

# Quan Wang

## List of Publications by Year in descending order

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272  
papers

14,382  
citations

15466

65  
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26548

107  
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274  
all docs

274  
docs citations

274  
times ranked

8833  
citing authors

#	ARTICLE	IF	CITATIONS
1	Wave propagation in carbon nanotubes via nonlocal continuum mechanics. <i>Journal of Applied Physics</i> , 2005, 98, 124301.	1.1	563
2	Skin-Inspired Multifunctional Autonomic-Intrinsic Conductive Self-Healing Hydrogels with Pressure Sensitivity, Stretchability, and 3D Printability. <i>Advanced Materials</i> , 2017, 29, 1700533.	11.1	557
3	A review on the application of nonlocal elastic models in modeling of carbon nanotubes and graphenes. <i>Computational Materials Science</i> , 2012, 51, 303-313.	1.4	474
4	Application of nonlocal continuum mechanics to static analysis of micro- and nano-structures. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2007, 363, 236-242.	0.9	430
5	Nonlocal shell model for elastic wave propagation in single- and double-walled carbon nanotubes. <i>Journal of the Mechanics and Physics of Solids</i> , 2008, 56, 3475-3485.	2.3	369
6	Mechanical properties of carbon nanotube/polymer composites. <i>Scientific Reports</i> , 2014, 4, 6479.	1.6	358
7	The constitutive relation and small scale parameter of nonlocal continuum mechanics for modelling carbon nanotubes. <i>Nanotechnology</i> , 2007, 18, 075702.	1.3	318
8	Vibration of carbon nanotubes studied using nonlocal continuum mechanics. <i>Smart Materials and Structures</i> , 2006, 15, 659-666.	1.8	288
9	Damage detection with spatial wavelets. <i>International Journal of Solids and Structures</i> , 1999, 36, 3443-3468.	1.3	248
10	On buckling of column structures with a pair of piezoelectric layers. <i>Engineering Structures</i> , 2002, 24, 199-205.	2.6	190
11	Small scale effect on elastic buckling of carbon nanotubes with nonlocal continuum models. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2006, 357, 130-135.	0.9	189
12	Detection of cracks in plates using piezo-actuated Lamb waves. <i>Smart Materials and Structures</i> , 2004, 13, 643-660.	1.8	185
13	Application of Wavelet Theory for Crack Identification in Structures. <i>Journal of Engineering Mechanics - ASCE</i> , 1998, 124, 152-157.	1.6	182
14	Analysis of piezoelectric coupled circular plate. <i>Smart Materials and Structures</i> , 2001, 10, 229-239.	1.8	178
15	Application of nonlocal elastic shell theory in wave propagation analysis of carbon nanotubes. <i>Smart Materials and Structures</i> , 2007, 16, 178-190.	1.8	176
16	A review on applications of carbon nanotubes and graphenes as nano-resonator sensors. <i>Computational Materials Science</i> , 2014, 82, 350-360.	1.4	176
17	A review on enhancement of mechanical and tribological properties of polymer composites reinforced by carbon nanotubes and graphene sheet: Molecular dynamics simulations. <i>Composites Part B: Engineering</i> , 2019, 160, 348-361.	5.9	168
18	Energy harvesting from a vehicle suspension system. <i>Energy</i> , 2015, 86, 385-392.	4.5	167

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19	Dispersion of carbon nanotubes with SDS surfactants: a study from a binding energy perspective. <i>Chemical Science</i> , 2011, 2, 1407.	3.7	166
20	A comparison study on mechanical properties of polymer composites reinforced by carbon nanotubes and graphene sheet. <i>Composites Part B: Engineering</i> , 2018, 133, 35-41.	5.9	146
21	On nonconservativeness of Eringen's nonlocal elasticity in beam mechanics: correction from a discrete-based approach. <i>Archive of Applied Mechanics</i> , 2014, 84, 1275-1292.	1.2	139
22	Wave characteristics of carbon nanotubes. <i>International Journal of Solids and Structures</i> , 2006, 43, 254-265.	1.3	137
23	Sensitivity analysis of crack detection in beams by wavelet technique. <i>International Journal of Mechanical Sciences</i> , 2001, 43, 2899-2910.	3.6	136
24	A molecular dynamics simulation study on enhancement of mechanical and tribological properties of polymer composites by introduction of graphene. <i>Carbon</i> , 2017, 111, 538-545.	5.4	131
25	Detecting anomalies in beams and plate based on the Hilbert-Huang transform of real signals. <i>Smart Materials and Structures</i> , 2003, 12, 447-460.	1.8	123
26	Energy harvesting from ocean waves by a floating energy harvester. <i>Energy</i> , 2016, 112, 1219-1226.	4.5	122
27	Highly Transparent and Flexible Iontronic Pressure Sensors Based on an Opaque to Transparent Transition. <i>Advanced Science</i> , 2020, 7, 2000348.	5.6	121
28	Scale effect on wave propagation of double-walled carbon nanotubes. <i>International Journal of Solids and Structures</i> , 2006, 43, 6071-6084.	1.3	118
29	Buckling and vibration analysis of a pressurized CNT reinforced functionally graded truncated conical shell under an axial compression using HDQ method. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2016, 303, 75-100.	3.4	118
30	Energy harvesting from transverse ocean waves by a piezoelectric plate. <i>International Journal of Engineering Science</i> , 2014, 81, 41-48.	2.7	115
31	Applications of Piezoelectric Materials in Structural Health Monitoring and Repair: Selected Research Examples. <i>Materials</i> , 2010, 3, 5169-5194.	1.3	113
32	Ocean wave energy harvesting with a piezoelectric coupled buoy structure. <i>Applied Ocean Research</i> , 2015, 50, 110-118.	1.8	110
33	Flexural vibration analysis of sandwich beam coupled with piezoelectric actuator. <i>Smart Materials and Structures</i> , 2000, 9, 103-109.	1.8	106
34	Atomic Transportation via Carbon Nanotubes. <i>Nano Letters</i> , 2009, 9, 245-249.	4.5	106
35	Effective in-plane stiffness and bending rigidity of armchair and zigzag carbon nanotubes. <i>International Journal of Solids and Structures</i> , 2004, 41, 5451-5461.	1.3	104
36	Analysis of wave propagation in carbon nanotubes via elastic shell theories. <i>International Journal of Engineering Science</i> , 2007, 45, 227-241.	2.7	99

