Daining Fang

List of Publications by Year
in descending order

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		8755	26613
681	23,697	75	107
papers	citations	h-index	g-index

687	687	687	14253
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	High-Performance Aluminum-Ion Battery with CuS@C Microsphere Composite Cathode. ACS Nano, 2017, 11, 469-477.	14.6	388
2	Mechanical and thermal transport properties of graphene with defects. Applied Physics Letters, 2011, 99, .	3.3	321
3	Grayscale digital light processing 3D printing for highly functionally graded materials. Science Advances, 2019, 5, eaav5790.	10.3	298
4	Morphable 3D mesostructures and microelectronic devices by multistable buckling mechanics. Nature Materials, 2018, 17, 268-276.	27.5	297
5	Preparation and characterization of 3D printed continuous carbon fiber reinforced thermosetting composites. Polymer Testing, 2018, 65, 29-34.	4.8	224
6	Evaluation of compressive properties of SLM-fabricated multi-layer lattice structures by experimental test and Î¼-CT-based finite element analysis. Materials and Design, 2019, 169, 107685.	7.0	203
7	High solid loading, low viscosity photosensitive Al2O3 slurry for stereolithography based additive manufacturing. Ceramics International, 2019, 45, 203-208.	4.8	203
8	Thermoelastic damping in micro-beam resonators. International Journal of Solids and Structures, 2006, 43, 3213-3229.	2.7	198
9	Planar lattices with tailorable coefficient of thermal expansion and high stiffness based on dual-material triangle unit. Journal of the Mechanics and Physics of Solids, 2016, 86, 173-191.	4.8	196
10	Origami by frontal photopolymerization. Science Advances, 2017, 3, e1602326.	10.3	193
11	Mechanical properties of an improved 3D-printed rhombic dodecahedron stainless steel lattice structure of variable cross section. International Journal of Mechanical Sciences, 2018, 145, 53-63.	6.7	187
12	Ballistic impact experiments of metallic sandwich panels with aluminium foam core. International Journal of Impact Engineering, 2010, 37, 1045-1055.	5.0	182
13	Nonlinear electricâ€“mechanical behavior and micromechanics modelling of ferroelectric domain evolution. Acta Materialia, 1999, 47, 2913-2926.	7.9	160
14	Mechanical properties of hierarchical cellular materials. Part I: Analysis. Composites Science and Technology, 2008, 68, 3380-3387.	7.8	160
15	Soft mechanical metamaterials with unusual swelling behavior and tunable stress-strain curves. Science Advances, 2018, 4, eaar8535.	10.3	159
16	Highâ€Speed 3D Printing of Highâ€Performance Thermosetting Polymers via Twoâ€Stage Curing. Macromolecular Rapid Communications, 2018, 39, e1700809.	3.9	146
17	Study of fatigue crack characteristics by acoustic emission. Engineering Fracture Mechanics, 1995, 51, 401-416.	4.3	144
18	Mechanical properties of anti-tetrachiral auxetic stents. Composite Structures, 2018, 185, 381-392.	5.8	141

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19	Non-linear constitutive relations for magnetostrictive materials. International Journal of Non-Linear Mechanics, 2003, 38, 1053-1065.	2.6	136
20	Graphene-Based Sandwich Structures for Frequency Selectable Electromagnetic Shielding. ACS Applied Materials & Interfaces, 2017, 9, 36119-36129.	8.0	135
21	Manufacturing and testing of a CFRC sandwich cylinder with Kagome cores. Composites Science and Technology, 2009, 69, 2695-2700.	7.8	132
22	Progress and challenges towards additive manufacturing of SiC ceramic. Journal of Advanced Ceramics, 2021, 10, 637-674.	17.4	132
23	Three-dimensional mesostructures as high-temperature growth templates, electronic cellular scaffolds, and self-propelled microrobots. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E9455-E9464.	7.1	129
24	Crushing behavior of multi-layer metal lattice panel fabricated by selective laser melting. International Journal of Mechanical Sciences, 2018, 145, 389-399.	6.7	129
25	Dispersion and stability of SiC ceramic slurry for stereolithography. Ceramics International, 2020, 46, 4720-4729.	4.8	129
26	Multi-scale design of electromagnetic composite metamaterials for broadband microwave absorption. Composites Science and Technology, 2018, 162, 206-214.	7.8	128
