

# X-Q He

## List of Publications by Year in descending order

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129  
papers

6,110  
citations

76326

40  
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76900

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129  
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129  
docs citations

129  
times ranked

3380  
citing authors

#	ARTICLE	IF	CITATIONS
1	Peridynamic Simulation of Fracture in Polycrystalline Graphene. Journal of Peridynamics and Nonlocal Modeling, 2023, 5, 260-274.	2.9	5
2	Influence of Defect Number, Distribution Continuity and Orientation on Tensile Strengths of the CNT-Based Networks: A Molecular Dynamics Study. Nanoscale Research Letters, 2022, 17, 15.	5.7	2
3	A programmable multiscale assembly strategy of carbon nanotubes for honeycomb-like networks. Carbon, 2022, 198, 110-118.	10.3	4
4	Parameter analysis of damaged region for laminates with matrix defects. Journal of Sandwich Structures and Materials, 2021, 23, 580-620.	3.5	21
5	Investigation of carbon nanosprings with the tunable mechanical properties controlled by the defect distribution. Carbon, 2021, 179, 240-255.	10.3	7
6	Improving bistable properties of metallic shells using a nanostructuring technique. Thin-Walled Structures, 2020, 146, 106444.	5.3	5
7	Development of Matched Interface and Boundary Method for Buckling Analysis of Plates with Various Interfaces. International Journal of Applied Mechanics, 2020, 12, 2050086.	2.2	6
8	Multistable shells with designable configurations based on localized nanocrystallization processes. Materials and Design, 2020, 195, 109047.	7.0	1
9	An improved interpolating complex variable element free Galerkin method for the pattern transformation of hydrogel. Engineering Analysis With Boundary Elements, 2020, 113, 99-109.	3.7	12
10	Broadband energy harvesting by using bistable FG-CNTRC plate with integrated piezoelectric layers. Smart Materials and Structures, 2019, 28, 095021.	3.5	21
11	Atomic-Scale Simulation of the Contact Behavior and Mechanism of the SWNT@AgNW Heterostructure. Journal of Physical Chemistry C, 2019, 123, 19693-19703.	3.1	27
12	Carbon Nanotubes: A Molecular Dynamics Study on Self-Assembly of Single-Walled Carbon Nanotubes: From Molecular Morphology and Binding Energy (Adv. Mater. Interfaces 19/2019). Advanced Materials Interfaces, 2019, 6, 1970124.	3.7	0
13	A Molecular Dynamics Study on Self-Assembly of Single-Walled Carbon Nanotubes: From Molecular Morphology and Binding Energy. Advanced Materials Interfaces, 2019, 6, 1900983.	3.7	23
14	The generalized finite difference method for an inverse boundary value problem in three-dimensional thermo-elasticity. Advances in Engineering Software, 2019, 131, 1-11.	3.8	18
15	SnTe monolayer: Tuning its electronic properties with doping. Superlattices and Microstructures, 2019, 130, 12-19.	3.1	8
16	An improved ordinary state-based peridynamic model for cohesive crack growth in quasi-brittle materials. International Journal of Mechanical Sciences, 2019, 153-154, 402-415.	6.7	48
17	Theoretical and experimental study of bistable symmetric shells built by locally nanostructuring an isotropic plate. IOP Conference Series: Materials Science and Engineering, 2019, 531, 012018.	0.6	0
18	Experimental and Theoretical Investigation on Bistable Symmetric Shells Built by Locally Nanostructuring Isotropic Rectangular Plates. International Journal of Structural Stability and Dynamics, 2019, 19, 1950141.	2.4	3

