Yihui Zhang

List of Publications by Year
in descending order

169 papers	18,544 citations	18482 62 h-index	12272 133 g-index
181 all docs	181 docs citations	181 times ranked	15543 citing authors

#	Article	IF	Citations
1	Stretchable batteries with self-similar serpentine interconnects and integrated wireless recharging systems. Nature Communications, 2013, 4, 1543.	12.8	1,169
2	Ultrathin conformal devices for precise and continuous thermal characterization of humanÂskin. Nature Materials, 2013, 12, 938-944.	27.5	1,002
3	High performance piezoelectric devices based on aligned arrays of nanofibers of poly(vinylidenefluoride-co-trifluoroethylene). Nature Communications, 2013, 4, 1633.	12.8	1,001
4	Soft Microfluidic Assemblies of Sensors, Circuits, and Radios for the Skin. Science, 2014, 344, 70-74.	12.6	982
5	Fractal design concepts for stretchable electronics. Nature Communications, 2014, 5, 3266.	12.8	821
6	Assembly of micro/nanomaterials into complex, three-dimensional architectures by compressive buckling. Science, 2015, 347, 154-159.	12.6	745
7	Binodal, wireless epidermal electronic systems with in-sensor analytics for neonatal intensive care. Science, 2019, 363, .	12.6	521
8	Printing, folding and assembly methods for forming 3D mesostructures in advanced materials. Nature Reviews Materials, 2017, 2, .	48.7	463
9	A mechanically driven form of Kirigami as a route to 3D mesostructures in micro/nanomembranes. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 11757-11764.	7.1	429
10	Wireless Optofluidic Systems for Programmable InÂVivo Pharmacology and Optogenetics. Cell, 2015, 162, 662-674.	28.9	417
11	Soft network composite materials with deterministic and bio-inspired designs. Nature Communications, 2015, 6, 6566.	12.8	392
12	Self-assembled three dimensional network designs for soft electronics. Nature Communications, 2017, 8, 15894.	12.8	325
13	Three-dimensional piezoelectric polymer microsystems for vibrational energy harvesting, robotic interfaces and biomedical implants. Nature Electronics, 2019, 2, 26-35.	26.0	322
14	Rugged and breathable forms of stretchable electronics with adherent composite substrates for transcutaneous monitoring. Nature Communications, 2014, 5, 4779.	12.8	309
15	Morphable 3D mesostructures and microelectronic devices by multistable buckling mechanics. Nature Materials, 2018, 17, 268-276.	27.5	297
16	Experimental and Theoretical Studies of Serpentine Microstructures Bonded To Prestrained Elastomers for Stretchable Electronics. Advanced Functional Materials, 2014, 24, 2028-2037.	14.9	273
17	Large-area MRI-compatible epidermal electronic interfaces for prosthetic control and cognitive monitoring. Nature Biomedical Engineering, 2019, 3, 194-205.	22.5	253
18	Buckling in serpentine microstructures and applications in elastomer-supported ultra-stretchable electronics with high areal coverage. Soft Matter, 2013, 9, 8062.	2.7	248

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19	Capacitive Epidermal Electronics for Electrically Safe, Longâ€Term Electrophysiological Measurements. Advanced Healthcare Materials, 2014, 3, 642-648.	7.6	231
20	Controlled Mechanical Buckling for Origamiâ€Inspired Construction of 3D Microstructures in Advanced Materials. Advanced Functional Materials, 2016, 26, 2629-2639.	14.9	231
21	Epidermal photonic devices for quantitative imaging of temperature and thermal transport characteristics of the skin. Nature Communications, 2014, 5, 4938.	12.8	227
22	Multifunctional Skinâ€Like Electronics for Quantitative, Clinical Monitoring of Cutaneous Wound Healing. Advanced Healthcare Materials, 2014, 3, 1597-1607.	7.6	226
23	A nonlinear mechanics model of bio-inspired hierarchical lattice materials consisting of horseshoe microstructures. Journal of the Mechanics and Physics of Solids, 2016, 90, 179-202.	4.8	220