27	Compression behavior of the graded metallic auxetic reentrant honeycomb: Experiment and finite element analysis. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 758, 163-171.	5.6	126
28	Temperature Rise Associated with Adiabatic Shear Band: Causality Clarified. Physical Review Letters, 2019, 122, 015503.	7.8	125
29	Electroâ€“Chemoâ€“Mechanical Issues at the Interfaces in Solidâ€State Lithium Metal Batteries. Advanced Functional Materials, 2019, 29, 1900950.	14.9	124
30	The temperature-dependent fracture strength model for ultra-high temperature ceramics. Acta Mechanica Sinica/Lixue Xuebao, 2010, 26, 235-239.	3.4	122
31	Fabrication of SiC ceramic architectures using stereolithography combined with precursor infiltration and pyrolysis. Ceramics International, 2019, 45, 14006-14014.	4.8	120
32	Axial crushing behaviors of multi-cell tubes with triangular lattices. International Journal of Impact Engineering, 2014, 63, 106-117.	5.0	119
33	A cellular metastructure incorporating coupled negative thermal expansion and negative Poisson's ratio. International Journal of Solids and Structures, 2018, 150, 255-267.	2.7	119
34	Processing and Mechanical Properties of Zirconium Diboride-Based Ceramics Prepared by Spark Plasma Sintering. Journal of the American Ceramic Society, 2007, 90, 1992-1997.	3.8	118
35	Stereolithographyâ€based additive manufacturing of grayâ€colored SiC ceramic green body. Journal of the American Ceramic Society, 2019, 102, 7198-7209.	3.8	117
36	Desolvation Induced Origami of Photocurable Polymers by Digit Light Processing. Macromolecular Rapid Communications, 2017, 38, 1600625.	3.9	116

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37	Size-dependent ferroelectric behaviors of BaTiO3 nanowires. Applied Physics Letters, 2008, 92, .	3.3	111
38	Laser-induced vibrations of micro-beams under different boundary conditions. International Journal of Solids and Structures, 2008, 45, 1993-2013.	2.7	109
39	Photosensitive ZrO2 suspensions for stereolithography. Ceramics International, 2019, 45, 12189-12195.	4.8	107
40	Dynamic crushing behavior and energy absorption of graded lattice cylindrical structure under axial impact load. Thin-Walled Structures, 2018, 127, 333-343.	5.3	106
41	A multiscale elasto-plastic damage model for the nonlinear behavior of 3D braided composites. Composites Science and Technology, 2019, 171, 21-33.	7.8	105
42	4D printed origami metamaterials with tunable compression twist behavior and stress-strain curves. Composites Part B: Engineering, 2020, 201, 108344.	12.0	105
43	Diffusion-Induced Stresses of Spherical Core-Shell Electrodes in Lithium-Ion Batteries: The Effects of the Shell and Surface/Interface Stress. Journal of the Electrochemical Society, 2013, 160, A595-A600.	2.9	104
44	A novel carbon fiber reinforced lattice truss sandwich cylinder: Fabrication and experiments. Composites Part A: Applied Science and Manufacturing, 2016, 81, 313-322.	7.6	101
45	Hydrophilic/Hydrophobic Composite Shape-Shifting Structures. ACS Applied Materials & Interfaces, 2018, 10, 19932-19939.	8.0	101
46	Crushing mechanism of hierarchical lattice structure. Mechanics of Materials, 2016, 97, 164-183.	3.2	100
47	The structure response of sandwich beams with metallic auxetic honeycomb cores under localized impulsive loading-experiments and finite element analysis. Materials and Design, 2019, 176, 107840.	7.0	100
48	Compression and bending performances of carbon fiber reinforced lattice-core sandwich composites. Composites Part A: Applied Science and Manufacturing, 2013, 52, 118-125.	7.6	98
49	Polymerâ€derived silicon nitride ceramics by digital light processing based additive manufacturing. Journal of the American Ceramic Society, 2019, 102, 5117-5126.	3.8	98
50	Micromechanics simulation of ferroelectric polarization switching. Acta Materialia, 1997, 45, 3181-3189.	7.9	97
51	A Novel Ultrafast Rechargeable Multiâ€ions Battery. Advanced Materials, 2017, 29, 1606349.	21.0	97
52	Dynamic compressive behavior of a modified additively manufactured rhombic dodecahedron 316L stainless steel lattice structure. Thin-Walled Structures, 2020, 148, 106586.	5.3	96
53	Compression twist deformation of novel tetrachiral architected cylindrical tube inspired by towel gourd tendrils. Extreme Mechanics Letters, 2018, 20, 104-111.	4.1	95
