

Mostafa Baghani

List of Publications by Year in descending order

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191
papers

3,349
citations

159585

30
h-index

276875

41
g-index

192
all docs

192
docs citations

192
times ranked

1752
citing authors

#	ARTICLE	IF	CITATIONS
1	A thermodynamically-consistent 3D constitutive model for shape memory polymers. International Journal of Plasticity, 2012, 35, 13-30.	8.8	128
2	Analytical study on size-dependent static pull-in voltage of microcantilevers using the modified couple stress theory. International Journal of Engineering Science, 2012, 54, 99-105.	5.0	126
3	Performance enhancement of the double-layered micro-channel heat sink by use of tapered channels. Applied Thermal Engineering, 2016, 102, 1345-1354.	6.0	63
4	A constitutive model for shape memory polymers with application to torsion of prismatic bars. Journal of Intelligent Material Systems and Structures, 2012, 23, 107-116.	2.5	51
5	A comprehensive experimental investigation on 4D printing of PET-G under bending. Journal of Materials Research and Technology, 2022, 18, 2552-2569.	5.8	49
6	Shape memory characterization of poly(ϵ -caprolactone) (PCL)/polyurethane (PU) in combined torsion-tension loading with potential applications in cardiovascular stent. Polymer Testing, 2018, 68, 424-432.	4.8	48
7	Strain gradient elasticity solution for functionally graded micro-cylinders. International Journal of Engineering Science, 2012, 50, 22-30.	5.0	47
8	Inhomogeneous and homogeneous swelling behavior of temperature-sensitive poly-(N-isopropylacrylamide) hydrogels. Journal of Intelligent Material Systems and Structures, 2016, 27, 324-336.	2.5	47
9	Modeling and homogenization of shape memory polymer nanocomposites. Composites Part B: Engineering, 2016, 91, 36-43.	12.0	46
10	4D printing of PET-G via FDM including tailormade excess third shape. Manufacturing Letters, 2022, 33, 1-4.	2.2	46
11	Large amplitudes free vibrations and post-buckling analysis of unsymmetrically laminated composite beams on nonlinear elastic foundation. Applied Mathematical Modelling, 2011, 35, 130-138.	4.2	44
12	Assessment of controllable shape transformation, potential applications, and tensile shape memory properties of 3D printed PETG. Journal of Materials Research and Technology, 2022, 18, 4201-4215.	5.8	42
13	Analytical and numerical analysis of swelling-induced large bending of thermally-activated hydrogel bilayers. International Journal of Solids and Structures, 2016, 99, 1-11.	2.7	41
14	Transient swelling response of pH-sensitive hydrogels: A monophasic constitutive model and numerical implementation. International Journal of Pharmaceutics, 2020, 577, 119030.	5.2	41
15	On the directional elastic modulus of the TPMS structures and a novel hybridization method to control anisotropy. Materials and Design, 2021, 210, 110074.	7.0	39
16	Shape memory performance of PETG 4D printed parts under compression in cold, warm, and hot programming. Smart Materials and Structures, 2022, 31, 085002.	3.5	39
17	A semi-analytical study on helical springs made of shape memory polymer. Smart Materials and Structures, 2012, 21, 045014.	3.5	38
18	An analytical solution for shape-memory-polymer Euler-Bernoulli beams under bending. International Journal of Mechanical Sciences, 2014, 84, 84-90.	6.7	38

