

# Xiaoying Zhuang

## List of Publications by Year in descending order

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242  
papers

15,036  
citations

16451

64  
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22832

112  
g-index

248  
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248  
docs citations

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times ranked

7065  
citing authors

#	ARTICLE	IF	CITATIONS
1	Nonlocal strong forms of thin plate, gradient elasticity, magneto-electro-elasticity and phase-field fracture by nonlocal operator method. <i>Engineering With Computers</i> , 2023, 39, 23-44.	6.1	21
2	Prediction of Early Compressive Strength of Ultrahigh-Performance Concrete Using Machine Learning Methods. <i>International Journal of Computational Methods</i> , 2023, 20, .	1.3	3
3	Three-dimensional phase field feature of longitudinal hydraulic fracture propagation in naturally layered rocks under stress boundaries. <i>Engineering With Computers</i> , 2023, 39, 711-734.	6.1	5
4	Topological surface wave metamaterials for robust vibration attenuation and energy harvesting. <i>Mechanics of Advanced Materials and Structures</i> , 2022, 29, 4759-4767.	2.6	16
5	Phase-Field Modeling of a Single Horizontal Fluid-Driven Fracture Propagation in Spatially Variable Rock Mass. <i>International Journal of Computational Methods</i> , 2022, 19, .	1.3	2
6	Multilevel Monte Carlo method for topology optimization of flexoelectric composites with uncertain material properties. <i>Engineering Analysis With Boundary Elements</i> , 2022, 134, 412-418.	3.7	29
7	Exploring thermal expansion of carbon-based nanosheets by machine-learning interatomic potentials. <i>Carbon</i> , 2022, 186, 501-508.	10.3	30
8	Exploring the mechanical properties of two-dimensional carbon-nitride polymer nanocomposites by molecular dynamics simulations. <i>Composite Structures</i> , 2022, 281, 115004.	5.8	9
9	Machine-learning-driven on-demand design of phononic beams. <i>Science China: Physics, Mechanics and Astronomy</i> , 2022, 65, 1.	5.1	33
10	Stochastic deep collocation method based on neural architecture search and transfer learning for heterogeneous porous media. <i>Engineering With Computers</i> , 2022, 38, 5173-5198.	6.1	45
11	Phase field modeling and computer implementation: A review. <i>Engineering Fracture Mechanics</i> , 2022, 262, 108234.	4.3	50
12	Intelligent on-demand design of phononic metamaterials. <i>Nanophotonics</i> , 2022, 11, 439-460.	6.0	55
13	Computational Modelling of Flexoelectricity: State-of-the-art and Challenges. , 2022, , 593-606.		1
14	A first-principles and machine-learning investigation on the electronic, photocatalytic, mechanical and heat conduction properties of nanoporous C <sub>5</sub> N monolayers. <i>Nanoscale</i> , 2022, 14, 4324-4333.	5.6	26
15	Highly anisotropic mechanical and optical properties of 2D NbOX <sub>2</sub> (X=Cl, Br, I) revealed by first-principle. <i>Nanotechnology</i> , 2022, 33, 275701.	2.6	7
16	Analysis of three-dimensional potential problems in non-homogeneous media with physics-informed deep collocation method using material transfer learning and sensitivity analysis. <i>Engineering With Computers</i> , 2022, 38, 5423-5444.	6.1	31
17	Outstanding thermal conductivity and mechanical properties in the direct gap semiconducting penta-NiN <sub>2</sub> monolayer confirmed by first-principles. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2022, 140, 115221.	2.7	10
18	A combined first-principles and machine-learning investigation on the stability, electronic, optical, and mechanical properties of novel C <sub>6</sub> N <sub>7</sub> -based nanoporous carbon nitrides. <i>Carbon</i> , 2022, 194, 230-239.	10.3	24

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19	Stochastic integrated machine learning based multiscale approach for the prediction of the thermal conductivity in carbon nanotube reinforced polymeric composites. Composites Science and Technology, 2022, 224, 109425.	7.8	42
20	Mechanical, optical, and thermoelectric properties of semiconducting $ZnIn_2$		

