Mir Masoud Seyyed Fakhrabadi

List of Publications by Year
in descending order

79 papers	921 citations	471371 17 h-index	610775 24 g-index
79 all docs	79 docs citations	79 times ranked	765 citing authors

#	Article	IF	Citations
1	Effects of Various Cross Sections on Elastoplastic Behavior of Fe Nanowires under Tension/Compression. Journal of Materials Engineering and Performance, 2023, 32, 423-437.	1.2	2
2	Interphase effects on elastic properties of polymer nanocomposites reinforced by carbon nanocones. Computational Materials Science, 2022, 201, 110910.	1.4	9
3	Wave propagation and directionality in two-dimensional periodic lattices considering shear deformations. Proceedings of the Institution of Mechanical Engineers, Part N: Journal of Nanomaterials, Nanoengineering and Nanosystems, 2022, 236, 101-116.	0.5	1
4	Wave propagation in nonlinear monoatomic chains with linear and quadratic damping. Nonlinear Dynamics, 2022, 108, 457-478.	2.7	11
5	Active/passive tuning of wave propagation in phononic microbeams via piezoelectric patches. Mechanics of Materials, 2022, 167, 104249.	1.7	16
6	Graphyne nano-spirals under tension: Effects of base structures on superelasticity and fracture mechanisms. Mechanics of Materials, 2022, 171, 104367.	1.7	3
7	Small-scale effects on wave propagation in planar micro-lattices. Journal of Sound and Vibration, 2021, 494, 115894.	2.1	16
8	Out-of-plane wave propagation in two-dimensional micro-lattices. Physica Scripta, 2021, 96, 085704.	1.2	6
9	Reinforcement of polymer nanocomposites by É‘-graphyne nanotubes: A multiscale simulation. Computational Materials Science, 2021, 194, 110431.	1.4	4
10	Electronic, optical, mechanical, and thermal properties of diphenylacetylene-based graphyne nanosheet using density functional theory. Nanotechnology, 2021, 32, 405705.	1.3	5
11	Effects of copper nanoparticles on elastic and thermal properties of conductive polymer nanocomposites. Mechanics of Materials, 2021, 160, 103958.	1.7	9
12	Atomic-level engineering of anisotropically nanoporous graphyne membranes for efficient water desalination. Applied Surface Science, 2021, 559, 149977.	3.1	8
13	Molecular dynamics simulation of transversely isotropic elastic properties of carbon nanocones. Physica Scripta, 2021, 96, 035702.	1.2	3
14	Manipulation of wave motion in smart nonlinear phononic crystals made of shape memory alloys. Physica Scripta, 2021, 96, 125527.	1.2	4
15	Anisotropic nature of thermal conductivity in graphene spirals revealed by molecular dynamics simulations. Journal of Physics and Chemistry of Solids, 2020, 137, 109228.	1.9	16
16	Prediction of mechanical and thermal properties of polymer nanocomposites reinforced by coiled carbon nanotubes for possible application as impact absorbent. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2020, 234, 882-902.	1.1	13
17	How does flexoelectricity affect static bending and nonlinear dynamic response of nanoscale lipid bilayers?. Physica Scripta, 2020, 95, 025001.	1.2	3
18	Effects of combined material and geometric nonlinearities on dynamic response of embedded nanobeams. Physica Scripta, 2020, 95, 085220.	1.2	2