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19	Investigation on fracture of pre-cracked single-layer graphene sheets. Computational Materials Science, 2019, 159, 365-375.	3.0	15
20	Finite element method of bond-based peridynamics and its ABAQUS implementation. Engineering Fracture Mechanics, 2019, 206, 408-426.	4.3	34
21	Recent Progress in the Preparation of Horizontally Ordered Carbon Nanotube Assemblies from Solution. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700719.	1.8	41
22	Nanotwinned and hierarchical nanotwinned metals: a review of experimental, computational and theoretical efforts. Npj Computational Materials, 2018, 4, .	8.7	109
23	Bistable metallic materials produced by nanocrystallization process. Materials and Design, 2018, 141, 374-383.	7.0	14
24	Atomic scale study of the anti-vortex domain structure in polycrystalline ferroelectric. Philosophical Magazine, 2018, 98, 118-138.	1.6	10
25	Simulation study of near-field enhancement on an Ag nanoparticle dimer system in a laser-induced nanowelding process. Integrated Ferroelectrics, 2018, 191, 72-79.	0.7	19
26	An ordinary state-based peridynamic model for the fracture of zigzag graphene sheets. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2018, 474, 20180019.	2.1	30
27	3-D finite element calculation of electric field enhancement for nanostructures fabrication mechanism on silicon surface with AFM tip induced local anodic oxidation. Integrated Ferroelectrics, 2018, 190, 129-141.	0.7	25
28	Investigation on snapping transitions of locally nanostructured bistable disks actuated by distributed transverse forces. Mechanics of Materials, 2018, 127, 91-99.	3.2	7
29	Large-scale assembly of single-walled carbon nanotubes based on aqueous solution. Integrated Ferroelectrics, 2018, 190, 39-47.	0.7	21
30	Large amplitude free vibration of nanotube-reinforced composite doubly curved panels resting on elastic foundations in thermal environments. JVC/Journal of Vibration and Control, 2017, 23, 2672-2689.	2.6	28
31	Application of the meshless generalized finite difference method to inverse heat source problems. International Journal of Heat and Mass Transfer, 2017, 108, 721-729.	4.8	102
32	Atomistic simulations on the axial nanowelding configuration and contact behavior between Ag nanowire and single-walled carbon nanotubes. Journal of Nanoparticle Research, 2017, 19, 1.	1.9	31
33	Stress distributions and mechanical properties of laminates $[\hat{1}, /90]$ with closed and open cracks in shear loading. International Journal of Solids and Structures, 2017, 118-119, 97-108.	2.7	5
34	Investigating interfacial contact configuration and behavior of single-walled carbon nanotube-based nanodevice with atomistic simulations. Journal of Nanoparticle Research, 2017, 19, 1.	1.9	35
35	Hierarchical-structure induced adjustable deformation of super carbon nanotubes with radial shrinkage up to 66%. Carbon, 2017, 125, 289-298.	10.3	7
36	An Improved Interpolating Complex Variable Meshless Method for Bending Problem of Kirchhoff Plates. International Journal of Applied Mechanics, 2017, 09, 1750089.	2.2	15

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37	Free vibration of super-graphene carbon nanotube networks via a beam element based coarse-grained method. <i>Materials Research Express</i> , 2017, 4, 085002.	1.6	0
38	Near-field optical characteristics of Ag nanoparticle within the near-field scope of a metallic AFM tip irradiated by SNOM laser. <i>Integrated Ferroelectrics</i> , 2017, 178, 117-124.	0.7	28
39	Nanofabrication with the thermal AFM metallic tip irradiated by continuous laser. <i>Integrated Ferroelectrics</i> , 2017, 179, 140-147.	0.7	32
40	Transient experimental demonstration of an elliptical thermal camouflage device. <i>Scientific Reports</i> , 2017, 7, 16671.	3.3	7
41	Nanojoining of crossed Ag nanowires: a molecular dynamics study. <i>Journal of Nanoparticle Research</i> , 2016, 18, 1.	1.9	33
42	Super square carbon nanotube network: a new promising water desalination membrane. <i>Npj Computational Materials</i> , 2016, 2, .	8.7	18
43	Investigation on crack propagation in single crystal Ag with temperature dependence. <i>Journal of Materials Research</i> , 2015, 30, 3553-3563.	2.6	4
44	Atomistic simulation study on twin orientation and spacing distribution effects on nanotwinned Cu films. <i>Philosophical Magazine</i> , 2015, 95, 3467-3485.	1.6	15
45	Nonlinear dynamics of piezoelectric nanocomposite energy harvesters under parametric resonance. <i>Nonlinear Dynamics</i> , 2015, 79, 1863-1880.	5.2	22
46	A molecular dynamics simulation study on thermal conductivity of functionalized bilayer graphene sheet. <i>Chemical Physics Letters</i> , 2015, 622, 104-108.	2.6	36
47	A meshless singular boundary method for three-dimensional inverse heat conduction problems in general anisotropic media. <i>International Journal of Heat and Mass Transfer</i> , 2015, 84, 91-102.	4.8	46
48	Fast-multipole accelerated singular boundary method for large-scale three-dimensional potential problems. <i>International Journal of Heat and Mass Transfer</i> , 2015, 90, 291-301.	4.8	22
49	Detailed investigation on elastoplastic deformation and failure of carbon nanotube fibers by monotonic and cyclic tensile experiments. <i>Carbon</i> , 2015, 94, 73-78.	10.3	31
50	Large amplitude vibration of fractionally damped viscoelastic CNTs/fiber/polymer multiscale composite beams. <i>Composite Structures</i> , 2015, 131, 1111-1123.	5.8	85
51	A sensitive interval of imperfect interface parameters based on the analysis of general solution for anisotropic matrix containing an elliptic inhomogeneity. <i>International Journal of Solids and Structures</i> , 2015, 73-74, 67-77.	2.7	16
52	Two softening stages in nanotwinned Cu. <i>Philosophical Magazine</i> , 2014, 94, 4037-4052.	1.6	21
53	Modeling of interface cracking in copper-graphite composites by MD and CFE method. <i>Composites Part B: Engineering</i> , 2014, 58, 586-592.	12.0	42
54	Systematic experimental and numerical study of bistable snap processes for anti-symmetric cylindrical shells. <i>Composite Structures</i> , 2014, 112, 368-377.	5.8	44