24	Electronic sensor and actuator webs for large-area complex geometry cardiac mapping and therapy. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 19910-19915.	7.1	209
25	Compliant and stretchable thermoelectric coils for energy harvesting in miniature flexible devices. Science Advances, 2018, 4, eaau5849.	10.3	208
26	Mechanical assembly of complex, 3D mesostructures from releasable multilayers of advanced materials. Science Advances, 2016, 2, e1601014.	10.3	200
27	Adaptive optoelectronic camouflage systems with designs inspired by cephalopod skins. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 12998-13003.	7.1	197
28	Assembly of Advanced Materials into 3D Functional Structures by Methods Inspired by Origami and Kirigami: A Review. Advanced Materials Interfaces, 2018, 5, 1800284.	3.7	195
29	Two-dimensional materials in functional three-dimensional architectures with applications in photodetection and imaging. Nature Communications, 2018, 9, 1417.	12.8	189
30	Mechanics of ultra-stretchable self-similar serpentine interconnects. Acta Materialia, 2013, 61, 7816-7827.	7.9	183
31	Mechanicallyâ€Guided Structural Designs in Stretchable Inorganic Electronics. Advanced Materials, 2020, 32, e1902254.	21.0	183
32	Mechanics of stretchable batteries and supercapacitors. Current Opinion in Solid State and Materials Science, 2015, 19, 190-199.	11.5	173
33	Soft mechanical metamaterials with unusual swelling behavior and tunable stress-strain curves. Science Advances, 2018, 4, eaar8535.	10.3	159
34	Design and application of â€˜J-shapedâ€™ stressâ€“strain behavior in stretchable electronics: a review. Lab on A Chip, 2017, 17, 1689-1704.	6.0	140
35	Multimodal Sensing with a Three-Dimensional Piezoresistive Structure. ACS Nano, 2019, 13, 10972-10979.	14.6	134
36	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

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37	Three-dimensional, multifunctional neural interfaces for cortical spheroids and engineered assembloids. Science Advances, 2021, 7, .	10.3	128
38	Soft three-dimensional network materials with rational bio-mimetic designs. Nature Communications, 2020, 11, 1180.	12.8	120
39	Three-dimensional electronic microfliers inspired by wind-dispersed seeds. Nature, 2021, 597, 503-510.	27.8	120
40	Laserâ€Induced Graphene for Electrothermally Controlled, Mechanically Guided, 3D Assembly and Humanâ€"Soft Actuators Interaction. Advanced Materials, 2020, 32, e1908475.	21.0	118
41	Mechanics of Fractal-Inspired Horseshoe Microstructures for Applications in Stretchable Electronics. Journal of Applied Mechanics, Transactions ASME, 2016, 83, .	2.2	117
42	A hierarchical computational model for stretchable interconnects with fractal-inspired designs. Journal of the Mechanics and Physics of Solids, 2014, 72, 115-130.	4.8	115
43	Stretchable, Breathable, and Stable Leadâ€Free Perovskite/Polymer Nanofiber Composite for Hybrid Triboelectric and Piezoelectric Energy Harvesting. Advanced Materials, 2022, 34, e2200042.	21.0	108
44	Soft network materials with isotropic negative Poisson's ratios over large strains. Soft Matter, 2018, 14, 693-703.	2.7	107
45	Freestanding 3D Mesostructures, Functional Devices, and Shapeâ€Programmable Systems Based on Mechanically Induced Assembly with Shape Memory Polymers. Advanced Materials, 2019, 31, e1805615.	21.0	105
46	Theoretical and Experimental Studies of Epidermal Heat Flux Sensors for Measurements of Core Body Temperature. Advanced Healthcare Materials, 2016, 5, 119-127.	7.6	101
47	Epidermal Impedance Sensing Sheets for Precision Hydration Assessment and Spatial Mapping. IEEE Transactions on Biomedical Engineering, 2013, 60, 2848-2857.	4.2	95
48	Materials and Designs for Wirelessly Powered Implantable Lightâ€Emitting Systems. Small, 2012, 8, 2812-2818.	10.0	93
49	Mechanically active materials in three-dimensional mesostructures. Science Advances, 2018, 4, eaat8313.	10.3	89