54	A predictive micropolar continuum model for a novel three-dimensional chiral lattice with size effect and tension-twist coupling behavior. Journal of the Mechanics and Physics of Solids, 2018, 121, 23-46.	4.8	95

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55	Mechanics of shape distortion of DLP 3D printed structures during UV post-curing. Soft Matter, 2019, 15, 6151-6159.	2.7	94
56	Love waves in layered piezoelectric/piezomagnetic structures. Journal of Sound and Vibration, 2008, 315, 146-156.	3.9	92
57	Nonlinear electric-mechanical behavior of a soft PZT-51 ferroelectric ceramic. Journal of Materials Science, 1999, 34, 4001-4010.	3.7	90
58	Equivalent analysis and failure prediction of quasi-isotropic composite sandwich cylinder with lattice core under uniaxial compression. Composite Structures, 2013, 101, 180-190.	5.8	90
59	A coupled elastic-plastic damage model for the mechanical behavior of three-dimensional (3D) braided composites. Composites Science and Technology, 2018, 157, 86-98.	7.8	90
60	Mechanical properties and energy absorption of 3D printed square hierarchical honeycombs under in-plane axial compression. Composites Part B: Engineering, 2019, 176, 107219.	12.0	88
61	Free vibration behaviors of carbon fiber reinforced lattice-core sandwich cylinder. Composites Science and Technology, 2014, 100, 26-33.	7.8	87
62	Mechanical properties and energy absorption capability of AuxHex structure under in-plane compression: Theoretical and experimental studies. International Journal of Mechanical Sciences, 2019, 159, 43-57.	6.7	87
63	Mechanical properties of hierarchical anti-tetrachiral metastructures. Extreme Mechanics Letters, 2017, 16, 18-32.	4.1	86
64	Ultrathin Flexible Carbon Fiber Reinforced Hierarchical Metastructure for Broadband Microwave Absorption with Nano Lossy Composite and Multiscale Optimization. ACS Applied Materials & Interfaces, 2018, 10, 44731-44740.	8.0	86
65	Effects of fine grains and sintering additives on stereolithography additive manufactured Al2O3 ceramic. Ceramics International, 2021, 47, 2303-2310.	4.8	85
66	Constructing Repairable Meta-Structures of Ultra-Broad-Band Electromagnetic Absorption from Three-Dimensional Printed Patterned Shells. ACS Applied Materials & Interfaces, 2017, 9, 43179-43187.	8.0	84
67	Strain effect on ferroelectric behaviors of BaTiO₃nanowires: a molecular dynamics study. Nanotechnology, 2010, 21, 015701.	2.6	83
68	Enhanced out-of-plane crushing strength and energy absorption of in-plane graded honeycombs. Composites Part B: Engineering, 2017, 118, 33-40.	12.0	83
69	4D printed multi-stable metamaterials with mechanically tunable performance. Composite Structures, 2020, 252, 112663.	5.8	83
70	Compression experiment and numerical evaluation on mechanical responses of the lattice structures with stochastic geometric defects originated from additive-manufacturing. Composites Part B: Engineering, 2020, 194, 108030.	12.0	83
71	Digital light processing of 3Y-TZP strengthened ZrO2 ceramics. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 774, 138768.	5.6	82
72	Ultraâ€Lightweight 3D Carbon Current Collectors: Constructing Allâ€Carbon Electrodes for Stable and High Energy Density Dualâ€Ion Batteries. Advanced Energy Materials, 2018, 8, 1801439.	19.5	80

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73	Mechanics of advanced fiber reinforced lattice composites. Acta Mechanica Sinica/Lixue Xuebao, 2010, 26, 825-835.	3.4	79
74	Fabrication and testing of composite orthogrid sandwich cylinder. Composites Science and Technology, 2017, 142, 171-179.	7.8	79
75	Radar stealth and mechanical properties of a broadband radar absorbing structure. Composites Part B: Engineering, 2017, 123, 19-27.	12.0	79
76	Macroscopic mechanical response of chiral-type cylindrical metastructures under axial compression loading. Materials and Design, 2018, 158, 198-212.	7.0	79
77	Dynamic response of metallic lattice sandwich structures to impulsive loading. International Journal of Impact Engineering, 2012, 43, 1-5.	5.0	76
78	A novel sub-step composite implicit time integration scheme for structural dynamics. Computers and Structures, 2017, 182, 176-186.	4.4	76