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55	Non-linear dynamic stability of piezoelectric functionally graded carbon nanotube-reinforced composite plates with initial geometric imperfection. International Journal of Non-Linear Mechanics, 2014, 59, 37-51.	2.6	125
56	Geometrically nonlinear free vibration of shear deformable piezoelectric carbon nanotube/fiber/polymer multiscale laminated composite plates. Journal of Sound and Vibration, 2014, 333, 3236-3251.	3.9	127
57	Design of 3D carbon nanotube-based nanostructures and prediction of their extra-strong mechanical properties under tension and compression. Computational Materials Science, 2014, 85, 324-331.	3.0	7
58	Variational analysis for angle-ply laminates with matrix cracks. International Journal of Solids and Structures, 2014, 51, 3669-3678.	2.7	9
59	Improved singular boundary method for elasticity problems. Computers and Structures, 2014, 135, 73-82.	4.4	35
60	Nonlinear free vibration, postbuckling and nonlinear static deflection of piezoelectric fiber-reinforced laminated composite beams. Composites Part B: Engineering, 2014, 59, 123-132.	12.0	50
61	Deformation and failure mechanisms of nanotwinned copper films with a pre-existing crack. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 606, 334-345.	5.6	21
62	The bistable behaviors of carbon-fiber/epoxy anti-symmetric composite shells. Composites Part B: Engineering, 2013, 47, 190-199.	12.0	66
63	Analysis of intelligent hinged shell structures: deployable deformation and shape memory effect. Smart Materials and Structures, 2013, 22, 125018.	3.5	9
64	BISTABLE CHARACTERISTICS OF IRREGULAR ANTI-SYMMETRIC LAY-UP COMPOSITE CYLINDRICAL SHELLS. International Journal of Structural Stability and Dynamics, 2013, 13, 1350029.	2.4	18
65	BI-STABLE ANALYSES OF LAMINATED FGM SHELLS. International Journal of Structural Stability and Dynamics, 2012, 12, 311-335.	2.4	8
66	Kinetic Energy-Based Temperature Computation in Non-Equilibrium Molecular Dynamics Simulation. Journal of Computational and Theoretical Nanoscience, 2012, 9, 428-433.	0.4	5
67	Size- and shape-dependent effective properties of single-walled super carbon nanotubes via a generalized molecular structure mechanics method. Computational Materials Science, 2012, 61, 27-33.	3.0	11
68	Analysis of nonlinear forced vibration of multi-layered graphene sheets. Computational Materials Science, 2012, 61, 194-199.	3.0	43
69	Fracture analysis of carbon nanotubes in the context of an atomic-based cellular automata algorithm. Computational Materials Science, 2012, 65, 85-90.	3.0	3
70	Analysis of free vibration of embedded multi-layered graphene sheets. Procedia Engineering, 2012, 31, 641-646.	1.2	3
71	Free transverse vibration of single-walled carbon nanocones. Carbon, 2012, 50, 4418-4423.	10.3	31
72	Geometrical nonlinear free vibration of multi-layered graphene sheets. Journal Physics D: Applied Physics, 2011, 44, 135401.	2.8	56