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37	Dual-horizon peridynamics (DH-PD). , 2021, , 35-56.		0
38	Propagation and attenuation of Rayleigh and pseudo surface waves in viscoelastic metamaterials. Journal of Applied Physics, 2021, 129, .	2.5	26
39	Phase Field Characterization of Rock Fractures in Brazilian Splitting Test Specimens Containing Voids and Inclusions. International Journal of Geomechanics, 2021, 21, .	2.7	14
40	First-principles investigation of electronic, optical, mechanical and heat transport properties of pentadiamond: A comparison with diamond. Carbon Trends, 2021, 3, 100036.	3.0	16
41	Exceptional piezoelectricity, high thermal conductivity and stiffness and promising photocatalysis in two-dimensional MoSi <sub>2</sub> N <sub>4</sub> family confirmed by first-principles. Nano Energy, 2021, 82, 105716.	16.0	303
42	Deep autoencoder based energy method for the bending, vibration, and buckling analysis of Kirchhoff plates with transfer learning. European Journal of Mechanics, A/Solids, 2021, 87, 104225.	3.7	188
43	Nonlocal operator method for the Cahn-Hilliard phase field model. Communications in Nonlinear Science and Numerical Simulation, 2021, 96, 105687.	3.3	23
44	Nanopore creation in MoS <sub>2</sub> and graphene monolayers by nanoparticles impact: a reactive molecular dynamics study. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	6
45	Broadband Rayleigh wave attenuation by gradient metamaterials. International Journal of Mechanical Sciences, 2021, 205, 106592.	6.7	43
46	A micropolar peridynamic model with non-uniform horizon for static damage of solids considering different nonlocal enhancements. Theoretical and Applied Fracture Mechanics, 2021, 113, 102930.	4.7	59
47	Flexoelectric electricity generation by crumpling graphene. Journal of Applied Physics, 2021, 129, .	2.5	5
48	Multi-connected boundary conditions in solid mechanics and surgery theory. Computers and Structures, 2021, 251, 106504.	4.4	2
49	High tensile strength and thermal conductivity in BeO monolayer: A first-principles study. FlatChem, 2021, 28, 100257.	5.6	24
50	Firstâ€Principles Multiscale Modeling of Mechanical Properties in Graphene/Borophene Heterostructures Empowered by Machineâ€Learning Interatomic Potentials. Advanced Materials, 2021, 33, e2102807.	21.0	171
51	A deep neural network-based algorithm for solving structural optimization. Journal of Zhejiang University: Science A, 2021, 22, 609-620.	2.4	5
52	A nonlocal operator method for finite deformation higher-order gradient elasticity. Computer Methods in Applied Mechanics and Engineering, 2021, 384, 113963.	6.6	23
53	Nonlocal operator method for dynamic brittle fracture based on an explicit phase field model. European Journal of Mechanics, A/Solids, 2021, 90, 104380.	3.7	38
54	Discontinuous deformation analysis with distributed bond for the modelling of rock deformation and failure. Computers and Geotechnics, 2021, 139, 104413.	4.7	18