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37	Controlling the formation of wrinkles in a single layer graphene sheet subjected to in-plane shear. Carbon, 2011, 49, 3107-3112.	5.4	98
38	Molecular mechanics modeling of carbon nanotube fracture. Carbon, 2007, 45, 1769-1776.	5.4	96
39	Enhancement of tribological properties of polymer composites reinforced by functionalized graphene. Composites Part B: Engineering, 2017, 120, 83-91.	5.9	91
40	Detection of gas atoms via vibration of graphenes. Physics Letters, Section A: General, Atomic and Solid State Physics, 2011, 375, 2411-2415.	0.9	90
41	Experimental studies on damage detection of beam structures with wavelet transform. International Journal of Engineering Science, 2011, 49, 253-261.	2.7	90
42	Love waves in piezoelectric coupled solid media. Smart Materials and Structures, 2001, 10, 380-388.	1.8	85
43	Gum Sensor: A Stretchable, Wearable, and Foldable Sensor Based on Carbon Nanotube/Chewing Gum Membrane. ACS Applied Materials & Interfaces, 2015, 7, 26195-26205.	4.0	85
44	Energy harvesting from wind by a piezoelectric harvester. Engineering Structures, 2017, 133, 74-80.	2.6	85
45	Free vibration analysis of piezoelectric coupled thin and thick annular plate. Journal of Sound and Vibration, 2005, 281, 119-139.	2.1	82
46	A high-capacitance solid-state supercapacitor based on free-standing film of polyaniline and carbon particles. Applied Energy, 2015, 153, 87-93.	5.1	81
47	Analytical solution for free vibration of piezoelectric coupled moderately thick circular plates. International Journal of Solids and Structures, 2002, 39, 2129-2151.	1.3	78
48	Wave propagation in graphene sheets with nonlocal elastic theory via finite element formulation. Computer Methods in Applied Mechanics and Engineering, 2012, 223-224, 1-9.	3.4	78
49	Potential of a piezoelectric energy harvester from sea waves. Journal of Sound and Vibration, 2014, 333, 1421-1429.	2.1	78
50	Flexible Electrode Design: Fabrication of Freestanding Polyaniline-Based Composite Films for High-Performance Supercapacitors. ACS Applied Materials & Interfaces, 2016, 8, 11379-11389.	4.0	78
51	Reinforcing mechanism of graphene at atomic level: Friction, crack surface adhesion and 2D geometry. Carbon, 2017, 114, 557-565.	5.4	78
52	Magnetorheological elastomer-based smart sandwich beams with nonconductive skins. Smart Materials and Structures, 2005, 14, 1001-1009.	1.8	77
53	Review on engineering structural designs for efficient piezoelectric energy harvesting to obtain high power output. Engineering Structures, 2021, 235, 112068.	2.6	77
54	Vibration of Single- and Double-Layered Graphene Sheets. Journal of Nanotechnology in Engineering and Medicine, 2011, 2, .	0.8	76

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55	Water Transport with a Carbon Nanotube Pump. ACS Nano, 2010, 4, 2338-2344.	7.3	75
56	A study on tribology of nitrile-butadiene rubber composites by incorporation of carbon nanotubes: Molecular dynamics simulations. Carbon, 2016, 100, 145-150.	5.4	75
57	Small-scale effect on torsional buckling of multi-walled carbon nanotubes. European Journal of Mechanics, A/Solids, 2010, 29, 49-55.	2.1	73
58	Wind energy harvesting with a piezoelectric harvester. Smart Materials and Structures, 2013, 22, 095023.	1.8	73
59	On the interaction of a single-walled carbon nanotube with a moving nanoparticle using nonlocal Rayleigh, Timoshenko, and higher-order beam theories. European Journal of Mechanics, A/Solids, 2012, 31, 179-202.	2.1	72
60	High-Porosity Foam-Based Iontronic Pressure Sensor with Superhigh Sensitivity of $9280 \text{ kPa}^{-1}$ . Nano-Micro Letters, 2022, 14, 21.	14.4	72
61	Axi-symmetric wave propagation in a cylinder coated with a piezoelectric layer. International Journal of Solids and Structures, 2002, 39, 3023-3037.	1.3	71
62	Enhancement of fracture properties of polymer composites reinforced by carbon nanotubes: A molecular dynamics study. Carbon, 2018, 129, 504-509.	5.4	71
63	Large amplitude vibration of FG-CNT reinforced composite annular plates with integrated piezoelectric layers on elastic foundation. Thin-Walled Structures, 2017, 120, 203-214.	2.7	70
64	Inelastic buckling of carbon nanotubes. Applied Physics Letters, 2007, 90, 033110.	1.5	68
65	Energy harvesting from high-rise buildings by a piezoelectric coupled cantilever with a proof mass. International Journal of Engineering Science, 2013, 72, 98-106.	2.7	68
66	A ring piezoelectric energy harvester excited by magnetic forces. International Journal of Engineering Science, 2014, 77, 71-78.	2.7	68
67	Dynamic stability analysis of a pressurized FG-CNTRC cylindrical shell interacting with supersonic airflow. Composites Part B: Engineering, 2017, 118, 15-25.	5.9	67
68	Large amplitude vibration of functionally graded graphene nanocomposite annular plates in thermal environments. Composite Structures, 2020, 239, 112047.	3.1	67
69	On dynamic instability of a pressurized functionally graded carbon nanotube reinforced truncated conical shell subjected to yawed supersonic airflow. Composite Structures, 2016, 153, 938-951.	3.1	66
70	Detection of gas atoms with carbon nanotubes. Scientific Reports, 2013, 3, .	1.6	63
71	A mathematical model for piezoelectric ring energy harvesting technology from vehicle tires. International Journal of Engineering Science, 2015, 94, 113-127.	2.7	62
72	Supercapacitor with extraordinary cycling stability and high rate from nano-architected polyaniline/graphene on Janus nanofibrous film with shape memory. Journal of Materials Chemistry A, 2018, 6, 21064-21077.	5.2	61

