Journal of Advanced Manufacturing Technology, 2019, 100, 877-893.	3.0	14
32	On sound insulation of pyramidal lattice sandwich structure. Composite Structures, 2019, 208, 385-394.	5.8	78
33	On the properties of magnetorheological elastomers in shear mode: Design, fabrication and characterization. Composites Part B: Engineering, 2019, 159, 269-283.	12.0	107
34	Development, optimization, and control of a novel magnetorheological brake with no zero-field viscous torque for automotive applications. Journal of Intelligent Material Systems and Structures, 2018, 29, 3199-3213.	2.5	22
35	Dynamic analysis of an SDOF helicopter model featuring skid landing gear and an MR damper by considering the rotor lift factor and a Bingham number. Smart Materials and Structures, 2018, 27, 065013.	3.5	13
36	A comprehensive review of finite element modeling of orthogonal machining process: chip formation and surface integrity predictions. International Journal of Advanced Manufacturing Technology, 2018, 96, 3747-3791.	3.0	63

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37	Finite element analysis and response surface method for robust multi-performance optimization of radial turning of hard 300M steel. International Journal of Advanced Manufacturing Technology, 2018, 94, 2457-2474.	3.0	28
38	Vibration analysis and optimal design of multi-layer plates partially treated with the MR fluid. Mechanical Systems and Signal Processing, 2017, 82, 80-102.	8.0	24
39	Vibration behavior of a two-crack shaft in a rotor disc-bearing system. Mechanism and Machine Theory, 2017, 113, 67-84.	4.5	27
40	Vibro-acoustic topology optimization of sandwich panels partially treated with MR fluid and silicone rubber core layer. Smart Materials and Structures, 2017, 26, 125015.	3.5	6
41	Sound transmission analysis of MR fluid based-circular sandwich panels: Experimental and finite element analysis. Journal of Sound and Vibration, 2017, 408, 43-59.	3.9	12
42	Multi-objective design optimization and control of magnetorheological fluid brakes for automotive applications. Smart Materials and Structures, 2017, 26, 125012.	3.5	31
43	Design Optimization of a Magneto-Rheological Fluid Brake for Vehicle Applications. , 2016, , .		7
44	Development of a new torsional vibration damper incorporating conventional centrifugal pendulum absorber and magnetorheological damper. Journal of Intelligent Material Systems and Structures, 2016, 27, 980-992.	2.5	14
45	An accurate technique for pre-yield characterization of MR fluids. Smart Materials and Structures, 2015, 24, 065018.	3.5	28
46	Practical hysteresis model for magnetorheological dampers. Journal of Intelligent Material Systems and Structures, 2014, 25, 967-979.	2.5	21
47	Design optimization of magnetorheological fluid valves using response surface method. Journal of Intelligent Material Systems and Structures, 2014, 25, 1352-1371.	2.5	24
48	Vibration Control on Smart Civil Structures: A Review. Mechanics of Advanced Materials and Structures, 2014, 21, 23-38.	2.6	51
49	Finite element analysis and design optimization of low plasticity burnishing process. International Journal of Advanced Manufacturing Technology, 2014, 70, 1337-1354.	3.0	44
50	Fused empirical mode decomposition and wavelets for locating combined damage in a truss-type structure through vibration analysis. Journal of Zhejiang University: Science A, 2013, 14, 615-630.	2.4	36
51	Vibration analysis and design optimization of sandwich beams with constrained viscoelastic core layer. Journal of Sandwich Structures and Materials, 2013, 15, 203-228.	3.5	27
52	Vibration control of Timoshenko beam traversed by moving vehicle using optimized tuned mass damper. JVC/Journal of Vibration and Control, 2012, 18, 757-773.	2.6	20
53	Nonlinear free vibration analysis of sandwich shell structures with a constrained electrorheological fluid layer. Smart Materials and Structures, 2012, 21, 075035.	3.5	27
54	Optimal vibration control of beams with total and partial MR-fluid treatments. Smart Materials and Structures, 2011, 20, 115016.	3.5	43

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55	Vibration analysis of a partially treated multi-layer beam with magnetorheological fluid. Journal of Sound and Vibration, 2010, 329, 3451-3469.	3.9	95
56	Analytical and Experimental Study Using Output-Only Modal Testing for On-Orbit Satellite Appendages. Advances in Acoustics and Vibration, 2009, 2009, 1-10.	0.5	1
57	Optimal Vibration Suppression of Timoshenko Beam With Tuned-Mass-Damper Using Finite Element Method. Journal of Vibration and Acoustics, Transactions of the ASME, 2009, 131, .	1.6	13
58	Design of laminated composite structures for optimum fiber direction and layer thickness, using optimality criteria. Structural and Multidisciplinary Optimization, 2008, 36, 159-167.	3.5	32
59	Corotational non-linear analysis of thin plates and shells using a new shell element. International Journal for Numerical Methods in Engineering, 2007, 69, 859-885.	2.8	47