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55	Exploring tensile piezoelectricity and bending flexoelectricity of diamane monolayers by machine learning. Carbon, 2021, 185, 558-567.	10.3	13
56	Quasi-static and dynamic fracture modeling by the nonlocal operator method. Engineering Analysis With Boundary Elements, 2021, 133, 120-137.	3.7	8
57	Outstandingly high thermal conductivity, elastic modulus, carrier mobility and piezoelectricity in two-dimensional semiconducting CrC <sub>2</sub> N <sub>4</sub> : a first-principles study. Materials Today Energy, 2021, 22, 100839.	4.7	19
58	Laser-assisted graphene layer exfoliation from graphite slab. Molecular Simulation, 2021, 47, 1540-1548.	2.0	0
59	Phase field feature of inclined hydraulic fracture propagation in naturally-layered rocks under stress boundaries. IOP Conference Series: Earth and Environmental Science, 2021, 861, 072052.	0.3	0
60	Mechanical, thermal transport, electronic and photocatalytic properties of penta-PdPS, -PdPSe and -PdPTe monolayers explored by first-principles calculations. Journal of Materials Chemistry C, 2021, 10, 329-336.	5.5	14
61	Multiscale modelling and optimization of flexoelectric nano structures. , 2021, , .		0
62	A nonlocal operator method for solving partial differential equations. Computer Methods in Applied Mechanics and Engineering, 2020, 358, 112621.	6.6	139
63	A deep energy method for finite deformation hyperelasticity. European Journal of Mechanics, A/Solids, 2020, 80, 103874.	3.7	115
64	As <sub>2</sub> S <sub>3</sub> , As <sub>2</sub> Se <sub>3</sub> and As <sub>2</sub> Te <sub>3</sub> nanosheets: superstretchable semiconductors with anisotropic carrier mobilities and optical properties. Journal of Materials Chemistry C, 2020, 8, 2400-2410.	5.5	45
65	Stochastic multiscale modeling of heat conductivity of Polymeric clay nanocomposites. Mechanics of Materials, 2020, 142, 103280.	3.2	38
66	Extended finite element method. , 2020, , 29-151.		0
67	Extended isogeometric analysis. , 2020, , 315-358.		0
68	Multiscale methods for fracture. , 2020, , 471-519.		0
69	A short overview of alternatives for fracture. , 2020, , 521-579.		0
70	On the crack opening and energy dissipation in a continuum based disconnected crack model. Finite Elements in Analysis and Design, 2020, 170, 103333.	3.2	58
71	On the hydraulic fracturing in naturally-layered porous media using the phase field method. Engineering Geology, 2020, 266, 105306.	6.3	107
72	Polytopal composite finite elements for modeling concrete fracture based on nonlocal damage models. Computational Mechanics, 2020, 66, 1257-1274.	4.0	12

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73	Three-dimensional topology optimization of auxetic metamaterial using isogeometric analysis and model order reduction. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020, 371, 113306.	6.6	40
74	Three-dimensional mesoscale computational modeling of soil-rock mixtures with concave particles. <i>Engineering Geology</i> , 2020, 277, 105802.	6.3	110
75	A meshfree formulation for large deformation analysis of flexoelectric structures accounting for the surface effects. <i>Engineering Analysis With Boundary Elements</i> , 2020, 120, 153-165.	3.7	17
76	An Experimental and Numerical Study on the Influence of Filling Materials on Double-Crack Propagation. <i>Rock Mechanics and Rock Engineering</i> , 2020, 53, 5571-5591.	5.4	40
77	Exploring phononic properties of two-dimensional materials using machine learning interatomic potentials. <i>Applied Materials Today</i> , 2020, 20, 100685.	4.3	96
78	A higher order nonlocal operator method for solving partial differential equations. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020, 367, 113132.	6.6	84
79	Nanoporous C3N4, C3N5 and C3N6 nanosheets; novel strong semiconductors with low thermal conductivities and appealing optical/electronic properties. <i>Carbon</i> , 2020, 167, 40-50.	10.3	72
80	High thermal conductivity in semiconducting Janus and non-Janus diamanes. <i>Carbon</i> , 2020, 167, 51-61.	10.3	39
81	Machine-learning interatomic potentials enable first-principles multiscale modeling of lattice thermal conductivity in graphene/borophene heterostructures. <i>Materials Horizons</i> , 2020, 7, 2359-2367.	12.2	124
82	Computational Modeling of Flexoelectricity—A Review. <i>Energies</i> , 2020, 13, 1326.	3.1	40
83	Efficient machine-learning based interatomic potentials for exploring thermal conductivity in two-dimensional materials. <i>J Phys Materials</i> , 2020, 3, 02LT02.	4.2	32
84	Isogeometric cohesive zone model for thin shell delamination analysis based on Kirchhoff-Love shell model. <i>Frontiers of Structural and Civil Engineering</i> , 2020, 14, 267-279.	2.9	7
85	Chemo-Mechanical Model for the Expansion of Concrete Due to Alkali Silica Reaction. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 3807.	2.5	5
86	A surrogate model for computational homogenization of elastostatics at finite strain using high-dimensional model representation-based neural network. <i>International Journal for Numerical Methods in Engineering</i> , 2020, 121, 4811-4842.	2.8	37
87	First-principles investigation of mechanical, electronic and optical properties of H-, F- and Cl-diamane. <i>Applied Surface Science</i> , 2020, 528, 147035.	6.1	47
88	Topologically switchable behavior induced by an elastic instability in a phononic waveguide. <i>Journal of Applied Physics</i> , 2020, 127, .	2.5	6
89	Exploration of mechanical, thermal conductivity and electromechanical properties of graphene nanoribbon springs. <i>Nanoscale Advances</i> , 2020, 2, 3394-3403.	4.6	9
90	Phase field modeling of hydraulic fracture propagation in transversely isotropic poroelastic media. <i>Acta Geotechnica</i> , 2020, 15, 2599-2618.	5.7	39