50	Highly-integrated, miniaturized, stretchable electronic systems based on stacked multilayer network materials. Science Advances, 2022, 8, eabm3785.	10.3	89
51	Optics and Nonlinear Buckling Mechanics in Large-Area, Highly Stretchable Arrays of Plasmonic Nanostructures. ACS Nano, 2015, 9, 5968-5975.	14.6	87
52	Micro/Nanoscale 3D Assembly by Rolling, Folding, Curving, and Buckling Approaches. Advanced Materials, 2019, 31, e1901895.	21.0	84
53	Strain effect on ferroelectric behaviors of BaTiO₃nanowires: a molecular dynamics study. Nanotechnology, 2010, 21, 015701.	2.6	83
54	A finite deformation model of planar serpentine interconnects for stretchable electronics. International Journal of Solids and Structures, 2016, 91, 46-54.	2.7	83

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55	A Generic Soft Encapsulation Strategy for Stretchable Electronics. Advanced Functional Materials, 2019, 29, 1806630.	14.9	83
56	2D Mechanical Metamaterials with Widely Tunable Unusual Modes of Thermal Expansion. Advanced Materials, 2019, 31, e1905405.	21.0	82
57	Buckling and twisting of advanced materials into morphable 3D mesostructures. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13239-13248.	7.1	81
58	Guided Formation of 3D Helical Mesostructures by Mechanical Buckling: Analytical Modeling and Experimental Validation. Advanced Functional Materials, 2016, 26, 2909-2918.	14.9	70
59	Mechanical Properties of two novel planar lattice structures. International Journal of Solids and Structures, 2008, 45, 3751-3768.	2.7	68
60	Deterministic assembly of 3D mesostructures in advanced materials via compressive buckling: A short review of recent progress. Extreme Mechanics Letters, 2017, 11, 96-104.	4.1	68
61	Electro-mechanically controlled assembly of reconfigurable 3D mesostructures and electronic devices based on dielectric elastomer platforms. National Science Review, 2020, 7, 342-354.	9.5	68
62	Deformation and failure mechanisms of lattice cylindrical shells under axial loading. International Journal of Mechanical Sciences, 2009, 51, 213-221.	6.7	66
63	Mechanics of unusual soft network materials with rotatable structural nodes. Journal of the Mechanics and Physics of Solids, 2021, 146, 104210.	4.8	65
64	Chemical Sensing Systems that Utilize Soft Electronics on Thin Elastomeric Substrates with Open Cellular Designs. Advanced Functional Materials, 2017, 27, 1605476.	14.9	64
65	The equivalent medium of cellular substrate under large stretching, with applications to stretchable electronics. Journal of the Mechanics and Physics of Solids, 2018, 120, 199-207.	4.8	62
66	High Performance, Tunable Electrically Small Antennas through Mechanically Guided 3D Assembly. Small, 2019, 15, e1804055.	10.0	60
67	Hierarchical mechanical metamaterials built with scalable tristable elements for ternary logic operation and amplitude modulation. Science Advances, 2021, 7, .	10.3	60
68	Liquid Crystal Elastomer Metamaterials with Giant Biaxial Thermal Shrinkage for Enhancing Skin Regeneration. Advanced Materials, 2021, 33, e2106175.	21.0	60
69	Submillimeter-scale multimaterial terrestrial robots. Science Robotics, 2022, 7, .	17.6	57
70	Allâ€Elastomeric, Strainâ€Responsive Thermochromic Color Indicators. Small, 2014, 10, 1266-1271.	10.0	56
71	Harnessing the interface mechanics of hard films and soft substrates for 3D assembly by controlled buckling. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 15368-15377.	7.1	54
72	Buckling of a stiff thin film on a pre-strained bi-layer substrate. International Journal of Solids and Structures, 2014, 51, 3113-3118.	2.7	52

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73	Designing Mechanical Metamaterials with Kirigamiâ€Inspired, Hierarchical Constructions for Giant Positive and Negative Thermal Expansion. Advanced Materials, 2021, 33, e2004919.	21.0	51
74	Engineered Elastomer Substrates for Guided Assembly of Complex 3D Mesostructures by Spatially Nonuniform Compressive Buckling. Advanced Functional Materials, 2017, 27, 1604281.	14.9	50