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73	Molecular dynamics simulations of tribology properties of NBR (Nitrile-Butadiene Rubber) /carbon nanotube composites. <i>Composites Part B: Engineering</i> , 2016, 97, 62-67.	5.9	60
74	Optimal placement and size of piezoelectric patches on beams from the controllability perspective. <i>Smart Materials and Structures</i> , 2000, 9, 558-567.	1.8	59
75	Practical issues in the detection of damage in beams using wavelets. <i>Smart Materials and Structures</i> , 2001, 10, 1009-1017.	1.8	59
76	Energy harvesting from high-rise buildings by a piezoelectric harvester device. <i>Energy</i> , 2015, 93, 1345-1352.	4.5	59
77	Nonlinear aero-thermal flutter postponement of supersonic laminated composite beams with shape memory alloys. <i>European Journal of Mechanics, A/Solids</i> , 2016, 57, 18-28.	2.1	59
78	Postbuckling analysis of smart FG-CNTRC annular sector plates with surface-bonded piezoelectric layers using generalized differential quadrature method. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2017, 325, 689-710.	3.4	59
79	Enhancing flutter and buckling capacity of column by piezoelectric layers. <i>International Journal of Solids and Structures</i> , 2002, 39, 4167-4180.	1.3	58
80	Use of magnetorheological elastomer in an adaptive sandwich beam with conductive skins. Part II: Dynamic properties. <i>International Journal of Solids and Structures</i> , 2006, 43, 5403-5420.	1.3	58
81	Simulations of the bending rigidity of graphene. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2010, 374, 1180-1183.	0.9	58
82	Stability analysis of carbon nanotubes via continuum models. <i>Smart Materials and Structures</i> , 2005, 14, 281-286.	1.8	56
83	A numerical study on flow-induced instabilities of supersonic FG-CNT reinforced composite flat panels in thermal environments. <i>Composite Structures</i> , 2017, 171, 113-125.	3.1	55
84	An investigation on the aeroelastic flutter characteristics of FG-CNTRC beams in the supersonic flow. <i>Composites Part B: Engineering</i> , 2017, 116, 486-499.	5.9	53
85	On the repair of a cracked beam with a piezoelectric patch. <i>Smart Materials and Structures</i> , 2002, 11, 404-410.	1.8	51
86	Enhanced tribological properties of polymer composites by incorporation of nano-SiO <sub>2</sub> particles: A molecular dynamics simulation study. <i>Computational Materials Science</i> , 2017, 134, 93-99.	1.4	51
87	A CONTROLLABILITY INDEX FOR OPTIMAL DESIGN OF PIEZOELECTRIC ACTUATORS IN VIBRATION CONTROL OF BEAM STRUCTURES. <i>Journal of Sound and Vibration</i> , 2001, 242, 507-518.	2.1	50
88	Torsional buckling of carbon nanotubes. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2007, 367, 135-139.	0.9	50
89	Study on the adjustable rigidity of magnetorheological-elastomer-based sandwich beams. <i>Smart Materials and Structures</i> , 2006, 15, 59-74.	1.8	49
90	Ocean wave energy pitching harvester with a frequency tuning capability. <i>Energy</i> , 2018, 162, 603-617.	4.5	49

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91	A theoretical model for a piezoelectric energy harvester with a tapered shape. <i>Engineering Structures</i> , 2017, 144, 19-25.	2.6	48
92	Optimal design of a piezoelectric coupled beam for power harvesting. <i>Smart Materials and Structures</i> , 2012, 21, 085013.	1.8	47
93	Ionic liquid-activated wearable electronics. <i>Materials Today Physics</i> , 2019, 8, 78-85.	2.9	47
94	Detection of cracks in cylindrical pipes and plates using piezo-actuated Lamb waves. <i>Smart Materials and Structures</i> , 2005, 14, 1325-1342.	1.8	46
95	Self-powered and plant-wearable hydrogel as LED power supply and sensor for promoting and monitoring plant growth in smart farming. <i>Chemical Engineering Journal</i> , 2021, 422, 129499.	6.6	46
96	Torsional instability of carbon nanotubes encapsulating C60 fullerenes. <i>Carbon</i> , 2009, 47, 507-512.	5.4	45
97	Polyaniline nanoflowers grown on vibration-isolator-mimetic polyurethane nanofibers for flexible supercapacitors with prolonged cycle life. <i>Journal of Materials Chemistry A</i> , 2017, 5, 7933-7943.	5.2	45
98	Use of magnetorheological elastomer in an adaptive sandwich beam with conductive skins. Part I: Magnetoelastic loads in conductive skins. <i>International Journal of Solids and Structures</i> , 2006, 43, 5386-5402.	1.3	44
99	Flow-induced instability of double-walled carbon nanotubes based on an elastic shell model. <i>Journal of Applied Physics</i> , 2007, 102, .	1.1	44
100	Nonlinear thermo-inertial instability of functionally graded shape memory alloy sandwich plates. <i>Composite Structures</i> , 2015, 120, 496-508.	3.1	44
101	2D underwater acoustic metamaterials incorporating a combination of particle-filled polyurethane and spiral-based local resonance mechanisms. <i>Composite Structures</i> , 2019, 220, 1-10.	3.1	44
102	Nonlocal elastic beam models for flexural wave propagation in double-walled carbon nanotubes. <i>Journal of Applied Physics</i> , 2009, 106, 044301.	1.1	43
103	A review on structural enhancement and repair using piezoelectric materials and shape memory alloys. <i>Smart Materials and Structures</i> , 2012, 21, 013001.	1.8	43
104	An efficient piezoelectric energy harvester with frequency self-tuning. <i>Journal of Sound and Vibration</i> , 2017, 396, 69-82.	2.1	43
105	Experimental investigation of underwater locally multi-resonant metamaterials under high hydrostatic pressure for low frequency sound absorption. <i>Applied Acoustics</i> , 2021, 172, 107605.	1.7	43
106	On dispersion relations in piezoelectric coupled-plate structures. <i>Smart Materials and Structures</i> , 2000, 9, 859-867.	1.8	42
107	On the snap-through instability of post-buckled FG-CNTRC rectangular plates with integrated piezoelectric layers. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2018, 331, 53-71.	3.4	42
108	Development of a unified model to predict the axial stress-strain behavior of recycled aggregate concrete confined through spiral reinforcement. <i>Engineering Structures</i> , 2020, 218, 110851.	2.6	42