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19	An experimental investigation on structural design of shape memory polymers. <i>Smart Materials and Structures</i> , 2019, 28, 095017.	3.5	38
20	Finite bending of bilayer pH-responsive hydrogels: A novel analytic method and finite element analysis. <i>Composites Part B: Engineering</i> , 2017, 110, 116-123.	12.0	37
21	Force recovery evaluation of thermo-induced shape-memory polymer stent: material, process and thermo-viscoelastic characterization. <i>Smart Materials and Structures</i> , 2019, 28, 095022.	3.5	37
22	A viscoelastic constitutive model for compressible polymers based on logarithmic strain and its finite element implementation. <i>Finite Elements in Analysis and Design</i> , 2012, 62, 18-27.	3.2	36
23	A large deformation framework for shape memory polymers: Constitutive modeling and finite element implementation. <i>Journal of Intelligent Material Systems and Structures</i> , 2013, 24, 21-32.	2.5	36
24	Inhomogeneous swelling behavior of temperature sensitive PNIPAM hydrogels in micro-valves: analytical and numerical study. <i>Smart Materials and Structures</i> , 2015, 24, 045004.	3.5	36
25	Closed form solutions for large deformation of cylinders under combined extension-torsion. <i>International Journal of Mechanical Sciences</i> , 2019, 157-158, 336-347.	6.7	36
26	A finite deformation constitutive model for shape memory polymers based on Hencky strain. <i>Mechanics of Materials</i> , 2014, 73, 1-10.	3.2	35
27	Numerical homogenization of coiled carbon nanotube reinforced shape memory polymer nanocomposites. <i>Smart Materials and Structures</i> , 2019, 28, 035026.	3.5	35
28	An experimental–numerical study on shape memory behavior of PU/PCL/ZnO ternary blend. <i>Journal of Intelligent Material Systems and Structures</i> , 2019, 30, 116-126.	2.5	34
29	Effective thermal and mechanical properties of short carbon fiber/natural rubber composites as a function of mechanical loading. <i>Applied Thermal Engineering</i> , 2017, 117, 8-16.	6.0	33
30	Coupling behavior of the pH/temperature sensitive hydrogels for the inhomogeneous and homogeneous swelling. <i>Smart Materials and Structures</i> , 2016, 25, 085034.	3.5	32
31	On the Correlation of FEM and Experiments for Hyperelastic Elastomers. <i>Experimental Mechanics</i> , 2017, 57, 195-206.	2.0	31
32	Swelling-induced finite bending of functionally graded pH-responsive hydrogels: a semi-analytical method. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2019, 40, 679-694.	3.6	31
33	A comprehensive review on thermomechanical constitutive models for shape memory polymers. <i>Journal of Intelligent Material Systems and Structures</i> , 2020, 31, 1243-1283.	2.5	31
34	Force and multiple-shape-recovery in shape-memory-polymers under finite deformation torsion-extension. <i>Smart Materials and Structures</i> , 2020, 29, 055011.	3.5	31
35	Size-Dependent Vibration Analysis of FG Microbeams in Thermal Environment Based on Modified Couple Stress Theory. <i>Iranian Journal of Science and Technology - Transactions of Mechanical Engineering</i> , 2019, 43, 761-771.	1.3	30
36	Constitutive Modeling of multi-stimuli-responsive shape memory polymers with multi-functional capabilities. <i>International Journal of Mechanical Sciences</i> , 2021, 192, 106082.	6.7	30

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37	Multiple Shape Memory Effect for Smart Helical Springs with Variable Stiffness over Time and Temperature. <i>International Journal of Mechanical Sciences</i> , 2020, 182, 105742.	6.7	30
38	Finite strain numerical analysis of elastomeric bushings under multi-axial loadings: a compressible visco-hyperelastic approach. <i>International Journal of Mechanics and Materials in Design</i> , 2013, 9, 385-399.	3.0	29
39	Study of non-uniform viscoelastic nanoplates vibration based on nonlocal first-order shear deformation theory. <i>Meccanica</i> , 2017, 52, 1063-1077.	2.0	29
40	Integral sliding mode control for nonlinear damped model of arch microbeams. <i>Microsystem Technologies</i> , 2019, 25, 57-68.	2.0	29
41	Study on pH-sensitive hydrogel micro-valves: A fluid-structure interaction approach. <i>Journal of Intelligent Material Systems and Structures</i> , 2017, 28, 1589-1602.	2.5	28
42	Hygrothermal aging effects on the mechanical properties of 3D printed composites with different stacking sequence of continuous glass fiber layers. <i>Polymer Testing</i> , 2021, 100, 107242.	4.8	28
43	Effect of nanofiller geometry on the energy absorption capability of coiled carbon nanotube composite material. <i>Composites Science and Technology</i> , 2017, 153, 222-231.	7.8	27
44	Computational analysis of vincristine loaded silk fibroin hydrogel for sustained drug delivery applications: Multiphysics modeling and experiments. <i>International Journal of Pharmaceutics</i> , 2021, 609, 121184.	5.2	27
45	Modeling of human intervertebral disc annulus fibrosus with complex multi-fiber networks. <i>Acta Biomaterialia</i> , 2021, 123, 208-221.	8.3	26
46	Application of the variational iteration method for nonlinear free vibration of conservative oscillators. <i>Scientia Iranica</i> , 2012, 19, 513-518.	0.4	25
47	Dynamic and Stability Analysis of the Rotating Nanobeam in a Nonuniform Magnetic Field Considering the Surface Energy. <i>International Journal of Applied Mechanics</i> , 2016, 08, 1650048.	2.2	25
48	Continuum damage-healing constitutive modeling for concrete materials through stress spectral decomposition. <i>International Journal of Damage Mechanics</i> , 2016, 25, 900-918.	4.2	25
49	Developing a fast response SMA-actuated rotary actuator: modeling and experimental validation. <i>Meccanica</i> , 2018, 53, 305-317.	2.0	25
50	Crack self-healing of thermo-responsive shape memory polymers with application to control valves, filtration, and drug delivery capsule. <i>European Journal of Mechanics, A/Solids</i> , 2021, 85, 104093.	3.7	25
51	Thermomechanical analysis of hyperelastic thick-walled cylindrical pressure vessels, analytical solutions and FEM. <i>International Journal of Mechanical Sciences</i> , 2017, 130, 426-436.	6.7	24
52	Implementing Stretch-Based Strain Energy Functions in Large Coupled Axial and Torsional Deformations of Functionally Graded Cylinder. <i>International Journal of Applied Mechanics</i> , 2019, 11, 1950039.	2.2	24
53	A Combined Analytical-Numerical Investigation on Photosensitive Hydrogel Micro-Valves. <i>International Journal of Applied Mechanics</i> , 2017, 09, 1750103.	2.2	23
54	Shape-memory polymer metamaterials based on triply periodic minimal surfaces. <i>European Journal of Mechanics, A/Solids</i> , 2022, 96, 104676.	3.7	23