75	Geometrically reconfigurable 3D mesostructures and electromagnetic devices through a rational bottom-up design strategy. Science Advances, 2020, 6, eabb7417.	10.3	50
76	Plasticity-induced origami for assembly of three dimensional metallic structures guided by compressive buckling. Extreme Mechanics Letters, 2017, 11, 105-110.	4.1	48
77	A double perturbation method of postbuckling analysis in 2D curved beams for assembly of 3D ribbon-shaped structures. Journal of the Mechanics and Physics of Solids, 2018, 111, 215-238.	4.8	48
78	Mechanically Assembled, Three-Dimensional Hierarchical Structures of Cellular Graphene with Programmed Geometries and Outstanding Electromechanical Properties. ACS Nano, 2018, 12, 12456-12463.	14.6	48
79	A theoretical model of reversible adhesion in shape memory surface relief structures and its application in transfer printing. Journal of the Mechanics and Physics of Solids, 2015, 77, 27-42.	4.8	44
80	Lateral buckling and mechanical stretchability of fractal interconnects partially bonded onto an elastomeric substrate. Applied Physics Letters, 2015, 106, .	3.3	44
81	Vibration of mechanically-assembled 3D microstructures formed by compressive buckling. Journal of the Mechanics and Physics of Solids, 2018, 112, 187-208.	4.8	44
82	Oxygen-vacancy-induced memory effect and large recoverable strain in a barium titanate single crystal. Physical Review B, 2010, 82, .	3.2	43
83	3D Tunable, Multiscale, and Multistable Vibrational Microâ€Platforms Assembled by Compressive Buckling. Advanced Functional Materials, 2017, 27, 1605914.	14.9	43
84	Remotely Triggered Assembly of 3D Mesostructures Through Shapeâ€Memory Effects. Advanced Materials, 2019, 31, e1905715.	21.0	42
85	Materials and Wireless Microfluidic Systems for Electronics Capable of Chemical Dissolution on Demand. Advanced Functional Materials, 2015, 25, 1338-1343.	14.9	41
86	Mechanically Guided Postâ€Assembly of 3D Electronic Systems. Advanced Functional Materials, 2018, 28, 1803149.	14.9	41
87	Three-dimensional electronic scaffolds for monitoring and regulation of multifunctional hybrid tissues. Extreme Mechanics Letters, 2020, 35, 100634.	4.1	38
88	A Mechanics Model of Soft Network Materials With Periodic Lattices of Arbitrarily Shaped Filamentary Microstructures for Tunable Poisson's Ratios. Journal of Applied Mechanics, Transactions ASME, 2018, 85, .	2.2	37
89	Molecular dynamics investigations on the size-dependent ferroelectric behavior of BaTiO₃nanowires. Nanotechnology, 2009, 20, 405703.	2.6	36
90	Three-Dimensional Silicon Electronic Systems Fabricated by Compressive Buckling Process. ACS Nano, 2018, 12, 4164-4171.	14.6	36

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91	Design, fabrication and applications of soft network materials. Materials Today, 2021, 49, 324-350.	14.2	36
92	Inverse Design Strategies for 3D Surfaces Formed by Mechanically Guided Assembly. Advanced Materials, 2020, 32, e1908424.	21.0	34
93	Bioinspired elastomer composites with programmed mechanical and electrical anisotropies. Nature Communications, 2022, 13, 524.	12.8	34
94	Analysis of a concentric coplanar capacitor for epidermal hydration sensing. Sensors and Actuators A: Physical, 2013, 203, 149-153.	4.1	33
95	Patterning Curved Three-Dimensional Structures With Programmable Kirigami Designs. Journal of Applied Mechanics, Transactions ASME, 2017, 84, .	2.2	32
96	Mechanicallyâ€Guided Deterministic Assembly of 3D Mesostructures Assisted by Residual Stresses. Small, 2017, 13, 1700151.	10.0	32
97	Controlled mechanical assembly of complex 3D mesostructures and strain sensors by tensile buckling. Npj Flexible Electronics, 2018, 2, .	10.7	31
98	Mechanics of bistable cross-shaped structures through loading-path controlled 3D assembly. Journal of the Mechanics and Physics of Solids, 2019, 129, 261-277.	4.8	31
