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	Inverse design strategies for buckling-guided assembly of 3D surfaces based on topology optimization. Extreme Mechanics Letters, 2022, 51, 101582.	4.1	9
2	Mechanically Guided Hierarchical Assembly of 3D Mesostructures. Advanced Materials, 2022, 34, e2109416.	21.0	17
3	Bioinspired elastomer composites with programmed mechanical and electrical anisotropies. Nature Communications, 2022, 13, 524.	12.8	34
4	Highly-integrated, miniaturized, stretchable electronic systems based on stacked multilayer network materials. Science Advances, 2022, 8, eabm3785.	10.3	89
5	Island Effect in Stretchable Inorganic Electronics. Small, 2022, 18, e2107879.	10.0	13
6	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
7	Morphable three-dimensional electronic mesofliers capable of on-demand unfolding. Science China Materials, 2022, 65, 2309-2318.	6.3	12
8	Recent progress in three-dimensional flexible physical sensors. International Journal of Smart and Nano Materials, 2022, 13, 17-41.	4.2	17
9	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
10	Submillimeter-scale multimaterial terrestrial robots. Science Robotics, 2022, 7, .	17.6	57
11	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
12	Designing Mechanical Metamaterials with Kirigamiâ€Inspired, Hierarchical Constructions for Giant Positive and Negative Thermal Expansion. Advanced Materials, 2021, 33, e2004919.	21.0	51
13	Nonlinear compressive deformations of buckled 3D ribbon mesostructures. Extreme Mechanics Letters, 2021, 42, 101114.	4.1	16
14	Mechanics of unusual soft network materials with rotatable structural nodes. Journal of the Mechanics and Physics of Solids, 2021, 146, 104210.	4.8	65
15	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
16	Hierarchical mechanical metamaterials built with scalable tristable elements for ternary logic operation and amplitude modulation. Science Advances, 2021, 7, .	10.3	60
17	Programmable Stimulation and Actuation in Flexible and Stretchable Electronics. Advanced Intelligent Systems, 2021, 3, 2000228.	6.1	11
18	Three-dimensional, multifunctional neural interfaces for cortical spheroids and engineered assembloids. Science Advances, 2021, 7, .	10.3	128

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19	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
20	Imperfection sensitivity of mechanical properties in soft network materials with horseshoe microstructures. Acta Mechanica Sinica/Lixue Xuebao, 2021, 37, 1050-1062.	3.4	5
21	Design, fabrication and applications of soft network materials. Materials Today, 2021, 49, 324-350.	14.2	36
22	An Antiâ€Fatigue Design Strategy for 3D Ribbonâ€Shaped Flexible Electronics. Advanced Materials, 2021, 33, e2102684.	21.0	27
23	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
24	Liquid Crystal Elastomer Metamaterials with Giant Biaxial Thermal Shrinkage for Enhancing Skin Regeneration. Advanced Materials, 2021, 33, e2106175.	21.0	60
25	Three-dimensional electronic microfliers inspired by wind-dispersed seeds. Nature, 2021, 597, 503-510.	27.8	120
26	An Antiâ€Fatigue Design Strategy for 3D Ribbonâ€Shaped Flexible Electronics (Adv. Mater. 37/2021). Advanced Materials, 2021, 33, 2170294.	21.0	0
27	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
28	Tunable seesaw-like 3D capacitive sensor for force and acceleration sensing. Npj Flexible Electronics, 2021, 5, .	10.7	12
29	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
30	Mechanicallyâ€Guided Structural Designs in Stretchable Inorganic Electronics. Advanced Materials, 2020, 32, e1902254.	21.0	183
31	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
32	Geometrically reconfigurable 3D mesostructures and electromagnetic devices through a rational bottom-up design strategy. Science Advances, 2020, 6, eabb7417.	10.3	50
33	Assembly of Foldable 3D Microstructures Using Graphene Hinges. Advanced Materials, 2020, 32, e2001303.	21.0	29
34	Recent progress of morphable 3D mesostructures in advanced materials. Journal of Semiconductors, 2020, 41, 041604.	3.7	9
35	Laserâ€Induced Graphene for Electrothermally Controlled, Mechanically Guided, 3D Assembly and Humanâ€"Soft Actuators Interaction. Advanced Materials, 2020, 32, e1908475.	21.0	118
36	Soft three-dimensional network materials with rational bio-mimetic designs. Nature Communications, 2020, 11, 1180.	12.8	120