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91	A general algorithm for numerical integration of three-dimensional crack singularities in PU-based numerical methods. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020, 363, 112908.	6.6	7
92	Phase field method for quasi-static hydro-fracture in porous media under stress boundary condition considering the effect of initial stress field. <i>Theoretical and Applied Fracture Mechanics</i> , 2020, 107, 102523.	4.7	47
93	Forward and inverse problems in piezoelectricity using isogeometric symmetric Galerkin boundary element method and level set method. <i>Engineering Analysis With Boundary Elements</i> , 2020, 113, 118-132.	3.7	4
94	Kinetic analysis of polyhedral block system using an improved potential-based penalty function approach for explicit discontinuous deformation analysis. <i>Applied Mathematical Modelling</i> , 2020, 82, 314-335.	4.2	30
95	An energy approach to the solution of partial differential equations in computational mechanics via machine learning: Concepts, implementation and applications. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020, 362, 112790.	6.6	799
96	Silicon diphosphide (SiP <sub>2</sub> ) and silicon diarsenide (SiAs <sub>2</sub> ): Novel stable 2D semiconductors with high carrier mobilities, promising for water splitting photocatalysts. <i>Materials Today Energy</i> , 2020, 16, 100377.	4.7	33
97	Numerical modeling of microcrack behavior in encapsulation-based self-healing concrete under uniaxial tension. <i>Journal of Mechanical Science and Technology</i> , 2020, 34, 1847-1853.	1.5	9
98	Elasto-plastic large deformation analysis of multi-patch thin shells by isogeometric approach. <i>Finite Elements in Analysis and Design</i> , 2020, 173, 103389.	3.2	17
99	Efficient Deep Learning for Gradient-Enhanced Stress Dependent Damage Model. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 2556.	2.5	5
100	Nonlocal operator method with numerical integration for gradient solid. <i>Computers and Structures</i> , 2020, 233, 106235.	4.4	31
101	Multiscale computation on feedforward neural network and recurrent neural network. <i>Frontiers of Structural and Civil Engineering</i> , 2020, 14, 1285-1298.	2.9	21
102	Numerical Methods and Modeling in Impulsive Dynamics. , 2020, , 1914-1927.		0
103	Meshless Discretization Methods. , 2020, , 1550-1563.		0
104	Atomic layer deposition of core-shell structured V <sub>2</sub> O <sub>5</sub> @CNT sponge as cathode for potassium ion batteries. <i>Journal of Materiomics</i> , 2019, 5, 344-349.	5.7	27
105	Implementation aspects of a phase-field approach for brittle fracture. <i>Frontiers of Structural and Civil Engineering</i> , 2019, 13, 417-428.	2.9	4
106	Micromechanical study of loading rate effects between a hole and a crack. <i>Underground Space (China)</i> , 2019, 4, 22-30.	7.5	10
107	Prediction of C <sub>7</sub> N <sub>6</sub> and C <sub>9</sub> N <sub>4</sub> : stable and strong porous carbon-nitride nanosheets with attractive electronic and optical properties. <i>Journal of Materials Chemistry C</i> , 2019, 7, 10908-10917.	5.5	57
108	Phase field modeling of brittle compressive-shear fractures in rock-like materials: A new driving force and a hybrid formulation. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019, 355, 729-752.	6.6	172