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109	Role of carbon nanotube in reinforcing cementitious materials: An experimental and coarse-grained molecular dynamics study. <i>Cement and Concrete Research</i> , 2021, 147, 106517.	4.6	42
110	Nonlinear thermal stability of geometrically imperfect shape memory alloy hybrid laminated composite plates. <i>Smart Materials and Structures</i> , 2014, 23, 075012.	1.8	41
111	Free vibration analysis of piezoelectric coupled circular plate with open circuit. <i>Journal of Sound and Vibration</i> , 2010, 329, 1126-1136.	2.1	40
112	Modeling of the mechanical instability of carbon nanotubes. <i>Carbon</i> , 2008, 46, 285-290.	5.4	39
113	Torsional buckling of double-walled carbon nanotubes. <i>Carbon</i> , 2008, 46, 1172-1174.	5.4	39
114	Lamb wave propagation in a metallic semi-infinite medium covered with piezoelectric layer. <i>International Journal of Solids and Structures</i> , 2002, 39, 2547-2556.	1.3	38
115	Analysis of wave propagation in piezoelectric coupled cylinder affected by transverse shear and rotary inertia. <i>International Journal of Solids and Structures</i> , 2003, 40, 6653-6667.	1.3	38
116	Modeling of vibrations of carbon nanotubes. <i>Procedia Engineering</i> , 2012, 31, 343-347.	1.2	38
117	Repair of notched beam under dynamic load using piezoelectric patch. <i>International Journal of Mechanical Sciences</i> , 2004, 46, 1517-1533.	3.6	37
118	Bending instability characteristics of double-walled carbon nanotubes. <i>Physical Review B</i> , 2005, 71, .	1.1	37
119	A Model for the Analysis of Beams with Embedded Piezoelectric Layers. <i>Journal of Intelligent Material Systems and Structures</i> , 2002, 13, 61-70.	1.4	35
120	Wave propagation in piezoelectric coupled plates by use of interdigital transducer. <i>International Journal of Solids and Structures</i> , 2002, 39, 1119-1130.	1.3	35
121	Wave propagation in a piezoelectric coupled cylindrical membrane shell. <i>International Journal of Solids and Structures</i> , 2001, 38, 8207-8218.	1.3	34
122	Nonlocal continuum models for carbon nanotubes subjected to static loading. <i>Journal of Mechanics of Materials and Structures</i> , 2006, 1, 663-680.	0.4	34
123	A new nonlinearly tapered FGM piezoelectric energy harvester. <i>Engineering Structures</i> , 2018, 173, 52-60.	2.6	34
124	Design of interdigital transducers for crack detection in plates. <i>Ultrasonics</i> , 2005, 43, 481-493.	2.1	33
125	Nonlocal Continuum Model and Molecular Dynamics for Free Vibration of Single-Walled Carbon Nanotubes. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 10401-10407.	0.9	33
126	The effect of sliding velocity on the tribological properties of polymer/carbon nanotube composites. <i>Carbon</i> , 2016, 106, 106-109.	5.4	33



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127	Orientation-dependent mechanical properties of Au nanowires under uniaxial loading. Computational Materials Science, 2010, 48, 513-519.	1.4	31
128	Gelation of highly entangled hydrophobic macromolecular fluid for ultrastrong underwater in situ fast tissue adhesion. Science Advances, 2022, 8, .	4.7	31
129	Design of a smart piezoelectric actuator based on a magnetorheological elastomer. Smart Materials and Structures, 2005, 14, 504-510.	1.8	30
130	Protein Gel Phase Transition: Toward Superiorly Transparent and Hysteresis-Free Wearable Electronics. Advanced Functional Materials, 2020, 30, 1910080.	7.8	30
131	A rain energy harvester using a self-release tank. Mechanical Systems and Signal Processing, 2021, 147, 107099.	4.4	30
132	Molecular dynamics simulations of the torsional instability of carbon nanotubes filled with hydrogen or silicon atoms. Applied Physics Letters, 2008, 92, 043120.	1.5	29
133	Design of a piezoelectric harvester fixed under the roof of a high-rise building. Engineering Structures, 2016, 117, 1-9.	2.6	29
134	Repair of cracked column under axially compressive load via piezoelectric patch. Computers and Structures, 2005, 83, 1355-1363.	2.4	28
135	Local buckling of carbon nanotubes under bending. Applied Physics Letters, 2007, 91, .	1.5	28
136	Transportation of hydrogen molecules using carbon nanotubes in torsion. Carbon, 2009, 47, 1870-1873.	5.4	28
137	Repair of vibrating delaminated beam structures using piezoelectric patches. Smart Materials and Structures, 2010, 19, 035027.	1.8	28
138	Effective Young's modulus of carbon nanotube/epoxy composites. Composites Part B: Engineering, 2016, 94, 160-166.	5.9	28
139	A comprehensive stability analysis of a cracked beam subjected to follower compression. International Journal of Solids and Structures, 2004, 41, 4875-4888.	1.3	27
140	Ejection of DNA molecules from carbon nanotubes. Carbon, 2012, 50, 4945-4952.	5.4	27
141	A study on a high efficient cylinder composite piezoelectric energy harvester. Composite Structures, 2017, 161, 237-245.	3.1	27
142	Modeling of fracture of carbon nanotubes with vacancy defect. Physical Review B, 2007, 75, .	1.1	26
143	A study on an ocean wave energy harvester made of a composite piezoelectric buoy structure. Composite Structures, 2017, 178, 447-454.	3.1	26
144	Wave Propagation in a Piezoelectric Coupled Solid Medium. Journal of Applied Mechanics, Transactions ASME, 2002, 69, 819-824.	1.1	25