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37	Inverse Design Strategies for 3D Surfaces Formed by Mechanically Guided Assembly. Advanced Materials, 2020, 32, e1908424.	21.0	34
38	Three-dimensional electronic scaffolds for monitoring and regulation of multifunctional hybrid tissues. Extreme Mechanics Letters, 2020, 35, 100634.	4.1	38
39	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
40	An Inverse Design Method of Buckling-Guided Assembly for Ribbon-Type 3D Structures. Journal of Applied Mechanics, Transactions ASME, 2020, 87, .	2.2	13
41	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
42	Transformable, Freestanding 3D Mesostructures Based on Transient Materials and Mechanical Interlocking. Advanced Functional Materials, 2019, 29, 1903181.	14.9	22
43	Micro/Nanoscale 3D Assembly by Rolling, Folding, Curving, and Buckling Approaches. Advanced Materials, 2019, 31, e1901895.	21.0	84
44	Remotely Triggered Assembly of 3D Mesostructures Through Shapeâ€Memory Effects. Advanced Materials, 2019, 31, e1905715.	21.0	42
45	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
46	2D Mechanical Metamaterials with Widely Tunable Unusual Modes of Thermal Expansion. Advanced Materials, 2019, 31, e1905405.	21.0	82
47	3D Assembly: Micro/Nanoscale 3D Assembly by Rolling, Folding, Curving, and Buckling Approaches (Adv.) Tj ETQq1 1 0.784314 rgBT /Ov	21.0	1
48	Toward Imperfection-Insensitive Soft Network Materials for Applications in Stretchable Electronics. ACS Applied Materials & Interfaces, 2019, 11, 36100-36109.	8.0	17
49	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
50	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
51	Multimodal Sensing with a Three-Dimensional Piezoresistive Structure. ACS Nano, 2019, 13, 10972-10979.	14.6	134
52	Manufacturing of 3D multifunctional microelectronic devices: challenges and opportunities. NPG Asia Materials, 2019, 11, .	7.9	28
53	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
54	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

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55	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
56	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
57	Design and Assembly of Reconfigurable 3D Radioâ€Frequency Antennas Based on Mechanically Triggered Switches. Advanced Electronic Materials, 2019, 5, 1900256.	5.1	14
58	Binodal, wireless epidermal electronic systems with in-sensor analytics for neonatal intensive care. Science, 2019, 363, .	12.6	521
59	Analyses of mechanically-assembled 3D spiral mesostructures with applications as tunable inductors. Science China Technological Sciences, 2019, 62, 243-251.	4.0	16
60	Large-area MRI-compatible epidermal electronic interfaces for prosthetic control and cognitive monitoring. Nature Biomedical Engineering, 2019, 3, 194-205.	22.5	253
61	Kirigami-inspired multiscale patterning of metallic structures via predefined nanotrench templates. Microsystems and Nanoengineering, 2019, 5, 54.	7.0	16
62	Design and Fabrication of Heterogeneous, Deformable Substrates for the Mechanically Guided 3D Assembly. ACS Applied Materials & Interfaces, 2019, 11, 3482-3492.	8.0	23
63	High Performance, Tunable Electrically Small Antennas through Mechanically Guided 3D Assembly. Small, 2019, 15, e1804055.	10.0	60
64	Soft Three-Dimensional Microscale Vibratory Platforms for Characterization of Nano-Thin Polymer Films. ACS Nano, 2019, 13, 449-457.	14.6	28
65	A Generic Soft Encapsulation Strategy for Stretchable Electronics. Advanced Functional Materials, 2019, 29, 1806630.	14.9	83
66	Three-dimensional piezoelectric polymer microsystems for vibrational energy harvesting, robotic interfaces and biomedical implants. Nature Electronics, 2019, 2, 26-35.	26.0	322
67	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
68	Three-Dimensional Silicon Electronic Systems Fabricated by Compressive Buckling Process. ACS Nano, 2018, 12, 4164-4171.	14.6	36
69	Two-dimensional materials in functional three-dimensional architectures with applications in photodetection and imaging. Nature Communications, 2018, 9, 1417.	12.8	189
70	Morphable 3D mesostructures and microelectronic devices by multistable buckling mechanics. Nature Materials, 2018, 17, 268-276.	27.5	297
71	Fabrication and Deformation of 3D Multilayered Kirigami Microstructures. Small, 2018, 14, e1703852.	10.0	28
72	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

