

# Mir Masoud Seyyed Fakhrabadi

## List of Publications by Year in descending order

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docs citations

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citing authors

#	ARTICLE	IF	CITATIONS
1	Design and Implementation of a Novel Spherical Mobile Robot. Journal of Intelligent and Robotic Systems: Theory and Applications, 2013, 71, 43-64.	2.0	42
2	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
3	Investigation of elastic and buckling properties of carbon nanocones using molecular mechanics approach. Computational Materials Science, 2012, 61, 248-256.	1.4	32
4	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
5	Size-dependent instability of carbon nanotubes under electrostatic actuation using nonlocal elasticity. International Journal of Mechanical Sciences, 2014, 80, 144-152.	3.6	32
6	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
7	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
8	Effects of boron doping on mechanical properties and thermal conductivities of carbon nanotubes. Solid State Communications, 2012, 152, 1973-1979.	0.9	27
9	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
10	Tunable elastic wave propagation in planar functionally graded metamaterials. Acta Mechanica, 2020, 231, 3363-3385.	1.1	27
11	Design, Implementation and Control of a Fish Robot with Undulating Fins. International Journal of Advanced Robotic Systems, 2011, 8, 60.	1.3	26
12	Molecular dynamics simulation of pull-in phenomena in carbon nanotubes with Stone-Wales defects. Solid State Communications, 2013, 157, 38-44.	0.9	25
13	Vibrational properties of two and three junctioned carbon nanotubes. Computational Materials Science, 2012, 65, 411-425.	1.4	23
14	Multiscale simulation study of anisotropic nanomechanical properties of graphene spirals and their polymer nanocomposites. Mechanics of Materials, 2020, 145, 103376.	1.7	23
15	Dynamic analysis of carbon nanotubes under electrostatic actuation using modified couple stress theory. Acta Mechanica, 2014, 225, 1523-1535.	1.1	22
16	Investigation of buckling and vibration properties of hetero-junctioned and coiled carbon nanotubes. Computational Materials Science, 2013, 73, 93-112.	1.4	17
17	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
18	Hybrid lattice metamaterials with auxiliary resonators made of functionally graded materials. Acta Mechanica, 2020, 231, 4835-4849.	1.1	17

#	ARTICLE	IF	CITATIONS
19	Damping effects on wave-propagation characteristics of microtubule-based bio-nano-metamaterials. <i>International Journal of Mechanical Sciences</i> , 2020, 184, 105844.	3.6	17
20	Modeling and Simulation of Inchworm Mode Locomotion. <i>Lecture Notes in Computer Science</i> , 2008, , 617-624.	1.0	17
21	Comprehensive nonlinear electromechanical analysis of nanobeams under DC/AC voltages based on consistent couple-stress theory. <i>Composite Structures</i> , 2015, 132, 1206-1218.	3.1	16
22	Wave propagation in microtubule-based bio-nano-architected networks: A lesson from nature. <i>International Journal of Mechanical Sciences</i> , 2019, 164, 105175.	3.6	16
23	Anisotropic nature of thermal conductivity in graphene spirals revealed by molecular dynamics simulations. <i>Journal of Physics and Chemistry of Solids</i> , 2020, 137, 109228.	1.9	16
24	Small-scale effects on wave propagation in planar micro-lattices. <i>Journal of Sound and Vibration</i> , 2021, 494, 115894.	2.1	16
25	Active/passive tuning of wave propagation in phononic microbeams via piezoelectric patches. <i>Mechanics of Materials</i> , 2022, 167, 104249.	1.7	16
26	Design and implementation of a novel hybrid quadruped spherical mobile robot. <i>Robotics and Autonomous Systems</i> , 2013, 61, 184-194.	3.0	14
27	Dynamic behaviours of carbon nanotubes under dc voltage based on strain gradient theory. <i>Journal Physics D: Applied Physics</i> , 2013, 46, 405101.	1.3	14
28	Nanomechanical properties of single- and double-layer graphene spirals: a molecular dynamics simulation. <i>Applied Physics A: Materials Science and Processing</i> , 2019, 125, 1.	1.1	14
29	Size effects on nanomechanical behaviors of nanoelectronics devices based on consistent couple-stress theory. <i>International Journal of Mechanical Sciences</i> , 2015, 92, 146-153.	3.6	13
30	Substrate involvement in dioxygen bond dissociation catalysed by iron phthalocyanine supported on Ag(100). <i>Chemical Communications</i> , 2018, 54, 9418-9421.	2.2	13
31	Prediction of mechanical and thermal properties of polymer nanocomposites reinforced by coiled carbon nanotubes for possible application as impact absorbent. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2020, 234, 882-902.	1.1	13
32	Analytical solution for nonlinear dynamic behavior of viscoelastic nano-plates modeled by consistent couple stress theory. <i>Latin American Journal of Solids and Structures</i> , 2018, 15, .	0.6	12
33	On-surface synthesis of extended linear graphyne molecular wires by protecting the alkynyl group. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 12180-12186.	1.3	12
34	Optimal Design of a 6-DOF Parallel Manipulator Using Particle Swarm Optimization. <i>Advanced Robotics</i> , 2012, 26, 1419-1441.	1.1	11
35	Wave propagation in nonlinear monoatomic chains with linear and quadratic damping. <i>Nonlinear Dynamics</i> , 2022, 108, 457-478.	2.7	11
36	Investigation of interphase effects on mechanical behaviors of carbon nanocone-based composites. <i>Mechanics and Industry</i> , 2014, 15, 287-292.	0.5	10