99	Differential quadrature analysis of the buckling of thin rectangular plates with cosine-distributed compressive loads on two opposite sides. Advances in Engineering Software, 2008, 39, 497-504.	3.8	30
100	Mechanics of buckled serpentine structures formed via mechanics-guided, deterministic three-dimensional assembly. Journal of the Mechanics and Physics of Solids, 2019, 125, 736-748.	4.8	29
101	Assembly of Foldable 3D Microstructures Using Graphene Hinges. Advanced Materials, 2020, 32, e2001303.	21.0	29
102	Fabrication and Deformation of 3D Multilayered Kirigami Microstructures. Small, 2018, 14, e1703852.	10.0	28
103	A nonlinear mechanics model of soft network metamaterials with unusual swelling behavior and tunable phononic band gaps. Composites Science and Technology, 2019, 183, 107822.	7.8	28
104	Manufacturing of 3D multifunctional microelectronic devices: challenges and opportunities. NPG Asia Materials, 2019, 11, .	7.9	28
105	Soft Three-Dimensional Microscale Vibratory Platforms for Characterization of Nano-Thin Polymer Films. ACS Nano, 2019, 13, 449-457.	14.6	28
106	Flexoelectricity induced increase of critical thickness in epitaxial ferroelectric thin films. Physica B: Condensed Matter, 2012, 407, 3377-3381.	2.7	27
107	Fabric-based stretchable electronics with mechanically optimized designs and prestrained composite substrates. Extreme Mechanics Letters, 2014, 1, 120-126.	4.1	27
108	An Antiâ€Fatigue Design Strategy for 3D Ribbonâ€Shaped Flexible Electronics. Advanced Materials, 2021, 33, e2102684.	21.0	27

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109	Constitutive relations and failure criterion of planar lattice composites. Composites Science and Technology, 2008, 68, 3299-3304.	7.8	24
110	Rapidly deployable and morphable 3D mesostructures with applications in multimodal biomedical devices. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	24
111	Quantitative Thermal Imaging of Single-Walled Carbon Nanotube Devices by Scanning Joule Expansion Microscopy. ACS Nano, 2012, 6, 10267-10275.	14.6	23
112	A theoretical model of postbuckling in straight ribbons with engineered thickness distributions for three-dimensional assembly. International Journal of Solids and Structures, 2018, 147, 254-271.	2.7	23
113	Design and Fabrication of Heterogeneous, Deformable Substrates for the Mechanically Guided 3D Assembly. ACS Applied Materials & Interfaces, 2019, 11, 3482-3492.	8.0	23
114	Transformable, Freestanding 3D Mesostructures Based on Transient Materials and Mechanical Interlocking. Advanced Functional Materials, 2019, 29, 1903181.	14.9	22
115	Fracture analysis of ferroelectric single crystals: Domain switching near crack tip and electric field induced crack propagation. Journal of the Mechanics and Physics of Solids, 2013, 61, 114-130.	4.8	21
116	Mechanics Design for Stretchable, High Areal Coverage GaAs Solar Module on an Ultrathin Substrate. Journal of Applied Mechanics, Transactions ASME, 2014, 81, .	2.2	21
117	Study on crack propagation in ferroelectric single crystal under electric loading. Acta Materialia, 2009, 57, 1630-1638.	7.9	20
118	Size dependent domain configuration and electric field driven evolution in ultrathin ferroelectric films: A phase field investigation. Journal of Applied Physics, 2010, 107, .	2.5	20
119	Optimization-Based Approach for the Inverse Design of Ribbon-Shaped Three-Dimensional Structures Assembled Through Compressive Buckling. Physical Review Applied, 2019, 11, .	3.8	20
120	Electric-field-induced fatigue crack growth in ferroelectric ceramics. Theoretical and Applied Fracture Mechanics, 2010, 54, 98-104.	4.7	19
121	Viscoelastic Characteristics of Mechanically Assembled Three-Dimensional Structures Formed by Compressive Buckling. Journal of Applied Mechanics, Transactions ASME, 2018, 85, .	2.2	19
122	OPTIMAL DESIGN OF SANDWICH BEAMS WITH LIGHTWEIGHT CORES IN THREE-POINT BENDING. International Journal of Applied Mechanics, 2012, 04, 1250033.	2.2	17