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73	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
74	Soft network materials with isotropic negative Poisson's ratios over large strains. Soft Matter, 2018, 14, 693-703.	2.7	107
75	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
76	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
77	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
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	Electronic Stuctures: Mechanically Guided Postâ€Assembly of 3D Electronic Systems (Adv. Funct. Mater.) Tj ETQq1 1 0.784314 rgBT /O	14.9	2
80	Mechanically Guided Postâ€Assembly of 3D Electronic Systems. Advanced Functional Materials, 2018, 28, 1803149.	14.9	41
81	Compliant and stretchable thermoelectric coils for energy harvesting in miniature flexible devices. Science Advances, 2018, 4, eaau5849.	10.3	208
82	Mechanically active materials in three-dimensional mesostructures. Science Advances, 2018, 4, eaat8313.	10.3	89
83	Viscoelastic Characteristics of Mechanically Assembled Three-Dimensional Structures Formed by Compressive Buckling. Journal of Applied Mechanics, Transactions ASME, 2018, 85, .	2.2	19
84	Controlled mechanical assembly of complex 3D mesostructures and strain sensors by tensile buckling. Npj Flexible Electronics, 2018, 2, .	10.7	31
85	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
86	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
87	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
88	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
89	Soft mechanical metamaterials with unusual swelling behavior and tunable stress-strain curves. Science Advances, 2018, 4, eaar8535.	10.3	159
90	Chemical Sensing Systems that Utilize Soft Electronics on Thin Elastomeric Substrates with Open Cellular Designs. Advanced Functional Materials, 2017, 27, 1605476.	14.9	64

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91	3D Tunable, Multiscale, and Multistable Vibrational Microâ€Platforms Assembled by Compressive Buckling. Advanced Functional Materials, 2017, 27, 1605914.	14.9	43
92	Patterning Curved Three-Dimensional Structures With Programmable Kirigami Designs. Journal of Applied Mechanics, Transactions ASME, 2017, 84, .	2.2	32
93	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
94	Mechanicallyâ€Guided Deterministic Assembly of 3D Mesostructures Assisted by Residual Stresses. Small, 2017, 13, 1700151.	10.0	32
95	Self-assembled three dimensional network designs for soft electronics. Nature Communications, 2017, 8, 15894.	12.8	325
96	Printing, folding and assembly methods for forming 3D mesostructures in advanced materials. Nature Reviews Materials, 2017, 2, .	48.7	463
97	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
98	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
99	Engineered Elastomer Substrates for Guided Assembly of Complex 3D Mesostructures by Spatially Nonuniform Compressive Buckling. Advanced Functional Materials, 2017, 27, 1604281.	14.9	50
100	Plasticity-induced origami for assembly of three dimensional metallic structures guided by compressive buckling. Extreme Mechanics Letters, 2017, 11, 105-110.	4.1	48
101	Guided Formation of 3D Helical Mesostructures by Mechanical Buckling: Analytical Modeling and Experimental Validation. Advanced Functional Materials, 2016, 26, 2909-2918.	14.9	70
102	Controlled Mechanical Buckling for Origamiâ€Inspired Construction of 3D Microstructures in Advanced Materials. Advanced Functional Materials, 2016, 26, 2629-2639.	14.9	231
103	Mechanics of Fractal-Inspired Horseshoe Microstructures for Applications in Stretchable Electronics. Journal of Applied Mechanics, Transactions ASME, 2016, 83, .	2.2	117
104	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
105	Mechanics and Designs of Stretchable Bioelectronics. Microsystems and Nanosystems, 2016, , 53-68.	0.1	3
106	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
107	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
108	Mechanical assembly of complex, 3D mesostructures from releasable multilayers of advanced materials. Science Advances, 2016, 2, e1601014.	10.3	200