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55	Developing a visco-hyperelastic material model for 3D finite deformation of elastomers. <i>Finite Elements in Analysis and Design</i> , 2018, 140, 1-10.	3.2	22
56	Insight into Geometry-Controlled Mechanical Properties of Spiral Carbon-Based Nanostructures. <i>Journal of Physical Chemistry C</i> , 2019, 123, 3226-3238.	3.1	22
57	Numerical investigation of smart auxetic three-dimensional meta-structures based on shape memory polymers via topology optimization. <i>Journal of Intelligent Material Systems and Structures</i> , 2020, 31, 1838-1852.	2.5	22
58	Multiphysics modeling and experiments on ultrasound-triggered drug delivery from silk fibroin hydrogel for Wilms tumor. <i>International Journal of Pharmaceutics</i> , 2022, 621, 121787.	5.2	22
59	A viscoelastic-viscoplastic constitutive model considering damage evolution for time dependent materials: Application to asphalt mixes. <i>International Journal of Damage Mechanics</i> , 2016, 25, 921-942.	4.2	21
60	Enhancing shape memory properties of multi-layered and multi-material polymer composites in 4D printing. <i>Smart Materials and Structures</i> , 2021, 30, 105006.	3.5	21
61	Finite bending of a temperature-sensitive hydrogel tri-layer: An analytical and finite element analysis. <i>Composite Structures</i> , 2017, 164, 219-228.	5.8	20
62	AC and DC electrical behavior of MWCNT/epoxy nanocomposite near percolation threshold: Equivalent circuits and percolation limits. <i>Journal of Applied Physics</i> , 2018, 123, .	2.5	20
63	On the finite bending of functionally graded light-sensitive hydrogels. <i>Meccanica</i> , 2019, 54, 841-854.	2.0	20
64	A combined analytical-numerical analysis on multidirectional finite bending of functionally graded temperature-sensitive hydrogels. <i>Journal of Intelligent Material Systems and Structures</i> , 2019, 30, 1882-1895.	2.5	20
65	Development of a large strain formulation for multiple shape-memory-effect of polymers under bending. <i>International Journal of Mechanical Sciences</i> , 2021, 204, 106560.	6.7	20
66	Mixed-mode fracture of a superelastic NiTi alloy: Experimental and numerical investigations. <i>Engineering Fracture Mechanics</i> , 2018, 190, 273-287.	4.3	19
67	An Experimental Investigation on Training of NiTi-Based Shape Memory Alloys. <i>International Journal of Applied Mechanics</i> , 2018, 10, 1850040.	2.2	19
68	A Time-Dependent Finite Element Formulation for Thick Shape Memory Polymer Beams Considering Shear Effects. <i>International Journal of Applied Mechanics</i> , 2018, 10, 1850043.	2.2	19
69	Finite Bending and Straightening of Hyperelastic Materials: Analytical Solution and FEM. <i>International Journal of Applied Mechanics</i> , 2019, 11, 1950084.	2.2	19
70	3D constitutive modeling of electro-magneto-visco-hyperelastic elastomers: a semi-analytical solution for cylinders under large torsion-extension deformation. <i>Smart Materials and Structures</i> , 2020, 29, 085031.	3.5	19
71	On finite bending of visco-hyperelastic materials: a novel analytical solution and FEM. <i>Acta Mechanica</i> , 2020, 231, 3435-3450.	2.1	19
72	An analytic investigation on behavior of smart devices consisting of reinforced shape memory polymer beams. <i>Journal of Intelligent Material Systems and Structures</i> , 2015, 26, 1385-1394.	2.5	18