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145	Repair of delaminated beams via piezoelectric patches. <i>Smart Materials and Structures</i> , 2004, 13, 1222-1229.	1.8	25
146	Mechanical properties of platinum nanowires: An atomistic investigation on single-crystalline and twinned structures. <i>Computational Materials Science</i> , 2012, 55, 205-210.	1.4	25
147	Wave propagation in piezoelectric coupled plates by use of interdigital transducer. Part 2: Wave excitation by interdigital transducer. <i>International Journal of Solids and Structures</i> , 2002, 39, 1131-1144.	1.3	24
148	Molecular mechanics modeling for properties of carbon nanotubes. <i>Journal of Applied Physics</i> , 2008, 103, .	1.1	24
149	Interplay between internal resonance and nonlinear magnetic interaction for multi-directional energy harvesting. <i>Energy Conversion and Management</i> , 2021, 244, 114465.	4.4	24
150	Compressive mechanical behavior of Au nanowires. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2010, 374, 2949-2952.	0.9	23
151	Free Vibration Analysis of a Nonlinearly Tapered Cone Beam by Adomian Decomposition Method. <i>International Journal of Structural Stability and Dynamics</i> , 2018, 18, 1850101.	1.5	23
152	A piezoelectric hydro-energy harvester featuring a special container structure. <i>Energy</i> , 2019, 189, 116261.	4.5	23
153	Finite element analysis of the piezoelectric-based repair of a delaminated beam. <i>Smart Materials and Structures</i> , 2008, 17, 015017.	1.8	22
154	Carbon Nanotube-Based Sensors for Detection of Gas Atoms. <i>Journal of Nanotechnology in Engineering and Medicine</i> , 2011, 2, .	0.8	22
155	Detection of gas atoms with graphene sheets. <i>Computational Materials Science</i> , 2012, 60, 245-249.	1.4	22
156	Dispersion Relations in Piezoelectric Coupled Beams. <i>AIAA Journal</i> , 2000, 38, 2357-2361.	1.5	21
157	Generalized hypergeometric function solutions for transverse vibration of a class of non-uniform annular plates. <i>Journal of Sound and Vibration</i> , 2005, 287, 785-807.	2.1	21
158	Dynamic Instability of Nanorods/Nanotubes Subjected to an End Follower Force. <i>Journal of Engineering Mechanics - ASCE</i> , 2010, 136, 1054-1058.	1.6	20
159	An experimental study on the repair of a notched beam subjected to dynamic loading with piezoelectric patches. <i>Smart Materials and Structures</i> , 2011, 20, 115023.	1.8	20
160	Reversible ferromagnetism in rutile TiO <sub>2</sub> single crystals induced by nickel impurities. <i>Applied Physics Letters</i> , 2012, 101, .	1.5	20
161	Analytical solution of excitation of Lamb waves in plates by inter-digital transducers. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2003, 459, 1117-1134.	1.0	19
162	Repair of a delaminated plate under static loading with piezoelectric patches. <i>Smart Materials and Structures</i> , 2010, 19, 105025.	1.8	19

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163	An octo-generator for energy harvesting based on the piezoelectric effect. Applied Ocean Research, 2017, 64, 128-134.	1.8	19
164	Hand-held piezoelectric energy harvesting structure: Design, dynamic analysis, and experimental validation. Measurement: Journal of the International Measurement Confederation, 2021, 174, 109011.	2.5	19
165	Cement-Based Piezoelectric Ceramic Composites for Sensing Elements: A Comprehensive State-of-the-Art Review. Sensors, 2021, 21, 3230.	2.1	19
166	Transition of the buckling load of beams by the use of piezoelectric layers. Smart Materials and Structures, 2003, 12, 696-702.	1.8	18
167	Wave boundary element to study Lamb wave propagation in plates. Journal of Sound and Vibration, 2005, 288, 195-213.	2.1	18
168	A noise-robust damage indicator for characterizing singularity of mode shapes for incipient delamination identification in CFRP laminates. Mechanical Systems and Signal Processing, 2019, 121, 183-200.	4.4	18
169	Elastic wave manipulation in piezoelectric beam meta-structure using electronic negative capacitance dual-adjacent/staggered connections. Composite Structures, 2019, 210, 567-580.	3.1	18
170	SH wave propagation in piezoelectric coupled plates. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2002, 49, 596-603.	1.7	17
171	Buckling enhancement of epoxy columns using embedded shape memory alloy spring actuators. Composite Structures, 2006, 72, 200-211.	3.1	17
172	AXI-SYMMETRIC WAVE PROPAGATION OF CARBON NANOTUBES WITH NON-LOCAL ELASTIC SHELL MODEL. International Journal of Structural Stability and Dynamics, 2006, 06, 285-296.	1.5	17
173	A novel ring type ultrasonic motor with multiple wavenumbers: design, fabrication and characterization. Smart Materials and Structures, 2009, 18, 125025.	1.8	17
174	A Review on the Application of Nonlocal Elastic Models in Modeling of Carbon Nanotubes and Graphenes. Springer Series in Materials Science, 2014, , 57-82.	0.4	16
175	Development of an ocean wave energy harvester with a built-in frequency conversion function. International Journal of Energy Research, 2018, 42, 684-695.	2.2	16
176	<title>Structural health monitoring using active sensors and wavelet transforms</title>. , 1999, , .		15
177	Axisymmetric Buckling of Reddy Circular Plates on Pasternak Foundation. Journal of Engineering Mechanics - ASCE, 2001, 127, 254-259.	1.6	15
178	Separation of atoms with carbon nanotubes. Carbon, 2009, 47, 2754-2757.	5.4	15
179	A review on energy harvesting from ocean waves by piezoelectric technology. Journal of Modeling in Mechanics and Materials, 2017, 1, .	0.5	15
180	Vibration analysis of non-uniform tapered beams with nonlinear FGM properties. Journal of Mechanical Science and Technology, 2018, 32, 5325-5337.	0.7	15