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37	Multi-objective design optimization of composite laminates using discrete shuffled frog leaping algorithm. <i>Journal of Mechanical Science and Technology</i> , 2013, 27, 1791-1800.	0.7	9
38	Analysis and optimization of the 5-RPUR parallel manipulator. <i>Advanced Robotics</i> , 2014, 28, 1021-1031.	1.1	9
39	Application of electrostatically actuated carbon nanotubes in nanofluidic and bio-nanofluidic sensors and actuators. <i>Measurement: Journal of the International Measurement Confederation</i> , 2015, 73, 127-136.	2.5	9
40	Application of Modified Couple Stress Theory and Homotopy Perturbation Method in Investigation of Electromechanical Behaviors of Carbon Nanotubes. <i>Advances in Applied Mathematics and Mechanics</i> , 2017, 9, 23-42.	0.7	9
41	Effects of copper nanoparticles on elastic and thermal properties of conductive polymer nanocomposites. <i>Mechanics of Materials</i> , 2021, 160, 103958.	1.7	9
42	Interphase effects on elastic properties of polymer nanocomposites reinforced by carbon nanocones. <i>Computational Materials Science</i> , 2022, 201, 110910.	1.4	9
43	Design, dynamic modeling and simulation of a spherical mobile robot with a novel motion mechanism. , 2010, , .		8
44	Application of Molecular Dynamics in Mechanical Characterization of Carbon Nanocones. <i>Journal of Computational and Theoretical Nanoscience</i> , 2013, 10, 1921-1927.	0.4	8
45	Atomic-level engineering of anisotropically nanoporous graphyne membranes for efficient water desalination. <i>Applied Surface Science</i> , 2021, 559, 149977.	3.1	8
46	Carbon nanotube-based nano-fluidic devices. <i>Journal Physics D: Applied Physics</i> , 2014, 47, 085301.	1.3	7
47	Primary and Secondary Resonance Analyses of Viscoelastic Nanoplates Based on Strain Gradient Theory. <i>International Journal of Applied Mechanics</i> , 2018, 10, 1850109.	1.3	7
48	Investigation of the Mechanical Behaviors of Carbon Nanotubes Under Electrostatic Actuation Using the Modified Couple Stress Theory. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2013, 21, 930-945.	1.0	6
49	Size-dependent characteristics of electrostatically actuated fluid-conveying carbon nanotubes based on modified couple stress theory. <i>Beilstein Journal of Nanotechnology</i> , 2013, 4, 771-780.	1.5	6
50	Pull-In Behaviors of Carbon Nanotubes with Vacancy Defects and Residual Stresses. <i>Journal of Computational and Theoretical Nanoscience</i> , 2014, 11, 153-159.	0.4	6
51	Three-dimensional modal analysis of carbon nanocones using molecular dynamics simulation. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2015, 33, .	0.6	6
52	Out-of-plane wave propagation in two-dimensional micro-lattices. <i>Physica Scripta</i> , 2021, 96, 085704.	1.2	6
53	Analysis of pull-in instability of electrostatically actuated carbon nanotubes using the homotopy perturbation method. <i>Journal of Mechanics of Materials and Structures</i> , 2013, 8, 385-401.	0.4	5
54	Modal analysis of silicon carbide nanotubes using structural mechanics. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 116, 1687-1694.	1.1	5