123	Advances in Developing Electromechanically Coupled Computational Methods for Piezoelectrics/Ferroelectrics at Multiscale. Applied Mechanics Reviews, 2013, 65, .	10.1	17
124	A Computational Model of Bio-Inspired Soft Network Materials for Analyzing Their Anisotropic Mechanical Properties. Journal of Applied Mechanics, Transactions ASME, 2018, 85, .	2.2	17
125	Reprogrammable 3D Mesostructures Through Compressive Buckling of Thin Films with Prestrained Shape Memory Polymer. Acta Mechanica Solida Sinica, 2018, 31, 589-598.	1.9	17
126	Toward Imperfection-Insensitive Soft Network Materials for Applications in Stretchable Electronics. ACS Applied Materials & Interfaces, 2019, 11, 36100-36109.	8.0	17

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127	3D-Printing Damage-Tolerant Architected Metallic Materials with Shape Recoverability via Special Deformation Design of Constituent Material. ACS Applied Materials & Interfaces, 2021, 13, 39915-39924.	8.0	17
128	Mechanically Guided Hierarchical Assembly of 3D Mesostructures. Advanced Materials, 2022, 34, e2109416.	21.0	17
129	Recent progress in three-dimensional flexible physical sensors. International Journal of Smart and Nano Materials, 2022, 13, 17-41.	4.2	17
130	Analyses of mechanically-assembled 3D spiral mesostructures with applications as tunable inductors. Science China Technological Sciences, 2019, 62, 243-251.	4.0	16
131	Kirigami-inspired multiscale patterning of metallic structures via predefined nanotrench templates. Microsystems and Nanoengineering, 2019, 5, 54.	7.0	16
132	Nonlinear compressive deformations of buckled 3D ribbon mesostructures. Extreme Mechanics Letters, 2021, 42, 101114.	4.1	16
133	Torsional deformation dominated buckling of serpentine structures to form three-dimensional architectures with ultra-low rigidity. Journal of the Mechanics and Physics of Solids, 2021, 155, 104568.	4.8	16
134	An electromechanical atomic-scale finite element method for simulating evolutions of ferroelectric nanodomains. Journal of the Mechanics and Physics of Solids, 2012, 60, 1383-1399.	4.8	14
135	Design and Assembly of Reconfigurable 3D Radioâ€Frequency Antennas Based on Mechanically Triggered Switches. Advanced Electronic Materials, 2019, 5, 1900256.	5.1	14
136	Bioinspired design and assembly of a multilayer cage-shaped sensor capable of multistage load bearing and collapse prevention. Nanotechnology, 2021, 32, 155506.	2.6	14
137	An Inverse Design Method of Buckling-Guided Assembly for Ribbon-Type 3D Structures. Journal of Applied Mechanics, Transactions ASME, 2020, 87, .	2.2	13
138	Island Effect in Stretchable Inorganic Electronics. Small, 2022, 18, e2107879.	10.0	13
139	Stress-induced phase transition and deformation behavior of BaTiO3 nanowires. Journal of Applied Physics, 2011, 110, .	2.5	12
140	Tunable seesaw-like 3D capacitive sensor for force and acceleration sensing. Npj Flexible Electronics, 2021, 5, .	10.7	12
141	Morphable three-dimensional electronic mesofliers capable of on-demand unfolding. Science China Materials, 2022, 65, 2309-2318.	6.3	12
142	Programmable Stimulation and Actuation in Flexible and Stretchable Electronics. Advanced Intelligent Systems, 2021, 3, 2000228.	6.1	11
143	An analytic model of two-level compressive buckling with applications in the assembly of free-standing 3D mesostructures. Soft Matter, 2018, 14, 8828-8837.	2.7	10
144	External uniform electric field removing the flexoelectric effect in epitaxial ferroelectric thin films. Europhysics Letters, 2012, 99, 47003.	2.0	9

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145	Recent progress of morphable 3D mesostructures in advanced materials. Journal of Semiconductors, 2020, 41, 041604.	3.7	9
146	Inverse design strategies for buckling-guided assembly of 3D surfaces based on topology optimization. Extreme Mechanics Letters, 2022, 51, 101582.	4.1	9