79	Recent Progress in Active Mechanical Metamaterials and Construction Principles. Advanced Science, 2022, 9, e2102662.	11.2	75
80	Boussinesq problem with the surface effect and its application to contact mechanics at the nanoscale. International Journal of Solids and Structures, 2013, 50, 2620-2630.	2.7	73
81	Reversible shape change structures by grayscale pattern 4D printing. Multifunctional Materials, 2018, 1, 015002.	3.7	73
82	Diffusion-induced stresses of electrode nanomaterials in lithium-ion battery: The effects of surface stress. Journal of Applied Physics, 2012, 112, .	2.5	72
83	Improved manufacturing method and mechanical performances of carbon fiber reinforced lattice-core sandwich cylinder. Thin-Walled Structures, 2013, 68, 75-84.	5.3	72
84	An experimental and numerical investigation of compressive response of designed Schwarz Primitive triply periodic minimal surface with non-uniform shell thickness. Extreme Mechanics Letters, 2020, 37, 100671.	4.1	72
85	Fatigue Crack Growth in Ferroelectric Ceramics Driven by Alternating Electric Fields. Journal of the American Ceramic Society, 2004, 87, 840-846.	3.8	70
86	Theoretical prediction of temperature dependent yield strength for metallic materials. International Journal of Mechanical Sciences, 2016, 105, 273-278.	6.7	70
87	Out-of-plane compressive performance and energy absorption of multi-layer graded sinusoidal corrugated sandwich panels. Materials and Design, 2019, 178, 107858.	7.0	70
88	Numerical and experimental studies on compressive behavior of Gyroid lattice cylindrical shells. Materials and Design, 2020, 186, 108340.	7.0	70
89	Rechargeable Nickel Telluride/Aluminum Batteries with High Capacity and Enhanced Cycling Performance. ACS Nano, 2020, 14, 3469-3476.	14.6	70
90	Experimental and simulation investigation of the reversible bi-directional twisting response of tetra-chiral cylindrical shells. Composite Structures, 2018, 203, 142-152.	5.8	69

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91	Mechanical Properties of two novel planar lattice structures. International Journal of Solids and Structures, 2008, 45, 3751-3768.	2.7	68
92	Uniaxial local buckling strength of periodic lattice composites. Materials & Design, 2009, 30, 4136-4145.	5.1	68
93	Super tough magnetic hydrogels for remotely triggered shape morphing. Journal of Materials Chemistry B, 2018, 6, 2713-2722.	5.8	68
94	Enhanced out-of-plane compressive strength and energy absorption of 3D printed square and hexagonal honeycombs with variable-thickness cell edges. Extreme Mechanics Letters, 2018, 18, 9-18.	4.1	68
95	Experimentally program large magnitude of Poisson's ratio in additively manufactured mechanical metamaterials. International Journal of Mechanical Sciences, 2020, 173, 105466.	6.7	68
96	A lightweight, high compression strength ultra high temperature ceramic corrugated panel with potential for thermal protection system applications. Materials & Design, 2015, 66, 552-556.	5.1	67
97	Additively-manufactured anisotropic and isotropic 3D plate-lattice materials for enhanced mechanical performance: Simulations & experiments. Acta Materialia, 2020, 199, 397-412.	7.9	67
98	Simulations of domain switching in ferroelectrics by a three-dimensional finite element model. Mechanics of Materials, 2004, 36, 959-973.	3.2	66
99	Deformation and failure mechanisms of lattice cylindrical shells under axial loading. International Journal of Mechanical Sciences, 2009, 51, 213-221.	6.7	66
100	Fabrication and heat transfer characteristics of C/SiC pyramidal core lattice sandwich panel. Applied Thermal Engineering, 2015, 81, 10-17.	6.0	66
101	A hierarchical multiscale model for the elastic-plastic damage behavior of 3D braided composites at high temperature. Composites Science and Technology, 2020, 196, 108230.	7.8	66
102	Preparation and characterization of high-toughness ZrB2/Mo composites by hot-pressing process. International Journal of Refractory Metals and Hard Materials, 2009, 27, 1024-1026.	3.8	65
103	Recent progress in the design and fabrication of multifunctional structures based on metamaterials. Current Opinion in Solid State and Materials Science, 2021, 25, 100883.	11.5	65
104	Effect of temperature on bending properties and failure mechanism of three-dimensional braided composite. Materials & Design, 2012, 41, 167-170.	5.1	64