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73	Transient behavior and dynamic pull-in instability of electrostatically-actuated fluid-conveying microbeams. <i>Microsystem Technologies</i> , 2017, 23, 6015-6023.	2.0	18
74	Analysis of large amplitude free vibrations of clamped tapered beams on a nonlinear elastic foundation. <i>Applied Mathematical Modelling</i> , 2014, 38, 1176-1186.	4.2	17
75	3D reconstruction of carbon nanotube networks from neutron scattering experiments. <i>Nanotechnology</i> , 2015, 26, 385704.	2.6	17
76	Stress Analysis of a Functionally Graded Micro/ Nanorotating Disk with Variable Thickness Based on the Strain Gradient Theory. <i>International Journal of Applied Mechanics</i> , 2016, 08, 1650020.	2.2	17
77	Developing a semi-analytical model for thermomechanical response of SMA laminated beams, considering SMA asymmetric behavior. <i>Meccanica</i> , 2018, 53, 957-971.	2.0	17
78	Mathematical modeling and experimental evaluation of a prototype double-tube Magnetorheological damper. <i>SN Applied Sciences</i> , 2019, 1, 1.	2.9	17
79	Hydrogenation-controlled mechanical properties in graphene helicoids: exceptional distribution-dependent behavior. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 12423-12433.	2.8	17
80	On the modeling of human intervertebral disc annulus fibrosus: Elastic, permanent deformation and failure responses. <i>Journal of Biomechanics</i> , 2020, 102, 109463.	2.1	17
81	Role of Chemical Doping in Large Deformation Behavior of Spiral Carbon-Based Nanostructures: Unraveling Geometry-Dependent Chemical Doping Effects. <i>Journal of Physical Chemistry C</i> , 2019, 123, 19208-19219.	3.1	16
82	A semi-analytical solution for bending response of SMA composite beams considering SMA asymmetric behavior. <i>Composites Part B: Engineering</i> , 2019, 163, 622-633.	12.0	16
83	Multi-Trigger Thermo-Electro-Mechanical Soft Actuators under Large Deformations. <i>Polymers</i> , 2020, 12, 489.	4.5	16
84	Developing a finite element beam theory for nanocomposite shape memory polymers with application to sustained release of drugs. <i>Scientia Iranica</i> , 2017, 24, 249-259.	0.4	16
85	Photostress analysis of stress-induced martensite phase transformation in superelastic NiTi. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 688, 202-209.	5.6	15
86	Design, analysis and testing of a smart morphing airfoil actuated by SMA wires. <i>Smart Materials and Structures</i> , 2019, 28, 115043.	3.5	15
87	Coupled thermo-mechanical swelling of a thermo-responsive hydrogel hollow cylinder under extension-torsion: Analytical Solution and FEM. <i>Journal of Intelligent Material Systems and Structures</i> , 2021, 32, 140-155.	2.5	15
88	An Electrodiffusion Model Coupled with Fluid-Flow Effects for an On-Chip Electromembrane Extraction System. <i>Transport in Porous Media</i> , 2022, 142, 317-331.	2.6	15
89	A large deformation hybrid isogeometric-finite element method applied to cohesive interface contact/debonding. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2018, 330, 395-414.	6.6	14
90	Manufacturing and mechanical characterization of Mg-4Y-2Nd-0.4Zr-0.25La magnesium microtubes by combined severe plastic deformation process for biodegradable vascular stents. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2019, 233, 1196-1205.	2.4	14