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55	Electronic, optical, mechanical, and thermal properties of diphenylacetylene-based graphyne nanosheet using density functional theory. <i>Nanotechnology</i> , 2021, 32, 405705.	1.3	5
56	Investigation of Mechanical Properties and Thermal Conductivities of Nitrogen Doped Carbon Nanotubes. <i>Journal of Computational and Theoretical Nanoscience</i> , 2013, 10, 2536-2541.	0.4	4
57	Nonlinear analysis of carbon nanotube-based nanoelectronics devices. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2014, 228, 2426-2439.	1.1	4
58	Reinforcement of polymer nanocomposites by $\text{E}^{\text{c}}$ -graphyne nanotubes: A multiscale simulation. <i>Computational Materials Science</i> , 2021, 194, 110431.	1.4	4
59	Manipulation of wave motion in smart nonlinear phononic crystals made of shape memory alloys. <i>Physica Scripta</i> , 2021, 96, 125527.	1.2	4
60	Simulation and analysis of anthropomorphic three finger micro/nano gripper using piezoelectric actuator. <i>Proceedings of SPIE</i> , 2008, , .	0.8	3
61	Fluid-solid interaction in electrostatically actuated carbon nanotubes. <i>Journal of Mechanical Science and Technology</i> , 2014, 28, 1431-1439.	0.7	3
62	Nonlinear Dynamic Analysis of Electrostatically Actuated Single-walled Carbon Nanotubes Using Nonlocal Elasticity. <i>Latin American Journal of Solids and Structures</i> , 2015, 12, 1224-1240.	0.6	3
63	On the Pull-in Instability of Double-Walled Carbon Nanotube-Based Nano Electromechanical Systems with Cross-Linked Walls. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2015, 23, 300-314.	1.0	3
64	How does flexoelectricity affect static bending and nonlinear dynamic response of nanoscale lipid bilayers?. <i>Physica Scripta</i> , 2020, 95, 025001.	1.2	3
65	Molecular dynamics simulation of transversely isotropic elastic properties of carbon nanocones. <i>Physica Scripta</i> , 2021, 96, 035702.	1.2	3
66	Graphyne nano-spirals under tension: Effects of base structures on superelasticity and fracture mechanisms. <i>Mechanics of Materials</i> , 2022, 171, 104367.	1.7	3
67	Analysis of a Micro-Optomechatronic Force Sensor. <i>Fiber and Integrated Optics</i> , 2010, 29, 491-513.	1.7	2
68	Prediction of Buckling Instability of Perfect and Defective Carbon Nanotubes. <i>Journal of Computational and Theoretical Nanoscience</i> , 2014, 11, 2356-2369.	0.4	2
69	Two bioinspired mobile manipulators with rolling locomotion. <i>Journal of Bionic Engineering</i> , 2016, 13, 48-58.	2.7	2
70	Effects of combined material and geometric nonlinearities on dynamic response of embedded nanobeams. <i>Physica Scripta</i> , 2020, 95, 085220.	1.2	2
71	Templating Effect of Different Low-Miller-Index Gold Surfaces on the Bottom-Up Growth of Graphene Nanoribbons. <i>ACS Applied Nano Materials</i> , 2020, 3, 11497-11509.	2.4	2
72	Orientation-dependent mechanical properties of planar microtubule-based bio-nanometamaterials. <i>Physica Scripta</i> , 2020, 95, 085004.	1.2	2

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73	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
74	Dynamics and GA-Based Optimization of Rectilinear Snake Robot. Lecture Notes in Computer Science, 2009, , 613-622.	1.0	1
75	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
76	Prediction of the behavior of a microcantilever based optomechatronic force sensor by finite element method. , 2009, , .		0
77	Design and Implementation of an Electrically Control Circuit for Undulating Fins of Fish-Like Robot. , 2010, , .		0
78	Comment on "Molecular structure-dependent deformations in boron nitride nanostructures subject to an electrical field". Journal Physics D: Applied Physics, 2016, 49, 108001.	1.3	0
79	KINEMATICS AND KINETICS ANALYSIS OF RECTILINEAR LOCOMOTION GAIT. , 2008, , .		0