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109	Dual-support smoothed particle hydrodynamics in solid: variational principle and implicit formulation. <i>Engineering Analysis With Boundary Elements</i> , 2019, 108, 15-29.	3.7	31
110	Uncertainty Quantification for Mechanical Properties of Polyethylene Based on Fully Atomistic Model. <i>Materials</i> , 2019, 12, 3613.	2.9	22
111	Two-Dimensional SiP, SiAs, GeP and GeAs as Promising Candidates for Photocatalytic Applications. <i>Coatings</i> , 2019, 9, 522.	2.6	32
112	An extended polygonal finite element method for large deformation fracture analysis. <i>Engineering Fracture Mechanics</i> , 2019, 209, 344-368.	4.3	18
113	Characterizing Flexoelectricity in Composite Material Using the Element-Free Galerkin Method. <i>Energies</i> , 2019, 12, 271.	3.1	13
114	Multiscale modeling of material failure: Theory and computational methods. <i>Advances in Applied Mechanics</i> , 2019, 52, 1-103.	2.3	41
115	Harnessing multi-layered soil to design seismic metamaterials with ultralow frequency band gaps. <i>Materials and Design</i> , 2019, 175, 107813.	7.0	68
116	The Construction of Equivalent Particle Element Models for Conditioned Sandy Pebble. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 1137.	2.5	12
117	Interface Characterization Between Polyethylene/ Silica in Engineered Cementitious Composites by Molecular Dynamics Simulation. <i>Molecules</i> , 2019, 24, 1497.	3.8	22
118	Sensitivity analysis for the mechanics of tendons and ligaments: Investigation on the effects of collagen structural properties via a multiscale modeling approach. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2019, 35, e3209.	2.1	24
119	Outstanding strength, optical characteristics and thermal conductivity of graphene-like BC3 and BC6N semiconductors. <i>Carbon</i> , 2019, 149, 733-742.	10.3	126
120	Coupled Discrete Crack and Porous Media Model for Hydraulic Fractures using the XFEM. <i>KSCE Journal of Civil Engineering</i> , 2019, 23, 1017-1027.	1.9	4
121	Tunable topological bandgaps and frequencies in a pre-stressed soft phononic crystal. <i>Journal of Applied Physics</i> , 2019, 125, .	2.5	46
122	Phase-field modeling of fluid-driven dynamic cracking in porous media. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019, 350, 169-198.	6.6	202
123	Cracking elements method for dynamic brittle fracture. <i>Theoretical and Applied Fracture Mechanics</i> , 2019, 102, 1-9.	4.7	117
124	Intrinsic bending flexoelectric constants in two-dimensional materials. <i>Physical Review B</i> , 2019, 99, .	3.2	68
125	N-, B-, P-, Al-, As-, and Ga-graphdiyne/graphyne lattices: first-principles investigation of mechanical, optical and electronic properties. <i>Journal of Materials Chemistry C</i> , 2019, 7, 3025-3036.	5.5	41
126	Detection of void and metallic inclusion in 2D piezoelectric cantilever beam using impedance measurements. <i>Frontiers of Structural and Civil Engineering</i> , 2019, 13, 542-556.	2.9	3