#	ARTICLE	IF	CITATIONS
181	Bladeless rotational piezoelectric energy harvester for hydroelectric applications of ultra-low and wide-range flow rates. <i>Energy Conversion and Management</i> , 2021, 227, 113619.	4.4	15
182	BUCKLING ANALYSIS OF CRACKED COLUMN STRUCTURES AND PIEZOELECTRIC-BASED REPAIR AND ENHANCEMENT OF AXIAL LOAD CAPACITY. <i>International Journal of Structural Stability and Dynamics</i> , 2003, 03, 17-33.	1.5	14
183	Stability analysis of carbon nanotube probes for an atomic force microscope via a continuum model. <i>Smart Materials and Structures</i> , 2005, 14, 1196-1203.	1.8	14
184	Damage Detection of Beams by a Vibration Characteristic Tuning Technique Through an Optimal Design of Piezoelectric Layers. <i>International Journal of Structural Stability and Dynamics</i> , 2016, 16, 1550070.	1.5	14
185	Influence of hydration capacity for cement matrix on the piezoelectric properties and microstructure of cement-based piezoelectric ceramic composites. <i>Materials Characterization</i> , 2021, 179, 111390.	1.9	14
186	Time Constants of Cardiac Function and Their Calculations. <i>Open Cardiovascular Medicine Journal</i> , 2010, 4, 168-172.	0.6	14
187	Finite element studies on field-dependent rigidities of sandwich beams with magnetorheological elastomer cores. <i>Smart Materials and Structures</i> , 2006, 15, 787-791.	1.8	13
188	ON INSTABILITY OF SINGLE-WALLED CARBON NANOTUBES WITH A VACANCY DEFECT. <i>International Journal of Structural Stability and Dynamics</i> , 2008, 08, 357-366.	1.5	13
189	Detecting the delamination location of a beam with a wavelet transform: an experimental study. <i>Smart Materials and Structures</i> , 2011, 20, 012002.	1.8	13
190	Longitudinal wave propagation in piezoelectric coupled rods. <i>Smart Materials and Structures</i> , 2002, 11, 48-54.	1.8	12
191	Repair of Delaminated Beams Subjected to Compressive Force via Piezoelectric Layers. <i>Advances in Structural Engineering</i> , 2005, 8, 411-425.	1.2	12
192	Modeling the Instability of Carbon Nanotubes: From Continuum Mechanics to Molecular Dynamics. <i>Journal of Nanotechnology in Engineering and Medicine</i> , 2010, 1, .	0.8	12
193	Gene Detection With Carbon Nanotubes. <i>Journal of Nanotechnology in Engineering and Medicine</i> , 2012, 3, .	0.8	12
194	Flexible Cellulose-Based Films of Polyanilineâ€“Grapheneâ€“Silver Nanowire for High-Performance Supercapacitors. <i>Journal of Nanotechnology in Engineering and Medicine</i> , 2015, 6, .	0.8	12
195	Performance analysis of piezoelectric energy harvesters with a tip mass and nonlinearities of geometry and damping under parametric and external excitations. <i>Archive of Applied Mechanics</i> , 2020, 90, 2297-2318.	1.2	12
196	Piezoelectric properties and microstructure of ceramicrete-based piezoelectric composites. <i>Ceramics International</i> , 2021, 47, 29681-29687.	2.3	12
197	Buckling of carbon nanotubes wrapped by polyethylene molecules. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2011, 375, 624-627.	0.9	11
198	Crack identification through scan-tuning of vibration characteristics using piezoelectric materials. <i>Smart Materials and Structures</i> , 2017, 26, 025005.	1.8	11