#	Article	IF	Citations
19	Templating Effect of Different Low-Miller-Index Gold Surfaces on the Bottom-Up Growth of Graphene Nanoribbons. ACS Applied Nano Materials, 2020, 3, 11497-11509.	2.4	2
20	Hybrid lattice metamaterials with auxiliary resonators made of functionally graded materials. Acta Mechanica, 2020, 231, 4835-4849.	1.1	17
21	Study of tunable locally resonant metamaterials: Effects of spider-web and snowflake hierarchies. International Journal of Solids and Structures, 2020, 204-205, 81-95.	1.3	30
22	Damping effects on wave-propagation characteristics of microtubule-based bio-nano-metamaterials. International Journal of Mechanical Sciences, 2020, 184, 105844.	3.6	17
23	Orientation-dependent mechanical properties of planar microtubule-based bio-nanometamaterials. Physica Scripta, 2020, 95, 085004.	1.2	2
24	Tunable elastic wave propagation in planar functionally graded metamaterials. Acta Mechanica, 2020, 231, 3363-3385.	1.1	27
25	Multiscale simulation study of anisotropic nanomechanical properties of graphene spirals and their polymer nanocomposites. Mechanics of Materials, 2020, 145, 103376.	1.7	23
26	On-surface synthesis of extended linear graphyne molecular wires by protecting the alkynyl group. Physical Chemistry Chemical Physics, 2020, 22, 12180-12186.	1.3	12
27	Wave propagation in microtubule-based bio-nano-architected networks: A lesson from nature. International Journal of Mechanical Sciences, 2019, 164, 105175.	3.6	16
28	Nanomechanical properties of single- and double-layer graphene spirals: a molecular dynamics simulation. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	1.1	14
29	Primary and Secondary Resonance Analyses of Viscoelastic Nanoplates Based on Strain Gradient Theory. International Journal of Applied Mechanics, 2018, 10, 1850109.	1.3	7
30	Analytical solution for nonlinear dynamic behavior of viscoelastic nano-plates modeled by consistent couple stress theory. Latin American Journal of Solids and Structures, 2018, 15, .	0.6	12
31	Substrate involvement in dioxygen bond dissociation catalysed by iron phthalocyanine supported on Ag(100). Chemical Communications, 2018, 54, 9418-9421.	2.2	13
32	Application of Modified Couple Stress Theory and Homotopy Perturbation Method in Investigation of Electromechanical Behaviors of Carbon Nanotubes. Advances in Applied Mathematics and Mechanics, 2017, 9, 23-42.	0.7	9
33	Two bioinspired mobile manipulators with rolling locomotion. Journal of Bionic Engineering, 2016, 13, 48-58.	2.7	2
34	Comment on â€˜Molecular structure-dependent deformations in boron nitride nanostructures subject to an electrical fieldâ€™. Journal Physics D: Applied Physics, 2016, 49, 108001.	1.3	0
35	Prediction of small-scale effects on nonlinear dynamic behaviors of carbon nanotube-based nano-resonators using consistent couple stress theory. Composites Part B: Engineering, 2016, 88, 26-35.	5.9	17
36	Nonlinear Dynamic Analysis of Electrostatically Actuated Single-walled Carbon Nanotubes Using Nonlocal Elasticity. Latin American Journal of Solids and Structures, 2015, 12, 1224-1240.	0.6	3

#	Article	IF	Citations
37	Application of electrostatically actuated carbon nanotubes in nanofluidic and bio-nanofluidic sensors and actuators. Measurement: Journal of the International Measurement Confederation, 2015, 73, 127-136.	2.5	9
38	Comprehensive nonlinear electromechanical analysis of nanobeams under DC/AC voltages based on consistent couple-stress theory. Composite Structures, 2015, 132, 1206-1218.	3.1	16
39	Three-dimensional modal analysis of carbon nanocones using molecular dynamics simulation. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2015, 33, .	0.6	6
40	Size effects on nanomechanical behaviors of nanoelectronics devices based on consistent couple-stress theory. International Journal of Mechanical Sciences, 2015, 92, 146-153.	3.6	13
41	On the Pull-in Instability of Double-Walled Carbon Nanotube-Based Nano Electromechanical Systems with Cross-Linked Walls. Fullerenes Nanotubes and Carbon Nanostructures, 2015, 23, 300-314.	1.0	3
42	Prediction of Buckling Instability of Perfect and Defective Carbon Nanotubes. Journal of Computational and Theoretical Nanoscience, 2014, 11, 2356-2369.	0.4	2
43	Modal analysis of silicon carbide nanotubes using structural mechanics. Applied Physics A: Materials Science and Processing, 2014, 116, 1687-1694.	1.1	5
44	Size-dependent instability of carbon nanotubes under electrostatic actuation using nonlocal elasticity. International Journal of Mechanical Sciences, 2014, 80, 144-152.	3.6	32
45	Carbon nanotube-based nano-fluidic devices. Journal Physics D: Applied Physics, 2014, 47, 085301.	1.3	7
46	Dynamic analysis of carbon nanotubes under electrostatic actuation using modified couple stress theory. Acta Mechanica, 2014, 225, 1523-1535.	1.1	22
47	Nonlinear analysis of carbon nanotube-based nanoelectronics devices. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2014, 228, 2426-2439.	1.1	4
48	Analysis and optimization of the 5-RPUR parallel manipulator. Advanced Robotics, 2014, 28, 1021-1031.	1.1	9
49	Non-linear behaviors of carbon nanotubes under electrostatic actuation based on strain gradient theory. International Journal of Non-Linear Mechanics, 2014, 67, 236-244.	1.4	27
50	Fluid-solid interaction in electrostatically actuated carbon nanotubes. Journal of Mechanical Science and Technology, 2014, 28, 1431-1439.	0.7	3
51	Investigation of interphase effects on mechanical behaviors of carbon nanocone-based composites. Mechanics and Industry, 2014, 15, 287-292.	0.5	10
52	Pull-In Behaviors of Carbon Nanotubes with Vacancy Defects and Residual Stresses. Journal of Computational and Theoretical Nanoscience, 2014, 11, 153-159.	0.4	6
53	Multi-objective design optimization of composite laminates using discrete shuffled frog leaping algorithm. Journal of Mechanical Science and Technology, 2013, 27, 1791-1800.	0.7	9
54	Design and Implementation of a Novel Spherical MobileÂRobot. Journal of Intelligent and Robotic Systems: Theory and Applications, 2013, 71, 43-64.	2.0	42