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127	Isogeometric analysis for explicit elastodynamics using a dual-basis diagonal mass formulation. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019, 346, 574-591.	6.6	27
128	A series of Duffy's distance transformation for integrating 2D and 3D vertex singularities. <i>International Journal for Numerical Methods in Engineering</i> , 2019, 118, 38-60.	2.8	6
129	An isogeometric analysis to identify the full flexoelectric complex material properties based on electrical impedance curve. <i>Computers and Structures</i> , 2019, 214, 1-14.	4.4	26
130	Inverse design of quantum spin hall-based phononic topological insulators. <i>Journal of the Mechanics and Physics of Solids</i> , 2019, 125, 550-571.	4.8	70
131	Numerical manifold method for vibration analysis of Kirchhoff's plates of arbitrary geometry. <i>Applied Mathematical Modelling</i> , 2019, 66, 695-727.	4.2	59
132	NURBS-based formulation for nonlinear electro-gradient elasticity in semiconductors. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019, 346, 1074-1095.	6.6	41
133	High flexoelectric constants in Janus transition-metal dichalcogenides. <i>Physical Review Materials</i> , 2019, 3, .	2.4	25
134	A Nonlocal Operator Method for Partial Differential Equations with Application to Electromagnetic Waveguide Problem. <i>Computers, Materials and Continua</i> , 2019, 59, 31-55.	1.9	179
135	Computational Machine Learning Representation for the Flexoelectricity Effect in Truncated Pyramid Structures. <i>Computers, Materials and Continua</i> , 2019, 59, 79-87.	1.9	23
136	A Deep Collocation Method for the Bending Analysis of Kirchhoff Plate. <i>Computers, Materials and Continua</i> , 2019, 59, 433-456.	1.9	295
137	Introduction for the Special Issue on Recent Developments of Peridynamics. <i>CMES - Computer Modeling in Engineering and Sciences</i> , 2019, 121, 349-351.	1.1	1
138	Cracking elements: A self-propagating Strong Discontinuity embedded Approach for quasi-brittle fracture. <i>Finite Elements in Analysis and Design</i> , 2018, 144, 84-100.	3.2	155
139	A phase-field modeling approach of fracture propagation in poroelastic media. <i>Engineering Geology</i> , 2018, 240, 189-203.	6.3	259
140	Phase field modeling of quasi-static and dynamic crack propagation: COMSOL implementation and case studies. <i>Advances in Engineering Software</i> , 2018, 122, 31-49.	3.8	267
141	Size dependent flexoelectric and mechanical properties of barium titanate nanobelt: A molecular dynamics study. <i>Physica B: Condensed Matter</i> , 2018, 545, 527-535.	2.7	17
142	Meshless Discretization Methods. , 2018, , 1-15.		0
143	A softening-healing law for self-healing quasi-brittle materials: Analyzing with strong discontinuity embedded approach. <i>Engineering Fracture Mechanics</i> , 2018, 192, 290-306.	4.3	32
144	Stability analysis of shotcrete supported crown of NATM tunnels with discontinuity layout optimization. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2018, 42, 1199-1216.	3.3	50

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145	Sensitivity and uncertainty analysis for flexoelectric nanostructures. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2018, 337, 95-109.	6.6	159
146	The generation of piezoelectricity and flexoelectricity in graphene by breaking the materials symmetries. <i>Nanotechnology</i> , 2018, 29, 225702.	2.6	41
147	Fracture model for the prediction of the electrical percolation threshold in CNTs/Polymer composites. <i>Frontiers of Structural and Civil Engineering</i> , 2018, 12, 125-136.	2.9	9
148	Tunnel stability assessment by 3D DDA-key block analysis. <i>Tunnelling and Underground Space Technology</i> , 2018, 71, 210-214.	6.2	46
149	Fracture properties prediction of clay/epoxy nanocomposites with interphase zones using a phase field model. <i>Engineering Fracture Mechanics</i> , 2018, 188, 287-299.	4.3	249
150	A NURBS-based inverse analysis for reconstruction of nonlinear deformations of thin shell structures. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2018, 331, 427-455.	6.6	127
151	Fracture Properties of Graphene-Coated Silicon for Photovoltaics. <i>Advanced Theory and Simulations</i> , 2018, 1, 1800097.	2.8	11
152	A large deformation isogeometric approach for flexoelectricity and soft materials. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2018, 341, 718-739.	6.6	51
153	Continuum/Finite Element Modeling of Carbon Nanotube-Reinforced Polymers. , 2018, , 385-409.		3
154	Modeling hydraulic cracks and inclusion interaction using XFEM. <i>Underground Space (China)</i> , 2018, 3, 218-228.	7.5	11
155	Computational Multiscale Modeling of Carbon Nanotube-Reinforced Polymers. , 2018, , 465-477.		0
156	Numerical Methods and Modeling in Impulsive Dynamics. , 2018, , 1-14.		0
157	Method for Resolving Contact Indeterminacy in Three-Dimensional Discontinuous Deformation Analysis. <i>International Journal of Geomechanics</i> , 2018, 18, .	2.7	18
158	Molecular Dynamics Study of an Amorphous Polyethylene/Silica Interface with Shear Tests. <i>Materials</i> , 2018, 11, 929.	2.9	26
159	Numerical model for the characterization of Maxwell-Wagner relaxation in piezoelectric and flexoelectric composite material. <i>Computers and Structures</i> , 2018, 208, 75-91.	4.4	35
160	Simulating the damage extent of unreinforced brick masonry buildings under boulder impact using three-dimensional discontinuous deformation analysis (3-D DDA). <i>Engineering Failure Analysis</i> , 2018, 93, 122-143.	4.0	12
161	Computational modeling of fracture in encapsulation-based self-healing concrete using cohesive elements. <i>Composite Structures</i> , 2018, 196, 63-75.	5.8	43
162	Phase field modelling of crack propagation, branching and coalescence in rocks. <i>Theoretical and Applied Fracture Mechanics</i> , 2018, 96, 174-192.	4.7	260