147	A surface-layer model of ferroelectric nanowire. Journal of Applied Physics, 2010, 108, 124109.	2.5	8
148	Stress concentration in two-dimensional lattices with imperfections. Acta Mechanica, 2011, 216, 105-122.	2.1	8
149	A phenomenological framework for modeling of nonlinear mechanical responses in soft network materials with arbitrarily curved microstructures. Extreme Mechanics Letters, 2022, 55, 101795.	4.1	8
150	A COD fracture model of ferroelectric ceramics with applications in electric field induced fatigue crack growth. International Journal of Fracture, 2011, 167, 211-220.	2.2	7
151	Liquid Crystal Elastomer Metamaterials with Giant Biaxial Thermal Shrinkage for Enhancing Skin Regeneration (Adv. Mater. 45/2021). Advanced Materials, 2021, 33, 2170356.	21.0	7
152	Mechanics of Three-Dimensional Soft Network Materials With a Class of Bio-Inspired Designs. Journal of Applied Mechanics, Transactions ASME, 2022, 89, .	2.2	7
153	Plastic yield and collapse mechanism of planar lattice structures. Journal of Mechanics of Materials and Structures, 2008, 3, 1257-1277.	0.6	6
154	Flexible Electronics: Theoretical and Experimental Studies of Epidermal Heat Flux Sensors for Measurements of Core Body Temperature (Adv. Healthcare Mater. 1/2016). Advanced Healthcare Materials, 2016, 5, 2-2.	7.6	6
155	Postbuckling analyses of frame mesostructures consisting of straight ribbons for mechanically guided three-dimensional assembly. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20190012.	2.1	5
156	Imperfection sensitivity of mechanical properties in soft network materials with horseshoe microstructures. Acta Mechanica Sinica/Lixue Xuebao, 2021, 37, 1050-1062.	3.4	5
157	Three-dimensional thermal analysis of wirelessly powered light-emitting systems. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2012, 468, 4088-4097.	2.1	4
158	Effects of high order deformations on the strength of planar lattice materials. Acta Mechanica Sinica/Lixue Xuebao, 2008, 24, 533-540.	3.4	3
159	Mechanics and Designs of Stretchable Bioelectronics. Microsystems and Nanosystems, 2016, , 53-68.	0.1	3
160	Critical Thickness and the Size-Dependent Curie Temperature of BaTiO₃ Nanofilms. Journal of Computational and Theoretical Nanoscience, 2011, 8, 867-872.	0.4	2
161	Flexible Electronics: Materials and Designs for Wirelessly Powered Implantable Lightâ€Emitting Systems (Small 18/2012). Small, 2012, 8, 2770-2770.	10.0	2
162	Thermomechanical Modeling of Scanning Joule Expansion Microscopy Imaging of Single-Walled Carbon Nanotube Devices. Journal of Applied Mechanics, Transactions ASME, 2013, 80, .	2.2	2

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163	Analyses of postbuckling in stretchable arrays of nanostructures for wide-band tunable plasmonics. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2015, 471, 20150632.	2.1	2
164	Electronic Stuctures: Mechanically Guided Postâ€Assembly of 3D Electronic Systems (Adv. Funct. Mater.) Tj ETQq0 0 0 rgBT /Overlock 1	14.9	2
165	3D Assembly: Controlled Mechanical Buckling for Origamiâ€Inspired Construction of 3D Microstructures in Advanced Materials (Adv. Funct. Mater. 16/2016). Advanced Functional Materials, 2016, 26, 2586-2586.	14.9	1
166	3D Assembly: Micro/Nanoscale 3D Assembly by Rolling, Folding, Curving, and Buckling Approaches (Adv.) Tj ETQq0 0 0 rgBT /Overlock 1	21.0	1
167	4D Electronic Systems: Transformable, Freestanding 3D Mesostructures Based on Transient Materials and Mechanical Interlocking (Adv. Funct. Mater. 40/2019). Advanced Functional Materials, 2019, 29, 1970277.	14.9	0
168	Inverse Design Methods: Inverse Design Strategies for 3D Surfaces Formed by Mechanically Guided Assembly (Adv. Mater. 14/2020). Advanced Materials, 2020, 32, 2070107.	21.0	0
169	An Antiâ€Fatigue Design Strategy for 3D Ribbonâ€Shaped Flexible Electronics (Adv. Mater. 37/2021). Advanced Materials, 2021, 33, 2170294.	21.0	0