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109	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
110	A finite deformation model of planar serpentine interconnects for stretchable electronics. International Journal of Solids and Structures, 2016, 91, 46-54.	2.7	83
111	Assembly of micro/nanomaterials into complex, three-dimensional architectures by compressive buckling. Science, 2015, 347, 154-159.	12.6	745
112	Mechanics of stretchable batteries and supercapacitors. Current Opinion in Solid State and Materials Science, 2015, 19, 190-199.	11.5	173
113	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
114	Wireless Optofluidic Systems for Programmable InÂVivo Pharmacology and Optogenetics. Cell, 2015, 162, 662-674.	28.9	417
115	Optics and Nonlinear Buckling Mechanics in Large-Area, Highly Stretchable Arrays of Plasmonic Nanostructures. ACS Nano, 2015, 9, 5968-5975.	14.6	87
116	Soft network composite materials with deterministic and bio-inspired designs. Nature Communications, 2015, 6, 6566.	12.8	392
117	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
118	Lateral buckling and mechanical stretchability of fractal interconnects partially bonded onto an elastomeric substrate. Applied Physics Letters, 2015, 106, .	3.3	44
119	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
120	Materials and Wireless Microfluidic Systems for Electronics Capable of Chemical Dissolution on Demand. Advanced Functional Materials, 2015, 25, 1338-1343.	14.9	41
121	Fabric-based stretchable electronics with mechanically optimized designs and prestrained composite substrates. Extreme Mechanics Letters, 2014, 1, 120-126.	4.1	27
122	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
123	Multifunctional Skinâ€Like Electronics for Quantitative, Clinical Monitoring of Cutaneous Wound Healing. Advanced Healthcare Materials, 2014, 3, 1597-1607.	7.6	226
124	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
125	Capacitive Epidermal Electronics for Electrically Safe, Longâ€Term Electrophysiological Measurements. Advanced Healthcare Materials, 2014, 3, 642-648.	7.6	231
126	Allâ€Elastomeric, Strainâ€Responsive Thermochromic Color Indicators. Small, 2014, 10, 1266-1271.	10.0	56

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127	Fractal design concepts for stretchable electronics. Nature Communications, 2014, 5, 3266.	12.8	821
128	Soft Microfluidic Assemblies of Sensors, Circuits, and Radios for the Skin. Science, 2014, 344, 70-74.	12.6	982
129	Rugged and breathable forms of stretchable electronics with adherent composite substrates for transcutaneous monitoring. Nature Communications, 2014, 5, 4779.	12.8	309
130	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
131	Experimental and Theoretical Studies of Serpentine Microstructures Bonded To Prestrained Elastomers for Stretchable Electronics. Advanced Functional Materials, 2014, 24, 2028-2037.	14.9	273
132	Epidermal photonic devices for quantitative imaging of temperature and thermal transport characteristics of the skin. Nature Communications, 2014, 5, 4938.	12.8	227
133	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
134	Analysis of a concentric coplanar capacitor for epidermal hydration sensing. Sensors and Actuators A: Physical, 2013, 203, 149-153.	4.1	33
135	Epidermal Impedance Sensing Sheets for Precision Hydration Assessment and Spatial Mapping. IEEE Transactions on Biomedical Engineering, 2013, 60, 2848-2857.	4.2	95
136	Ultrathin conformal devices for precise and continuous thermal characterization of humanÂskin. Nature Materials, 2013, 12, 938-944.	27.5	1,002
137	Buckling in serpentine microstructures and applications in elastomer-supported ultra-stretchable electronics with high areal coverage. Soft Matter, 2013, 9, 8062.	2.7	248
138	Mechanics of ultra-stretchable self-similar serpentine interconnects. Acta Materialia, 2013, 61, 7816-7827.	7.9	183
139	Stretchable batteries with self-similar serpentine interconnects and integrated wireless recharging systems. Nature Communications, 2013, 4, 1543.	12.8	1,169
140	High performance piezoelectric devices based on aligned arrays of nanofibers of poly(vinylidenefluoride-co-trifluoroethylene). Nature Communications, 2013, 4, 1633.	12.8	1,001
141	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
142	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
143	Advances in Developing Electromechanically Coupled Computational Methods for Piezoelectrics/Ferroelectrics at Multiscale. Applied Mechanics Reviews, 2013, 65, .	10.1	17
144	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