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91	Fully-Coupled Transient Fluid-Solid Interaction Simulation of the pH-Sensitive Hydrogel-Based Microvalve. <i>International Journal of Applied Mechanics</i> , 2019, 11, 1950071.	2.2	14
92	Homogenization of heterogeneous brain tissue under quasi-static loading: a visco-hyperelastic model of a 3D RVE. <i>Biomechanics and Modeling in Mechanobiology</i> , 2019, 18, 969-981.	2.8	14
93	Developing an analytical solution for a thermally tunable soft actuator under finite bending. <i>Mechanics Based Design of Structures and Machines</i> , 2022, 50, 1793-1807.	4.7	14
94	Visco-hyperelastic swelling and mechanical behavior of tough pH-sensitive hydrogels: Theory development and numerical implementation. <i>International Journal of Engineering Science</i> , 2020, 152, 103294.	5.0	14
95	A Combined Experimental and Numerical Study of the Effect of Surface Roughness on Nanoindentation. <i>International Journal of Applied Mechanics</i> , 2019, 11, 1950070.	2.2	13
96	Rutting investigation of asphalt pavement subjected to moving cyclic loads: an implicit viscoelastic-viscoplastic-viscodamage FE framework. <i>International Journal of Pavement Engineering</i> , 2020, 21, 1393-1407.	4.4	13
97	A novel numerical model for the prediction of patient-dependent bone density loss in microgravity based on micro-CT images. <i>Continuum Mechanics and Thermodynamics</i> , 2020, 32, 927-943.	2.2	13
98	A finite deformation viscoelastic-viscoplastic constitutive model for self-healing materials. <i>Smart Materials and Structures</i> , 2016, 25, 125027.	3.5	12
99	Cu-Zn-Al ₂ O ₃ nanocomposites: study of microstructure, corrosion, and wear properties. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2017, 24, 462-472.	4.9	12
100	A novel machine learning based computational framework for homogenization of heterogeneous soft materials: application to liver tissue. <i>Biomechanics and Modeling in Mechanobiology</i> , 2020, 19, 1131-1142.	2.8	12
101	A computational simulation of electromembrane extraction based on Poisson - Nernst - Planck equations. <i>Analytica Chimica Acta</i> , 2021, 1158, 338414.	5.4	12
102	Developing an analytical solution for photo-sensitive hydrogel bilayers. <i>Journal of Intelligent Material Systems and Structures</i> , 2018, 29, 1953-1963.	2.5	11
103	A thermodynamically consistent viscoelastic-viscoplastic constitutive model for self-healing materials. <i>Journal of Intelligent Material Systems and Structures</i> , 2018, 29, 1065-1080.	2.5	11
104	The Application of Homotopy Analysis Method to Determine the Thermal Response of Convective-Radiative Porous Fins with Temperature-Dependent Properties. <i>International Journal of Applied Mechanics</i> , 2019, 11, 1950089.	2.2	11
105	Finite deformation swelling of a temperature-sensitive hydrogel cylinder under combined extension-torsion. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2020, 41, 409-424.	3.6	11
106	Swelling response of functionally graded temperature-sensitive hydrogel valves: Analytic solution and finite element method. <i>Journal of Intelligent Material Systems and Structures</i> , 2020, 31, 457-474.	2.5	11
107	Large deformation of hyperelastic thick-walled vessels under combined extension-torsion-pressure: analytical solution and FEM. <i>Mechanics Based Design of Structures and Machines</i> , 2022, 50, 4139-4156.	4.7	11
108	A review on swelling theories of pH-sensitive hydrogels. <i>Journal of Intelligent Material Systems and Structures</i> , 2021, 32, 2349-2365.	2.5	11

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109	Analytical study on torsion of shape-memory-polymer prismatic bars with rectangular cross-sections. <i>International Journal of Engineering Science</i> , 2014, 76, 1-11.	5.0	10
110	An Investigation on Thermomechanical Flexural Response of Shape-Memory-Polymer Beams. <i>International Journal of Applied Mechanics</i> , 2016, 08, 1650063.	2.2	10
111	How to characterize interfacial load transfer in spiral carbon-based nanostructure-reinforced nanocomposites: is this a geometry-dependent process?. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 23880-23892.	2.8	10
112	A semi-analytical solution for finite bending of a functionally graded hydrogel strip. <i>Acta Mechanica</i> , 2019, 230, 2625-2637.	2.1	10
113	Synthesis, test, calibration and modeling of a temperature-actuated hydrogel bilayer. <i>Smart Materials and Structures</i> , 2020, 29, 105001.	3.5	10
114	Gaseous slip flow forced convection through ordered microcylinders. <i>Microfluidics and Nanofluidics</i> , 2013, 15, 73-85.	2.2	9
115	Gaseous Slip Flow Forced Convection in Microducts of Arbitrary but Constant Cross Section. <i>Nanoscale and Microscale Thermophysical Engineering</i> , 2014, 18, 354-372.	2.6	9
116	Thermomechanical behavior of shape memory polymer beams reinforced by corrugated polymeric sections. <i>Meccanica</i> , 2017, 52, 1947-1962.	2.0	9
117	Investigation on thermal stresses in FGM hyperelastic thick-walled cylinders. <i>Journal of Thermal Stresses</i> , 2018, 41, 204-221.	2.0	9
118	Vibration analysis of FG annular sector in moderately thick plates with two piezoelectric layers. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2019, 40, 783-804.	3.6	9
119	Finite strain relaxation and creep in coupled axial and torsional deformation. <i>Mechanics Based Design of Structures and Machines</i> , 2022, 50, 2795-2811.	4.7	9
120	Design and fluid-structure interaction analysis for a microfluidic T-junction with chemo-responsive hydrogel valves. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2020, 41, 939-952.	3.6	9
121	Mechanical properties improvement of shape memory polymers by designing the microstructure of multi-phase heterogeneous materials. <i>Computational Materials Science</i> , 2021, 196, 110523.	3.0	9
122	Gaseous Slip Flow Mixed Convection in Vertical Microducts With Constant Axial Energy Input. <i>Journal of Heat Transfer</i> , 2014, 136, .	2.1	8
123	Compliant orthoses for repositioning of knee joint based on super-elasticity of shape memory alloys. <i>Journal of Intelligent Material Systems and Structures</i> , 2018, 29, 3136-3150.	2.5	8
124	Numerical study of patient-specific ankle-foot orthoses for drop foot patients using shape memory alloy. <i>Medical Engineering and Physics</i> , 2019, 69, 123-133.	1.7	8
125	A combined experimental-numerical analysis of a novel deformable sandwich structure for morphing wing applications. <i>Journal of Sandwich Structures and Materials</i> , 2021, 23, 4054-4076.	3.5	8
126	Development of an analytical framework for viscoelastic corrugated-core sandwich plates and validation against FEM. <i>Meccanica</i> , 2021, 56, 2103-2120.	2.0	8