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73	Bi-Stable Character of Laminated Cylindrical Shells. <i>Procedia Engineering</i> , 2011, 14, 616-621.	1.2	6
74	Molecular mechanics modeling of deformation and failure of super carbon nanotube networks. <i>Nanotechnology</i> , 2011, 22, 475701.	2.6	16
75	Bistable characteristic of laminated shells with graded fibers. <i>International Journal of Mechanics and Materials in Design</i> , 2011, 7, 219-229.	3.0	4
76	Analysis of transient responses in a laminated piezoelectric cylindrical shell. <i>Science China: Physics, Mechanics and Astronomy</i> , 2011, 54, 143-149.	5.1	0
77	Damage detection method for shear buildings using the changes in the first mode shape slopes. <i>Computers and Structures</i> , 2011, 89, 733-743.	4.4	64
78	Dynamic behaviour of edge-cracked shear deformable functionally graded beams on an elastic foundation under a moving load. <i>Composite Structures</i> , 2011, 93, 2992-3001.	5.8	72
79	Vibration Properties of Multi-Layered Graphene Sheets. <i>Advanced Materials Research</i> , 2011, 287-290, 81-85.	0.3	1
80	A new regularization method and application to dynamic load identification problems. <i>Inverse Problems in Science and Engineering</i> , 2011, 19, 765-776.	1.2	26
81	Failure analysis and the optimal toughness design of carbon nanotube-reinforced composites. <i>Composites Science and Technology</i> , 2010, 70, 1360-1367.	7.8	104
82	Performance-based optimal design of compression-yielding FRP-reinforced concrete beams. <i>Composite Structures</i> , 2010, 93, 113-123.	5.8	31
83	Vibration of a Multilayered Graphene Sheet With Initial Stress. <i>Journal of Nanotechnology in Engineering and Medicine</i> , 2010, 1, .	0.8	11
84	Asymptotic Solution for Nonlinear Buckling of Orthotropic Shells on Elastic Foundation. <i>AIAA Journal</i> , 2009, 47, 1772-1783.	2.6	16
85	On the use of cellular automata algorithm for the atomic-based simulation of carbon nanotubes. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2009, 465, 193-206.	2.1	5
86	Strongly coupled simulation of fluid-structure interaction in a Francis hydroturbine. <i>International Journal for Numerical Methods in Fluids</i> , 2009, 60, 515-538.	1.6	12
87	Young's moduli of functionalized single-wall carbon nanotubes under tensile loading. <i>Composites Science and Technology</i> , 2009, 69, 169-175.	7.8	58
88	Dynamic behavior of triple-walled carbon nanotubes conveying fluid. <i>Journal of Sound and Vibration</i> , 2009, 319, 1003-1018.	3.9	78
89	Modeling and deformation characteristics of a circular beam with asymmetric piezoelectric actuators. <i>Composite Structures</i> , 2009, 90, 263-269.	5.8	9
90	Buckling of functionalized single-walled nanotubes under axial compression. <i>Carbon</i> , 2009, 47, 279-285.	10.3	25

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91	Enhanced mechanical properties of single-walled carbon nanotubes due to chemical functionalization. <i>Journal of Physics Condensed Matter</i> , 2009, 21, 215301.	1.8	7
92	Analysis of nonlinear vibrations of double-walled carbon nanotubes conveying fluid. <i>Computational Materials Science</i> , 2009, 45, 875-880.	3.0	69
93	Bending buckling of single-walled carbon nanotubes by atomic-scale finite element. <i>Composites Part B: Engineering</i> , 2008, 39, 202-208.	12.0	40
94	A theoretical model for surface bone remodeling under electromagnetic loads. <i>Archive of Applied Mechanics</i> , 2008, 78, 163-175.	2.2	7
95	Pressure dependence of the instability of multiwalled carbon nanotubes conveying fluids. <i>Archive of Applied Mechanics</i> , 2008, 78, 637-648.	2.2	25
96	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.	4.8	369
97	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
98	DYNAMICAL PROPERTIES OF MULTI-WALLED CARBON NANOTUBES BASED ON A NONLOCAL ELASTICITY MODEL. <i>International Journal of Modern Physics B</i> , 2008, 22, 4975-4986.	2.0	9
99	Flexural Wave Propagation in Single-Walled Carbon Nanotubes. <i>Journal of Computational and Theoretical Nanoscience</i> , 2008, 5, 581-586.	0.4	64
100	Vibration of nonlocal Timoshenko beams. <i>Nanotechnology</i> , 2007, 18, 105401.	2.6	338
101	Mechanical properties of carbon nanocones. <i>Applied Physics Letters</i> , 2007, 91, .	3.3	62
102	A computational approach for predicting the hydroelasticity of flexible structures based on the pressure Poisson equation. <i>International Journal for Numerical Methods in Engineering</i> , 2007, 72, 1560-1583.	2.8	27
103	Molecular mechanics modeling of carbon nanotube fracture. <i>Carbon</i> , 2007, 45, 1769-1776.	10.3	96
104	Saint-Venant decay analysis of FGPM laminates and dissimilar piezoelectric laminates. <i>Mechanics of Materials</i> , 2007, 39, 1053-1065.	3.2	16
105	The effect of van der Waals interaction modeling on the vibration characteristics of multiwalled carbon nanotubes. <i>Journal of Applied Physics</i> , 2006, 100, 124317.	2.5	57
106	Predicting nanovibration of multi-layered graphene sheets embedded in an elastic matrix. <i>Acta Materialia</i> , 2006, 54, 4229-4236.	7.9	201
107	Postbuckling of carbon nanotubes by atomic-scale finite element. <i>Journal of Applied Physics</i> , 2006, 99, 124308.	2.5	40
108	Buckling analysis of multi-walled carbon nanotubes: a continuum model accounting for van der Waals interaction. <i>Journal of the Mechanics and Physics of Solids</i> , 2005, 53, 303-326.	4.8	345