#	ARTICLE	IF	CITATIONS
199	Nonlocal magneto-thermo-vibro-elastic analysis of vertically aligned arrays of single-walled carbon nanotubes. <i>European Journal of Mechanics, A/Solids</i> , 2018, 72, 497-515.	2.1	11
200	A Novel Heaving Ocean Wave Energy Harvester with a Frequency Tuning Capability. <i>Arabian Journal for Science and Engineering</i> , 2019, 44, 5711-5722.	1.7	11
201	Deep residual U-net with input of static structural responses for efficient U* load transfer path analysis. <i>Advanced Engineering Informatics</i> , 2020, 46, 101184.	4.0	10
202	Small-scale experimental study on the optimisation of a rooftop rainwater energy harvester using electromagnetic generators in light rains. <i>International Journal of Energy Research</i> , 2020, 44, 10778-10796.	2.2	10
203	Load path-guided fiber trajectory in composite panels: A comparative study and a novel combined method. <i>Composite Structures</i> , 2021, 263, 113689.	3.1	10
204	Propagation of a Shear Direction Acoustic Wave in Piezoelectric Coupled Cylinders. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2002, 69, 391-394.	1.1	9
205	EFFECTS OF THE FOLLOWER FORCE ON THE STATIC BUCKLING OF BEAMS. <i>International Journal of Structural Stability and Dynamics</i> , 2002, 02, 425-430.	1.5	9
206	Load sharing inside multi-layered graphene nanosheets under bending and tension. <i>Computational Materials Science</i> , 2015, 110, 62-70.	1.4	9
207	A study on effects of stone-thrower-wales defective carbon nanotubes on glass transition temperature of polymer composites using molecular dynamics simulations. <i>Computational Materials Science</i> , 2021, 186, 110005.	1.4	9
208	CONTINUUM MODEL FOR STABILITY ANALYSIS OF CARBON NANOTUBES UNDER INITIAL BEND. <i>International Journal of Structural Stability and Dynamics</i> , 2005, 05, 579-595.	1.5	8
209	Molecular Dynamics Simulations of Thermal Properties of Polymer Composites Enhanced by Cross-Linked Graphene Sheets. <i>Acta Mechanica Solida Sinica</i> , 2018, 31, 673-682.	1.0	8
210	On complex flutter and buckling analysis of a beam structure subjected to static follower force. <i>Structural Engineering and Mechanics</i> , 2003, 16, 533-556.	1.0	8
211	A note on wave control in lumped parameter system. <i>Computers and Structures</i> , 1995, 57, 177-181.	2.4	7
212	A NOTE ON POSSIBLE FLUTTER OF PIEZOELECTRIC LAYERS. <i>International Journal of Structural Stability and Dynamics</i> , 2005, 05, 125-133.	1.5	7
213	Analytical Solution for Shear Horizontal Wave Propagation in Piezoelectric Coupled Media by Interdigital Transducer. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2005, 72, 341-350.	1.1	7
214	ACOUSTIC WAVE IN PIEZOELECTRIC COUPLED PLATES WITH OPEN CIRCUIT. <i>International Journal of Structural Stability and Dynamics</i> , 2010, 10, 299-313.	1.5	7
215	Molecular simulations on separation of atoms with carbon nanotubes in torsion. <i>Computational Materials Science</i> , 2014, 81, 280-283.	1.4	7
216	Modeling the behavior of bilayer shape memory alloy/functionally graded material beams considering asymmetric shape memory alloy response. <i>Journal of Intelligent Material Systems and Structures</i> , 2020, 31, 84-99.	1.4	7

#	ARTICLE	IF	CITATIONS
217	Crack detection of structure for plane problem with spatial wavelets. Acta Mechanica Sinica/Lixue Xuebao, 1999, 15, 39-51.	1.5	6
218	Region of Flutter and Buckling Instability for a Cracked Beam. AIAA Journal, 2003, 41, 2302-2304.	1.5	6
219	Compressive buckling of carbon nanotubes containing polyethylene molecules. Carbon, 2011, 49, 729-732.	5.4	6
220	Dispersion of a bundle of carbon nanotubes by mechanical torsional energy. Carbon, 2013, 59, 229-236.	5.4	6
221	Molecular separation with carbon nanotubes. Computational Materials Science, 2014, 90, 50-55.	1.4	6
222	Novel Damage Detection Tool Based on Load Path Analysis Using Ustar (U*). IEEE Access, 2020, 8, 82607-82616.	2.6	6
223	A Note on Wavelet-Based Method for Damage Detection. Journal of Applied Mechanics, Transactions ASME, 2001, 68, 812-814.	1.1	6
224	<title>Issues of control of structures using piezoelectric actuators</title>. , 1997, , .		5
225	<title>Field-dependent dynamic properties of magnetorheological elastomer-based sandwich beams</title>. , 2005, , .		5
226	A linear time-variant system for signal modulation by use of magnetorheological elastomer-suspended beams. Smart Materials and Structures, 2005, 14, 1154-1162.	1.8	5
227	A Study of Interaction between Embedded SMA Fibers and Host Material. Mechanics of Advanced Materials and Structures, 2006, 13, 33-42.	1.5	5
228	Vortex-induced vibrational tristable energy harvester: Design and experiments. IOP Conference Series: Materials Science and Engineering, 2019, 531, 012011.	0.3	5
229	An investigation on a cylinder harvester made of piezoelectric coupled torsional beams. Energy Conversion and Management, 2022, 251, 114857.	4.4	5
230	Experimental Study on Hydroelectric Energy Harvester Based on a Hybrid Qiqi and Turbine Structure. Energies, 2021, 14, 7601.	1.6	5
231	Sustainable municipal solid waste incineration fly ash (MSWIFA) alkali-activated materials in construction: Fabrication and performance. Nanotechnologies in Construction, 2022, 14, 43-52.	0.1	5
232	On the Jump of Buckling Capacity of Beams via Piezoelectric Layers. Advances in Structural Engineering, 2004, 7, 363-370.	1.2	4
233	Use of magnetorheological elastomer for smart piezoelectric power actuator design and signal processing. , 2005, , .		4
234	EFFECT OF THE VAN DER WAALS INTERACTION ON ANALYSIS OF DOUBLE-WALLED CARBON NANOTUBES. International Journal of Structural Stability and Dynamics, 2005, 05, 457-474.	1.5	4