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163	Boronâ€“graphdiyne: a superstretchable semiconductor with low thermal conductivity and ultrahigh capacity for Li, Na and Ca ion storage. <i>Journal of Materials Chemistry A</i> , 2018, 6, 11022-11036.	10.3	104
164	Molecular Dynamics Simulation of Microwelds Formation and Breakage During Ultrasonic Copper Wire Bonding. , 2018, , .		1
165	Structure Optimization of Nano Electromechanical Energy Harvester Using Isogeometric Analysis. , 2018, , 416-424.		0
166	A Virtual Element Method for 2D linear elastic fracture analysis. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2018, 340, 366-395.	6.6	59
167	Dynamic flexoelectric effect on piezoelectric nanostructures. <i>European Journal of Mechanics, A/Solids</i> , 2018, 71, 404-409.	3.7	54
168	Adaptive phase field simulation of quasi-static crack propagation in rocks. <i>Underground Space (China)</i> , 2018, 3, 190-205.	7.5	47
169	A Nonlocal Formulation for Weakly Compressible Fluid. <i>Lecture Notes in Mechanical Engineering</i> , 2018, , 835-850.	0.4	1
170	Modeling of 3D Inflatable Large Deformation Air Plug in Contact With Concrete Lining. <i>Lecture Notes in Mechanical Engineering</i> , 2018, , 105-121.	0.4	0
171	Centroid sliding pyramid method for removability and stability analysis of fractured hard rock. <i>Acta Geotechnica</i> , 2017, 12, 627-644.	5.7	12
172	Dual-horizon peridynamics: A stable solution to varying horizons. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2017, 318, 762-782.	6.6	502
173	Three-dimensional slope stability analysis using independent cover based numerical manifold and vector method. <i>Engineering Geology</i> , 2017, 225, 83-95.	6.3	65
174	Stochastic analysis of the fracture toughness of polymeric nanoparticle composites using polynomial chaos expansions. <i>International Journal of Fracture</i> , 2017, 206, 215-227.	2.2	315
175	Multiscale modelling of hydro-mechanical couplings in quasi-brittle materials. <i>International Journal of Fracture</i> , 2017, 204, 1-27.	2.2	29
176	Isogeometric symmetric Galerkin boundary element method for three-dimensional elasticity problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2017, 323, 132-150.	6.6	26
177	Topology optimization of flexoelectric structures. <i>Journal of the Mechanics and Physics of Solids</i> , 2017, 105, 217-234.	4.8	93
178	Dual-Support Smoothed Particle Hydrodynamics for Elastic Mechanics. <i>International Journal of Computational Methods</i> , 2017, 14, 1750039.	1.3	14
179	Isogeometric analysis of large-deformation thin shells using RHT-splines for multiple-patch coupling. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2017, 316, 1157-1178.	6.6	210
180	Numerical study for cohesive zone model in delamination analysis based on higher-order B-spline functions. <i>Journal of Micromechanics and Molecular Physics</i> , 2017, 02, 1750004.	1.2	2

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