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109	Modeling of van der Waals force for infinitesimal deformation of multi-walled carbon nanotubes treated as cylindrical shells. <i>International Journal of Solids and Structures</i> , 2005, 42, 6032-6047.	2.7	90
110	Buckling analysis of triple-walled carbon nanotubes embedded in an elastic matrix. <i>Journal of Applied Physics</i> , 2005, 97, 114318.	2.5	45
111	Buckling characteristics of embedded multi-walled carbon nanotubes. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2005, 461, 3785-3805.	2.1	24
112	Resonance analysis of multi-layered graphene sheets used as nanoscale resonators. <i>Nanotechnology</i> , 2005, 16, 2086-2091.	2.6	184
113	Optimal shape control of functionally graded smart plates using genetic algorithms. <i>Computational Mechanics</i> , 2004, 33, 245-253.	4.0	31
114	Dynamic analysis of laminated composite plates with piezoelectric sensor/actuator patches using the FSDT mesh-free method. <i>International Journal of Mechanical Sciences</i> , 2004, 46, 411-431.	6.7	47
115	Finite element method for the feedback control of FGM shells in the frequency domain via piezoelectric sensors and actuators. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2004, 193, 257-273.	6.6	88
116	On the use of computational intelligence in the optimal shape control of functionally graded smart plates. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2004, 193, 4475-4492.	6.6	23
117	On the study of elastic and plastic properties of multi-walled carbon nanotubes under axial tension using molecular dynamics simulation. <i>Acta Materialia</i> , 2004, 52, 2521-2527.	7.9	345
118	The modelling and design of smart structures using functionally graded materials and piezoelectrical sensor/actuator patches. <i>Smart Materials and Structures</i> , 2003, 12, 647-655.	3.5	45
119	A FEM model for the active control of curved FGM shells using piezoelectric sensor/actuator layers. <i>International Journal for Numerical Methods in Engineering</i> , 2002, 54, 853-870.	2.8	77
120	Active control of FGM shells subjected to a temperature gradient via piezoelectric sensor/actuator patches. <i>International Journal for Numerical Methods in Engineering</i> , 2002, 55, 653-668.	2.8	92
121	Analysis of laminated composite beams and plates with piezoelectric patches using the element-free Galerkin method. <i>Computational Mechanics</i> , 2002, 29, 486-497.	4.0	90
122	Finite element modeling of active control of functionally graded shells in frequency domain via piezoelectric sensors and actuators. <i>Computational Mechanics</i> , 2002, 28, 1-9.	4.0	54
123	Active control of FGM plates subjected to a temperature gradient: Modelling via finite element method based on FSDT. <i>International Journal for Numerical Methods in Engineering</i> , 2001, 52, 1253-1271.	2.8	124
124	Active control of FGM plates with integrated piezoelectric sensors and actuators. <i>International Journal of Solids and Structures</i> , 2001, 38, 1641-1655.	2.7	371
125	Canonical exact solutions for Levy-plates on two-parameter foundation using Green's functions. <i>Engineering Structures</i> , 2000, 22, 364-378.	5.3	123
126	Variational principles, FE and MPT for analysis of non-linear impact-contact problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1995, 122, 205-222.	6.6	11



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127	A family of quadrilateral hybrid-Trefftz p-elements for thick plate analysis. Computer Methods in Applied Mechanics and Engineering, 1995, 127, 315-344.	6.6	41
128	A new procedure for the nonlinear analysis of Reissner plate by boundary element method. Computers and Structures, 1994, 53, 649-652.	4.4	3
129	Investigation of Vibration Properties of Multi-Walled Carbon Nanotubes. Applied Mechanics and Materials, 0, 117-119, 1254-1259.	0.2	0