105	3D-printed highly deformable electrodes for flexible lithium ion batteries. Energy Storage Materials, 2020, 33, 55-61.	18.0	64
106	A new temperature dependent fracture strength model for the ZrB2â€“SiC composites. Journal of the European Ceramic Society, 2015, 35, 2957-2962.	5.7	62
107	Thermal protection system integrating graded insulation materials and multilayer ceramic matrix composite cellular sandwich panels. Composite Structures, 2019, 209, 523-534.	5.8	62
108	Ultrathin multifunctional carbon/glass fiber reinforced lossy lattice metastructure for integrated design of broadband microwave absorption and effective load bearing. Carbon, 2019, 144, 449-456.	10.3	62

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109	A universal permittivity-attenuation evaluation diagram for accelerating design of dielectric-based microwave absorption materials: A case of graphene-based composites. Carbon, 2017, 118, 86-97.	10.3	61
110	Drastic tailorable thermal expansion chiral planar and cylindrical shell structures explored with finite element simulation. Composite Structures, 2019, 210, 327-338.	5.8	61
111	Fabrication and mechanical properties of lightweight ZrO2 ceramic corrugated core sandwich panels. Materials & Design, 2014, 64, 91-95.	5.1	60
112	Damage characterizations and simulation of selective laser melting fabricated 3D re-entrant lattices based on in-situ CT testing and geometric reconstruction. International Journal of Mechanical Sciences, 2019, 157-158, 231-242.	6.7	60
113	Hierarchical mechanical metamaterials built with scalable tristable elements for ternary logic operation and amplitude modulation. Science Advances, 2021, 7, .	10.3	60
114	Liquid Crystal Elastomer Metamaterials with Giant Biaxial Thermal Shrinkage for Enhancing Skin Regeneration. Advanced Materials, 2021, 33, e2106175.	21.0	60
115	Reflection and refraction of plane waves at the interface between piezoelectric and piezomagnetic media. International Journal of Engineering Science, 2008, 46, 1098-1110.	5.0	59
116	Mechanical properties of Invar 36 alloy additively manufactured by selective laser melting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 772, 138799.	5.6	59
117	3D printing of complex origami assemblages for reconfigurable structures. Soft Matter, 2018, 14, 8051-8059.	2.7	58
118	Novel multifunctional negative stiffness mechanical metamaterial structure: Tailored functions of multi-stable and compressive mono-stable. Composites Part B: Engineering, 2021, 204, 108501.	12.0	58
119	Design and analysis of integrated thermal protection system based on lightweight C/SiC pyramidal lattice core sandwich panel. Materials and Design, 2016, 111, 435-444.	7.0	57
120	A novel design method for 3D positive and negative Poisson's ratio material based on tension-twist coupling effects. Composite Structures, 2020, 236, 111899.	5.8	57
121	Ionic Conductive Gels for Optically Manipulatable Microwave Stealth Structures. Advanced Science, 2020, 7, 1902162.	11.2	57
122	Submillimeter-scale multimaterial terrestrial robots. Science Robotics, 2022, 7, .	17.6	57
123	Finite Element Analysis of Mechanical Properties of 3D Four-Directional Rectangular Braided Composites Part 1: Microgeometry and 3D Finite Element Model. Applied Composite Materials, 2010, 17, 373-387.	2.5	56
124	Influence of manufacturing geometric defects on the mechanical properties of AlSi10Mg alloy fabricated by selective laser melting. Journal of Alloys and Compounds, 2019, 789, 852-859.	5.5	56
125	Insight into the negative Poisson's ratio effect of metallic auxetic reentrant honeycomb under dynamic compression. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 763, 138151.	5.6	55
126	Evolutionary optimization design of honeycomb metastructure with effective mechanical resistance and broadband microwave absorption. Carbon, 2021, 177, 79-89.	10.3	55

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127	Microstructure, mechanical and dielectric properties of highly porous silicon nitride ceramics produced by a new water-based freeze casting. Ceramics International, 2012, 38, 4373-4377.	4.8	54
128	Fabrication and testing of composite hierarchical Isogrid stiffened cylinder. Composites Science and Technology, 2018, 157, 152-159.	7.8	54