#	ARTICLE	IF	CITATIONS
235	Bending Solutions of Sectorial Thick Plates Based on Reissner Plate Theory. <i>Mechanics Based Design of Structures and Machines</i> , 2005, 33, 51-77.	3.4	4
236	Publisher's Note: Modeling of fracture of carbon nanotubes with vacancy defect [Phys. Rev. B75, 201405 (2007)]. <i>Physical Review B</i> , 2007, 75, .	1.1	4
237	Using Model of Strain Gradient Membrane Shell to Characterize Longitudinal Wave Dispersion in Multi-Walled Carbon Nanotubes. <i>Journal of Computational and Theoretical Nanoscience</i> , 2008, 5, 1980-1988.	0.4	4
238	Relationship Between PI and Szeged Indices of a Triangulane and Its Associated Dendrimer. <i>Journal of Computational and Theoretical Nanoscience</i> , 2008, 5, 681-684.	0.4	4
239	Instability analysis of double-walled carbon nanotubes subjected to axial compression. <i>Journal of Applied Physics</i> , 2008, 104, 036102.	1.1	4
240	Flexural Analysis of Piezoelectric Coupled Structures. <i>Solid Mechanics and Its Applications</i> , 2001, , 161-168.	0.1	4
241	Singularity under a concentrated force in elasticity. <i>Applied Mathematics and Mechanics (English)</i> Tj ETQq1 1 0.784314 rgBT <sub>3</sub> /Overlo 1.9	1.9	3
242	A reduced-order model about structural wave control based upon the concept of degree of controllability. <i>IEEE Transactions on Automatic Control</i> , 1994, 39, 1711-1713.	3.6	3
243	ON CONCENTRATED MASSES AND STIFFNESSES IN STRUCTURAL THEORIES. <i>International Journal of Structural Stability and Dynamics</i> , 2004, 04, 171-179.	1.5	3
244	Detection of crack in thin cylindrical pipes using piezo-actuated Lamb waves. , 2005, 5765, 820.		3
245	Comparison of Hilbert- Huang, Wavelet, and Fourier Transforms for Selected Applications. , 2005, , 213-244.		3
246	Stability Analysis of a Delaminated Beam Subjected to Follower Compression. <i>AIAA Journal</i> , 2005, 43, 2052-2059.	1.5	3
247	FE-PML MODELING OF 3D SCATTERING OF TRANSIENT ELASTIC WAVES IN CRACKED PLATE WITH RECTANGULAR CROSS SECTION. <i>International Journal of Structural Stability and Dynamics</i> , 2010, 10, 1123-1139.	1.5	3
248	A study on interaction of DNA molecules and carbon nanotubes for an effective ejection of the molecules. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2012, 376, 3267-3271.	0.9	3
249	Nanoresonators in Sensors and Molecular Transportation: An Introduction to the Possibilities of Carbon Nanotubes and Graphene Sheets. <i>IEEE Nanotechnology Magazine</i> , 2014, 8, 29-37.	0.9	3
250	Snubbing effect in atomic scale friction of graphene. <i>Composites Part B: Engineering</i> , 2018, 136, 119-125.	5.9	3
251	The Method of Successive Decrease and the Concept of Harmonic Wave Filter in Structural Wave Control. , 1995, , .		3
252	A Theory for Reduced Order Control Design of Plate Systems. <i>Journal of Applied Mechanics, Transactions ASME</i> , 1997, 64, 532-537.	1.1	2

#	ARTICLE	IF	CITATIONS
253	Exact Bending Solutions of Axisymmetric Reissner Plates in Terms of Classical Thin Plate Solutions. <i>Advances in Structural Engineering</i> , 2004, 7, 129-145.	1.2	2
254	Reduction approaches for vibration control of repetitive structures. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2006, 27, 637-644.	1.9	2
255	<title>Free vibration of piezoelectric-coupled thick circular plates</title>. , 2002, 4693, 505.		1
256	Complex Analysis of Flutter and Buckling of Beams under Rotational and Transverse Spring Constraints. <i>Advances in Structural Engineering</i> , 2004, 7, 21-31.	1.2	1
257	Self-magnetism and Persistent Photoconductivity. <i>Communications in Theoretical Physics</i> , 2008, 50, 999-1002.	1.1	1
258	Molecular simulations of in-plane stiffness and shear modulus of double-walled carbon nanotubes. <i>Molecular Simulation</i> , 2008, 34, 1283-1287.	0.9	1
259	Buckling and Vibration of Carbon Nanotubes Embedded in Polyethylene Polymers. <i>Journal of Nanotechnology in Engineering and Medicine</i> , 2012, 3, .	0.8	1
260	Driving Forces and Transportation Efficiency in Water Transportation Through Single-Walled Carbon Nanotubes. <i>Journal of Nanotechnology in Engineering and Medicine</i> , 2012, 3, .	0.8	1
261	A high-capacitance solid-state supercapacitor based on polyaniline and ground carbon fibers. , 2014, , .		1
262	Frequency Comparison Function Method for Real-Time Identification of Breathing Crack at Welding Joint. <i>International Journal of Structural Stability and Dynamics</i> , 2020, 20, 2041001.	1.5	1
263	Transparent Protein Hydrogels: Protein Gel Phase Transition: Toward Superiorly Transparent and Hysteresis-Free Wearable Electronics ( <i>Adv. Funct. Mater.</i> 27/2020). <i>Advanced Functional Materials</i> , 2020, 30, 2070176.	7.8	1
264	Stability analysis of carbon nanotubes via continuum models. , 2005, , .		0
265	Effect of Atomic Vacancy on Stability of Carbon Nanotubes. <i>Journal of Computational and Theoretical Nanoscience</i> , 2008, 5, 1997-2003.	0.4	0
266	The Alternating Electrostatic Force Needed to Optimize Growth of a Carbon Nanotube. <i>Journal of Computational and Theoretical Nanoscience</i> , 2008, 5, 2170-2175.	0.4	0
267	Analysis of elastic wave in carbon nanotubes using continuum mechanics and molecular dynamic simulations. , 2009, , .		0
268	Buckling and Vibration of Carbon Nanotubes Embedded in Polyethylene Polymers. <i>Applied Mechanics and Materials</i> , 2011, 148-149, 1016-1020.	0.2	0
269	Recent studies on applications of nanoresonators in sensors and molecular transportation. , 2014, , .		0
270	Bandgap coupling effects between hybrid nonlinear synchronized switch damping and linear two-order resonant bandgaps in piezoelectric meta-structures. <i>Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications</i> , 0, , 146442072110018.	0.7	0



#	ARTICLE	IF	CITATIONS
271	On complex flutter and buckling analysis of a beam structure subjected to static follower force. Structural Engineering and Mechanics, 2003, 16, 533-556.	1.0	0
272	Simulation and Experimental Studies and Applications of Carbon Nanotubes and Graphenes in Engineering and Medicine. Journal of Nanotechnology in Engineering and Medicine, 2012, 3, .	0.8	0