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127	On Single and Multiple pH-Sensitive Hydrogel Micro-valves: A 3D Transient Fully Coupled Fluid-Solid Interaction Study. <i>Transport in Porous Media</i> , 2022, 142, 295-316.	2.6	8
128	Silk Fibroin Hydrogel Reinforced With Magnetic Nanoparticles as an Intelligent Drug Delivery System for Sustained Drug Release. <i>Frontiers in Bioengineering and Biotechnology</i> , 0, 10, .	4.1	8
129	Analytical Couple-stress Solution for Size-dependent Large-amplitude Vibrations of FG Tapered-nanobeams. <i>Latin American Journal of Solids and Structures</i> , 2016, 13, 95-118.	1.0	7
130	Analysis of nonlinear free vibration of a beam with magnetic shape memory alloy elements. <i>Journal of Intelligent Material Systems and Structures</i> , 2016, 27, 2216-2228.	2.5	7
131	Temperature and stress distribution in hollow annular disk of uniform thickness with quadratic temperature-dependent thermal conductivity. <i>Journal of Thermal Stresses</i> , 2017, 40, 828-845.	2.0	7
132	3D-Printable Unit Cell Design for Cubic and Orthotropic Porous Microstructures Using Topology Optimization Based on Optimality Criteria Algorithm. <i>International Journal of Applied Mechanics</i> , 2018, 10, 1850060.	2.2	7
133	Corrugated structures reinforced by shape memory alloy sheets: Analytical modeling and finite element modeling. <i>Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering</i> , 2019, 233, 2445-2454.	1.3	7
134	Analytical investigation of composite sandwich beams filled with shape memory polymer corrugated core. <i>Meccanica</i> , 2019, 54, 1647-1661.	2.0	7
135	Online force control of a shape-memory-alloy-based 2 degree-of-freedom human finger via inverse model and proportional-integral-derivative compensator. <i>Journal of Intelligent Material Systems and Structures</i> , 2019, 30, 1538-1548.	2.5	7
136	Effect of prior deformation on the subsequent creep and anelastic recovery behaviour of an advanced martensitic steel: Unified constitutive modelling. <i>International Journal of Mechanical Sciences</i> , 2020, 176, 105546.	6.7	7
137	A Finite Strain Analytical Solution for Stress-Softening of Hyperelastic Materials Under Cyclic Bending. <i>International Journal of Applied Mechanics</i> , 2021, 13, 2150014.	2.2	7
138	PH-sensitive hydrogel-based valves: A transient fully-coupled fluid-solid interaction study. <i>Journal of Intelligent Material Systems and Structures</i> , 2022, 33, 196-209.	2.5	7
139	Finite Deformation of Swollen pH-Sensitive Hydrogel Cylinder Under Extension and Torsion and its Poynting Effect: Analytical Solution and Numerical Verification. <i>International Journal of Applied Mechanics</i> , 2021, 13, .	2.2	7
140	Programming shape-shifting of flat bilayers composed of tough hydrogels under transient swelling. <i>Acta Mechanica</i> , 2022, 233, 213-232.	2.1	7
141	Limit analysis of FGM circular plates subjected to arbitrary rotational symmetric loads using von-Mises yield criterion. <i>Acta Mechanica</i> , 2013, 224, 1601-1608.	2.1	6
142	Application of Elastic-Damage-Heal Model for Self-Healing Concrete Thick-Walled Cylinders Through Thermodynamics of Irreversible Processes. <i>International Journal of Applied Mechanics</i> , 2017, 09, 1750082.	2.2	6
143	A Combined Analytic, Numeric, and Experimental Investigation Performed on NiTi/NiTiCu Bilayer Composites under Tensile Loading. <i>Advanced Engineering Materials</i> , 2018, 20, 1700395.	3.5	6
144	Numerical Analysis of Growing the Ductile Damage in Structures Reinforced by SMA Using Continuum Damage Mechanics Approach. <i>International Journal of Applied Mechanics</i> , 2018, 10, 1850070.	2.2	6