129	Gel electrolytes with a wide potential window for high-rate Al-ion batteries. Journal of Materials Chemistry A, 2019, 7, 20348-20356.	10.3	54
130	Modeling the effect of temperature on the yield strength of precipitation strengthening Ni-base superalloys. International Journal of Plasticity, 2019, 116, 143-158.	8.8	54
131	A novel embedded method for in-situ measuring internal multi-point temperatures of lithium ion batteries. Journal of Power Sources, 2020, 456, 227981.	7.8	54
132	Interactions between domain switching and crack propagation in poled BaTiO3 single crystal under mechanical loading. Acta Materialia, 2007, 55, 5758-5767.	7.9	53
133	A curvature-dependent interfacial energy-based interface stress theory and its applications to nano-structured materials: (I) General theory. Journal of the Mechanics and Physics of Solids, 2014, 66, 59-77.	4.8	53
134	Weather-Manipulated Smart Broadband Electromagnetic Metamaterials. ACS Applied Materials & Interfaces, 2018, 10, 40815-40823.	8.0	53
135	Reducing diffusion-induced stresses of electrodeâ€“collector bilayer inÂlithium-ion battery by pre-strain. Journal of Power Sources, 2013, 242, 415-420.	7.8	52
136	Porous carbon-bonded carbon fiber composites impregnated with SiO2-Al2O3 aerogel with enhanced thermal insulation and mechanical properties. Ceramics International, 2018, 44, 3484-3487.	4.8	52
137	Flexible thin broadband microwave absorber based on a pyramidal periodic structure of lossy composite. Optics Letters, 2018, 43, 2764.	3.3	52
138	Mechanical properties and internal microdefects evolution of carbon fiber reinforced polymer composites: Cryogenic temperature and thermocycling effects. Composites Science and Technology, 2020, 191, 108083.	7.8	52
139	Dynamic response of stiffened plate under internal blast: Experimental and numerical investigation. Marine Structures, 2021, 77, 102957.	3.8	52
140	Strain rate effect on the out-of-plane dynamic compressive behavior of metallic honeycombs: Experiment and theory. Composite Structures, 2015, 132, 644-651.	5.8	51
141	Tailorable Thermal Expansion of Lightweight and Robust Dual-Constituent Triangular Lattice Material. Journal of Applied Mechanics, Transactions ASME, 2017, 84, .	2.2	51
142	Mechanical responses of titanium 3D kagome lattice structure manufactured by selective laser melting. Extreme Mechanics Letters, 2018, 23, 41-48.	4.1	51
143	In-plane compression behavior of hybrid honeycomb metastructures: Theoretical and experimental studies. Aerospace Science and Technology, 2020, 106, 106081.	4.8	51
144	Fracture strength of the particulate-reinforced ultra-high temperature ceramics based on a temperature dependent fracture toughness model. Journal of the Mechanics and Physics of Solids, 2017, 107, 365-378.	4.8	50

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145	Customized Kirigami Electrodes for Flexible and Deformable Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 780-788.	8.0	50
146	Rapid Volatilization Induced Mechanically Robust Shape-Morphing Structures toward 4D Printing. ACS Applied Materials & Interfaces, 2020, 12, 17979-17987.	8.0	50
147	Active Reconfigurable Tristable Squareâ€Twist Origami. Advanced Functional Materials, 2020, 30, 1909087.	14.9	50
148	A unified model for piezocomposites with non-piezoelectric matrix and piezoelectric ellipsoidal inclusions. International Journal of Solids and Structures, 1999, 36, 2707-2733.	2.7	49
149	Theoretical prediction on the mechanical properties of 3D braided composites using a helix geometry model. Composite Structures, 2013, 100, 511-516.	5.8	49
150	Preparation and thermodynamic analysis of the porous ZrO2/(ZrO2Â+ÂNi) functionally graded bolted joint. Composites Part B: Engineering, 2015, 82, 13-22.	12.0	49
151	In Plane Mechanical Properties of Tetrachiral and Antitetrachiral Hybrid Metastructures. Journal of Applied Mechanics, Transactions ASME, 2017, 84, .	2.2	49
152	Wave propagation in piezoelectric/piezomagnetic layered periodic composites. Acta Mechanica Solida Sinica, 2008, 21, 483-490.	1.9	48
153	A photoviscoplastic model for photoactivated covalent adaptive networks. Journal of the Mechanics and Physics of Solids, 2014, 70, 84-103.	4.8	48