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145	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
146	OPTIMAL DESIGN OF SANDWICH BEAMS WITH LIGHTWEIGHT CORES IN THREE-POINT BENDING. International Journal of Applied Mechanics, 2012, 04, 1250033.	2.2	17
147	Quantitative Thermal Imaging of Single-Walled Carbon Nanotube Devices by Scanning Joule Expansion Microscopy. ACS Nano, 2012, 6, 10267-10275.	14.6	23
148	Flexoelectricity induced increase of critical thickness in epitaxial ferroelectric thin films. Physica B: Condensed Matter, 2012, 407, 3377-3381.	2.7	27
149	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
150	Flexible Electronics: Materials and Designs for Wirelessly Powered Implantable Lightâ€Emitting Systems (Small 18/2012). Small, 2012, 8, 2770-2770.	10.0	2
151	External uniform electric field removing the flexoelectric effect in epitaxial ferroelectric thin films. Europhysics Letters, 2012, 99, 47003.	2.0	9
152	Materials and Designs for Wirelessly Powered Implantable Lightâ€Emitting Systems. Small, 2012, 8, 2812-2818.	10.0	93
153	Critical Thickness and the Size-Dependent Curie Temperature of BaTiO₃ Nanofilms. Journal of Computational and Theoretical Nanoscience, 2011, 8, 867-872.	0.4	2
154	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
155	Stress concentration in two-dimensional lattices with imperfections. Acta Mechanica, 2011, 216, 105-122.	2.1	8
156	Stress-induced phase transition and deformation behavior of BaTiO3 nanowires. Journal of Applied Physics, 2011, 110, .	2.5	12
157	Electric-field-induced fatigue crack growth in ferroelectric ceramics. Theoretical and Applied Fracture Mechanics, 2010, 54, 98-104.	4.7	19
158	A surface-layer model of ferroelectric nanowire. Journal of Applied Physics, 2010, 108, 124109.	2.5	8
159	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
160	Strain effect on ferroelectric behaviors of BaTiO₃nanowires: a molecular dynamics study. Nanotechnology, 2010, 21, 015701.	2.6	83
161	Oxygen-vacancy-induced memory effect and large recoverable strain in a barium titanate single crystal. Physical Review B, 2010, 82, .	3.2	43
162	Deformation and failure mechanisms of lattice cylindrical shells under axial loading. International Journal of Mechanical Sciences, 2009, 51, 213-221.	6.7	66

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163	Study on crack propagation in ferroelectric single crystal under electric loading. Acta Materialia, 2009, 57, 1630-1638.	7.9	20
164	Molecular dynamics investigations on the size-dependent ferroelectric behavior of BaTiO₃nanowires. Nanotechnology, 2009, 20, 405703.	2.6	36
165	Effects of high order deformations on the strength of planar lattice materials. Acta Mechanica Sinica/Lixue Xuebao, 2008, 24, 533-540.	3.4	3
166	Constitutive relations and failure criterion of planar lattice composites. Composites Science and Technology, 2008, 68, 3299-3304.	7.8	24
167	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
168	Mechanical Properties of two novel planar lattice structures. International Journal of Solids and Structures, 2008, 45, 3751-3768.	2.7	68
169	Plastic yield and collapse mechanism of planar lattice structures. Journal of Mechanics of Materials and Structures, 2008, 3, 1257-1277.	0.6	6