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145	An implicit finite element framework considering damage and healing effects with application to cyclic moving load on asphalt pavement. <i>Applied Mathematical Modelling</i> , 2019, 70, 139-151.	4.2	6
146	Asymmetric bending response of shape memory alloy beam with functionally graded porosity. <i>Journal of Intelligent Material Systems and Structures</i> , 2020, 31, 1935-1949.	2.5	6
147	Developing a beam formulation for semi-crystalline two-way shape memory polymers. <i>Journal of Intelligent Material Systems and Structures</i> , 2020, 31, 1465-1476.	2.5	6
148	Finite element modeling and design of pH/temperature sensitive hydrogel based biphasic twisting actuators. <i>Scientia Iranica</i> , 2018, .	0.4	6
149	Transient growth of a micro-void in an infinite medium under thermal load with modified Zerilli–Armstrong model. <i>Acta Mechanica</i> , 2016, 227, 943-953.	2.1	5
150	Large deformation and stability analysis of functionally graded pressure vessels: An analytical and numerical study. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2018, 232, 3300-3314.	2.1	5
151	Design and Manufacture of a Smart Macro-Structure with Changeable Effective Stiffness. <i>International Journal of Applied Mechanics</i> , 2020, 12, 2050001.	2.2	5
152	A New Statistical Descriptor for the Physical Characterization and 3D Reconstruction of Heterogeneous Materials. <i>Transport in Porous Media</i> , 2022, 142, 23-40.	2.6	5
153	A modified simulated annealing algorithm for hybrid statistical reconstruction of heterogeneous microstructures. <i>Computational Materials Science</i> , 2021, 197, 110636.	3.0	5
154	Free Vibration Analysis of Rotating Functionally Graded Annular Disc of Variable Thickness Using Generalized Differential Quadrature Method. <i>Scientia Iranica</i> , 2017, .	0.4	5
155	A combined experimental and numerical study on shape memory alloy rods under torsion. <i>Journal of Intelligent Material Systems and Structures</i> , 2019, 30, 2222-2233.	2.5	4
156	A computational study on vascular damage caused by shape memory alloy self-expandable and balloon-expandable stents in a stenosed artery. <i>Journal of Intelligent Material Systems and Structures</i> , 2019, 30, 3113-3123.	2.5	4
157	Development and implementation of a geometrically nonlinear beam theory model for SMA composite beams with asymmetric behavior. <i>Composite Structures</i> , 2021, 259, 113417.	5.8	4
158	An experimental investigation on shape memory polymer and metallic stents under bending and radial compression. <i>Engineering Research Express</i> , 2020, 2, 045012.	1.6	4
159	Simulating favorable adsorption in lithium-ion batteries using a novel cellular-automaton-based method. <i>Physica Scripta</i> , 2021, 96, 125841.	2.5	4
160	Programmable self-folding of trilayer and bilayer-hinge structures by time-dependent swelling of tough hydrogels. <i>Journal of Intelligent Material Systems and Structures</i> , 2022, 33, 2106-2120.	2.5	4
161	Fabrication, characterization, and modeling of a structural flexible skin for applications in morphing wings. <i>Mechanics of Materials</i> , 2022, 172, 104409.	3.2	4
162	Computational Elucidation of Elastic Percolation Threshold in Isotropic and Anisotropic Microstructures with Voronoi Tessellation. <i>International Journal of Applied Mechanics</i> , 2019, 11, 1950029.	2.2	3