154	Free-standing and flexible LiMnTiO4/carbon nanotube cathodes for high performance lithium ion batteries. Journal of Power Sources, 2016, 321, 120-125.	7.8	48
155	Architecture design of periodic truss-lattice cells for additive manufacturing. Additive Manufacturing, 2020, 34, 101172.	3.0	48
156	Heat transfer mechanism of the C/SiC ceramics pyramidal lattice composites. Composites Part B: Engineering, 2014, 63, 8-14.	12.0	47
157	Recent development of graphene materials applied in polymer solar cell. Renewable and Sustainable Energy Reviews, 2015, 43, 973-980.	16.4	47
158	Experimental and numerical investigation on the crushing behavior of sandwich composite under edgewise compression loading. Composites Part B: Engineering, 2016, 94, 34-44.	12.0	47
159	Optimal design of hierarchical grid-stiffened cylindrical shell structures based on linear buckling and nonlinear collapse analyses. Thin-Walled Structures, 2017, 119, 315-323.	5.3	47
160	The Dynamic response of shallow sandwich arch with auxetic metallic honeycomb core under localized impulsive loading. International Journal of Impact Engineering, 2020, 137, 103442.	5.0	47
161	Integrated design of component and configuration for a flexible and ultrabroadband radar absorbing composite. Composites Science and Technology, 2019, 176, 81-89.	7.8	46
162	Dynamic crashing and impact energy absorption of 3D braided composite tubes. Materials Letters, 2005, 59, 1491-1496.	2.6	45

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163	Ultra-high-temperature tensile properties and fracture behavior of ZrB2-based ceramics in air above 1500Â°C. Materials & Design, 2013, 52, 17-22.	5.1	45
164	Load distribution in threads of porous metalâ€“ceramic functionally graded composite joints subjected to thermomechanical loading. Composite Structures, 2015, 134, 680-688.	5.8	45
165	Free vibration of CFRC lattice-core sandwich cylinder with attached mass. Composites Science and Technology, 2015, 118, 226-235.	7.8	45
166	Twistable Origami and Kirigami: from Structure-Guided Smartness to Mechanical Energy Storage. ACS Applied Materials & Interfaces, 2019, 11, 3450-3458.	8.0	45
167	Mechanical analysis and modeling of metallic lattice sandwich additively fabricated by selective laser melting. Thin-Walled Structures, 2020, 146, 106189.	5.3	45
168	Advances in numerical modeling of environmental barrier coating systems for gas turbines. Journal of the European Ceramic Society, 2020, 40, 3363-3379.	5.7	45
169	A new criterion for domain-switching in ferroelectric materials. Mechanics of Materials, 2006, 38, 25-32.	3.2	44
170	The equivalent thermal conductivity of lattice core sandwich structure: A predictive model. Applied Thermal Engineering, 2016, 93, 236-243.	6.0	44
171	Tensile properties of two-dimensional carbon fiber reinforced silicon carbide composites at temperatures up to 2300â€Â°C. Journal of the European Ceramic Society, 2020, 40, 630-635.	5.7	44
172	SMP-based multi-stable mechanical metamaterials: From bandgap tuning to wave logic gates. Extreme Mechanics Letters, 2021, 42, 101077.	4.1	44
173	Predicting the nonlinear response and failure of 3D braided composites. Materials Letters, 2004, 58, 3237-3241.	2.6	43
174	Design and manufacturing of a composite lattice structure reinforced by continuous carbon fibers. Tsinghua Science and Technology, 2006, 11, 515-522.	6.1	43
175	The size and strain effects on the electric-field-induced domain evolution and hysteresis loop in ferroelectric BaTiO3 nanofilms. Computational Materials Science, 2008, 44, 404-410.	3.0	43
176	Oxygen-vacancy-induced memory effect and large recoverable strain in a barium titanate single crystal. Physical Review B, 2010, 82, .	3.2	43
177	Microstructure and properties of highly porous Y2SiO5 ceramics produced by a new water-based freeze casting. Materials & Design, 2013, 46, 746-750.	5.1	43
178	Fabrication and bending behavior of thermoplastic composite curved corrugated sandwich beam with interface enhancement. International Journal of Mechanical Sciences, 2018, 149, 101-111.	6.7	43
179	Mechanical Properties of Selective Laser Sintering (SLS) Additive Manufactured Chiral Auxetic Cylindrical Stent. Experimental Mechanics, 2019, 59, 913-925.	2.0	43
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