#	Article	IF	Citations
55	Design and implementation of a novel hybrid quadruped spherical mobile robot. Robotics and Autonomous Systems, 2013, 61, 184-194.	3.0	14
56	Investigation of buckling and vibration properties of hetero-junctioned and coiled carbon nanotubes. Computational Materials Science, 2013, 73, 93-112.	1.4	17
57	Dynamic behaviours of carbon nanotubes under dc voltage based on strain gradient theory. Journal Physics D: Applied Physics, 2013, 46, 405101.	1.3	14
58	Investigation of the Mechanical Behaviors of Carbon Nanotubes Under Electrostatic Actuation Using the Modified Couple Stress Theory. Fullerenes Nanotubes and Carbon Nanostructures, 2013, 21, 930-945.	1.0	6
59	Molecular dynamics simulation of pull-in phenomena in carbon nanotubes with Stoneâ€"Wales defects. Solid State Communications, 2013, 157, 38-44.	0.9	25
60	Investigation of Mechanical Properties and Thermal Conductivities of Nitrogen Doped Carbon Nanotubes. Journal of Computational and Theoretical Nanoscience, 2013, 10, 2536-2541.	0.4	4
61	Analysis of pull-in instability of electrostatically actuated carbon nanotubes using the homotopy perturbation method. Journal of Mechanics of Materials and Structures, 2013, 8, 385-401.	0.4	5
62	Application of Molecular Dynamics in Mechanical Characterization of Carbon Nanocones. Journal of Computational and Theoretical Nanoscience, 2013, 10, 1921-1927.	0.4	8
63	Size-dependent characteristics of electrostatically actuated fluid-conveying carbon nanotubes based on modified couple stress theory. Beilstein Journal of Nanotechnology, 2013, 4, 771-780.	1.5	6
64	Optimal Design of a 6-DOF Parallel Manipulator Using Particle Swarm Optimization. Advanced Robotics, 2012, 26, 1419-1441.	1.1	11
65	Vibrational properties of two and three junctioned carbon nanotubes. Computational Materials Science, 2012, 65, 411-425.	1.4	23
66	Vibrational analysis of single-walled carbon nanocones using molecular mechanics approach. Physica E: Low-Dimensional Systems and Nanostructures, 2012, 44, 1162-1168.	1.3	27
67	Investigation of elastic and buckling properties of carbon nanocones using molecular mechanics approach. Computational Materials Science, 2012, 61, 248-256.	1.4	32
68	Effects of boron doping on mechanical properties and thermal conductivities of carbon nanotubes. Solid State Communications, 2012, 152, 1973-1979.	0.9	27
69	Optimization of milling parameters using artificial neural network and artificial immune system. Journal of Mechanical Science and Technology, 2012, 26, 4097-4104.	0.7	32
70	Design, Implementation and Control of a Fish Robot with Undulating Fins. International Journal of Advanced Robotic Systems, 2011, 8, 60.	1.3	26
71	Vibrational analysis of carbon nanotubes using molecular mechanics and artificial neural network. Physica E: Low-Dimensional Systems and Nanostructures, 2011, 44, 565-578.	1.3	34
72	Design and Implementation of an Electrically Control Circuit for Undulating Fins of Fish-Like Robot. , 2010, , .		0

#	Article	IF	Citations
73	Design, dynamic modeling and simulation of a spherical mobile robot with a novel motion mechanism. , 2010, , .		8
74	Analysis of a Micro-Optomechatronic Force Sensor. Fiber and Integrated Optics, 2010, 29, 491-513.	1.7	2
75	Prediction of the behavior of a microcantilever based optomechatronic force sensor by finite element method. , 2009, , .		0
76	Dynamics and GA-Based Optimization of Rectilinear Snake Robot. Lecture Notes in Computer Science, 2009, , 613-622.	1.0	1
77	Simulation and analysis of anthropomorphic three finger micro/nano gripper using piezoelectric actuator. Proceedings of SPIE, 2008, , .	0.8	3
78	Modeling and Simulation of Inchworm Mode Locomotion. Lecture Notes in Computer Science, 2008, , 617-624.	1.0	17
79	KINEMATICS AND KINETICS ANALYSIS OF RECTILINEAR LOCOMOTION GAIT. , 2008, , .		0