#	ARTICLE	IF	CITATIONS
163	Hybrid IG-FE method applied to cohesive fracture/contact in particle-filled elastomeric composites. <i>International Journal of Mechanics and Materials in Design</i> , 2020, 16, 123-138.	3.0	3
164	Numerical Investigation of Axonal Damage for Regular and Irregular Axonal Distributions. <i>Frontiers in Mechanical Engineering</i> , 2021, 7, .	1.8	3
165	Conical coiled carbon nanotubes with highly controllable mechanical properties. <i>Materials Today Communications</i> , 2021, 29, 102927.	1.9	3
166	Swelling of pH-sensitive hydrogel pressure vessel under altered-pH coupled with inflation, extension, and torsion. <i>Meccanica</i> , 2022, 57, 1391-1411.	2.0	3
167	Matrix-fiber interfacial debonding in soft composite materials: Cyclically behavior modeling and microstructural evolution. <i>Composites Part B: Engineering</i> , 2022, 237, 109853.	12.0	3
168	Insights into thermal characteristics of spiral carbon-based nanomaterials: From heat transport mechanisms to tunable thermal diode behavior. <i>International Journal of Heat and Mass Transfer</i> , 2022, 189, 122719.	4.8	3
169	Elastic Percolation in Nanocomposites with Impenetrable Ellipsoidal Inclusion (Comprehensive Study) <i>Tj ETQq1 1 0,784314 rgBT /Over</i>	2.2	2
170	Elastic percolation of composite structures with regular tessellations of microstructure. <i>Composite Structures</i> , 2017, 161, 513-521.	5.8	2
171	Microstructure and Mechanical Properties of CP-Titanium Processed by ECAP Followed by Warm Caliber Rolling. <i>Transactions of the Indian Institute of Metals</i> , 2018, 71, 1083-1090.	1.5	2
172	Hybrid Isogeometric-Finite Element Discretization Applied to Stress Concentration Problems. <i>International Journal of Applied Mechanics</i> , 2018, 10, 1850081.	2.2	2
173	Micromechanical Modeling of the Effective Mechanical Behavior of Cerebral Cortex Tissue. <i>Iranian Journal of Science and Technology - Transactions of Mechanical Engineering</i> , 2020, 44, 273-285.	1.3	2
174	Analysis of temperature-sensitive hydrogel microvalves in a T-junction flow sorter using full scale fluid-structure interaction. <i>Journal of Intelligent Material Systems and Structures</i> , 2020, 31, 1371-1382.	2.5	2
175	Study of a magnetic SMA-based energy harvester using a corrugated structure. <i>Journal of Intelligent Material Systems and Structures</i> , 0, , 1045389X2098390.	2.5	2
176	Design and Shape Optimization of a Biodegradable Polymeric Stent for Curved Arteries Using FEM. <i>Frontiers in Mechanical Engineering</i> , 2021, 7, .	1.8	2
177	Anatase TiO ₂ nanotubes as Li-ion battery anodes: A molecular dynamics study of Li-ion adsorption on anatase nanotubes. <i>Sustainable Energy Technologies and Assessments</i> , 2021, 47, 101438.	2.7	2
178	Refining anticipation of degraded bone microstructures during osteoporosis based on statistical homogenized reconstruction method via quality of connection function. <i>International Journal of Computational Materials Science and Engineering</i> , 2020, 09, 2050023.	0.7	2
179	Modeling of Damage Evolution in a Patient-Specific Stenosed Artery upon Stent Deployment. <i>International Journal of Applied Mechanics</i> , 2020, 12, 2050101.	2.2	2
180	Prediction of bone microstructures degradation during osteoporosis with fuzzy cellular automata algorithm. <i>Mathematics and Mechanics of Solids</i> , 0, , 108128652210885.	2.4	2

#	ARTICLE	IF	CITATIONS
181	Statistical prediction of bone microstructure degradation to study patient dependency in osteoporosis. <i>Mathematics and Mechanics of Solids</i> , 0, , 108128652210987.	2.4	2
182	pH-Responsive Hydrogel Bilayer With Reversible, Bidirectional Bending Behavior. <i>Frontiers in Materials</i> , 2022, 9, .	2.4	2
183	Transient swelling of cylindrical hydrogels under coupled extension-torsion: Analytical and 3D FEM solutions. <i>Journal of Intelligent Material Systems and Structures</i> , 2023, 34, 415-424.	2.5	2
184	Electro-mechanical bending analysis of ionic polymer metal nanocomposites (IPMNCs). <i>Mechanics Research Communications</i> , 2014, 62, 77-82.	1.8	1
185	An experimental and numerical investigation on active compliant joint made by shape memory alloy actuator. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Aerospace Engineering</i> , 2020, 234, 156-164.	1.3	1
186	Computational modeling of degradation process on the mechanical performance of Poly-lactic acid /Magnesium composite. <i>Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications</i> , 2021, 235, 3-18.	1.1	1
187	Entropy Generation in Thermally Developing Laminar Forced Convection Through a Slit Microchannel. , 2010, , .		0
188	Second Law Analysis for Extended Graetz Problem Including Viscous Dissipation in Microtubes. , 2010, , .		0
189	A Semi-Analytic Solution for Self-Healing Concrete Beams Through Stress Spectral Decomposition. <i>International Journal of Applied Mechanics</i> , 2018, 10, 1850077.	2.2	0
190	Stress analysis of thick-walled cylinders made of functionally graded materials using strain gradient elasticity. , 2010, , .		0
191	Size dependent analysis of tapered FG micro-bridge based on a 3D beam theory. <i>Scientia Iranica</i> , 2019, .	0.4	0