

Yihui Zhang

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

167
papers

13,580
citations

54
h-index

115
g-index

181
ext. papers

15,877
ext. citations

11.6
avg, IF

6.45
L-index

#	Paper	IF	Citations
167	Mechanically Guided Hierarchical Assembly of 3D Mesostructures.. <i>Advanced Materials</i> , 2022 , e2109416	24	1
166	Bioinspired elastomer composites with programmed mechanical and electrical anisotropies.. <i>Nature Communications</i> , 2022 , 13, 524	17.4	5
165	Inverse design strategies for buckling-guided assembly of 3D surfaces based on topology optimization. <i>Extreme Mechanics Letters</i> , 2022 , 51, 101582	3.9	1
164	Highly-integrated, miniaturized, stretchable electronic systems based on stacked multilayer network materials.. <i>Science Advances</i> , 2022 , 8, eabm3785	14.3	15
163	Island Effect in Stretchable Inorganic Electronics.. <i>Small</i> , 2022 , e2107879	11	1
162	Stretchable, Breathable and Stable Lead-free Perovskite/Polymer Nanofiber Composite for Hybrid Triboelectric and Piezoelectric Energy Harvesting.. <i>Advanced Materials</i> , 2022 , e2200042	24	13
161	A phenomenological framework for modeling of nonlinear mechanical responses in soft network materials with arbitrarily curved microstructures. <i>Extreme Mechanics Letters</i> , 2022 , 101795	3.9	1
160	Liquid Crystal Elastomer Metamaterials with Giant Biaxial Thermal Shrinkage for Enhancing Skin Regeneration (Adv. Mater. 45/2021). <i>Advanced Materials</i> , 2021 , 33, 2170356	24	0
159	Tunable seesaw-like 3D capacitive sensor for force and acceleration sensing. <i>Npj Flexible Electronics</i> , 2021 , 5,	10.7	1
158	Rapidly deployable and morphable 3D mesostructures with applications in multimodal biomedical devices. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	10
157	Design, fabrication and applications of soft network materials. <i>Materials Today</i> , 2021 ,	21.8	11
156	Designing Mechanical Metamaterials with Kirigami-Inspired, Hierarchical Constructions for Giant Positive and Negative Thermal Expansion. <i>Advanced Materials</i> , 2021 , 33, e2004919	24	17
155	Nonlinear compressive deformations of buckled 3D ribbon mesostructures. <i>Extreme Mechanics Letters</i> , 2021 , 42, 101114	3.9	5
154	Mechanics of unusual soft network materials with rotatable structural nodes. <i>Journal of the Mechanics and Physics of Solids</i> , 2021 , 146, 104210	5	30
153	Bioinspired design and assembly of a multilayer cage-shaped sensor capable of multistage load bearing and collapse prevention. <i>Nanotechnology</i> , 2021 , 32, 155506	3.4	6
152	Hierarchical mechanical metamaterials built with scalable tristable elements for ternary logic operation and amplitude modulation. <i>Science Advances</i> , 2021 , 7,	14.3	18
151	Programmable Stimulation and Actuation in Flexible and Stretchable Electronics. <i>Advanced Intelligent Systems</i> , 2021 , 3, 2000228	6	3

150	Three-dimensional, multifunctional neural interfaces for cortical spheroids and engineered assembloids. <i>Science Advances</i> , 2021 , 7,	14.3	38
149	An Anti-Fatigue Design Strategy for 3D Ribbon-Shaped Flexible Electronics. <i>Advanced Materials</i> , 2021 , 33, e2102684	24	9
148	3D-Printing Damage-Tolerant Architected Metallic Materials with Shape Recoverability via Special Deformation Design of Constituent Material. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 39915-39924	8.5	3
147	Liquid Crystal Elastomer Metamaterials with Giant Biaxial Thermal Shrinkage for Enhancing Skin Regeneration. <i>Advanced Materials</i> , 2021 , 33, e2106175	24	14
146	Three-dimensional electronic microfliers inspired by wind-dispersed seeds. <i>Nature</i> , 2021 , 597, 503-510	50.4	28
145	Torsional deformation dominated buckling of serpentine structures to form three-dimensional architectures with ultra-low rigidity. <i>Journal of the Mechanics and Physics of Solids</i> , 2021 , 155, 104568	5	5
144	Assembly of Foldable 3D Microstructures Using Graphene Hinges. <i>Advanced Materials</i> , 2020 , 32, e2001303	24	19
143	Recent progress of morphable 3D mesostructures in advanced materials. <i>Journal of Semiconductors</i> , 2020 , 41, 041604	2.3	5
142	Laser-Induced Graphene for Electrothermally Controlled, Mechanically Guided, 3D Assembly and Human-Soft Actuators Interaction. <i>Advanced Materials</i> , 2020 , 32, e1908475	24	57
141	Soft three-dimensional network materials with rational bio-mimetic designs. <i>Nature Communications</i> , 2020 , 11, 1180	17.4	57
140	Inverse Design Strategies for 3D Surfaces Formed by Mechanically Guided Assembly. <i>Advanced Materials</i> , 2020 , 32, e1908424	24	19
139	Three-dimensional electronic scaffolds for monitoring and regulation of multifunctional hybrid tissues. <i>Extreme Mechanics Letters</i> , 2020 , 35, 100634	3.9	24
138	Inverse Design Methods: Inverse Design Strategies for 3D Surfaces Formed by Mechanically Guided Assembly (Adv. Mater. 14/2020). <i>Advanced Materials</i> , 2020 , 32, 2070107	24	
137	An Inverse Design Method of Buckling-Guided Assembly for Ribbon-Type 3D Structures. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2020 , 87,	2.7	9
136	Electro-mechanically controlled assembly of reconfigurable 3D mesostructures and electronic devices based on dielectric elastomer platforms. <i>National Science Review</i> , 2020 , 7, 342-354	10.8	43
135	Geometrically reconfigurable 3D mesostructures and electromagnetic devices through a rational bottom-up design strategy. <i>Science Advances</i> , 2020 , 6, eabb7417	14.3	33
134	Mechanically-Guided Structural Designs in Stretchable Inorganic Electronics. <i>Advanced Materials</i> , 2020 , 32, e1902254	24	104
133	3D Assembly: Micro/Nanoscale 3D Assembly by Rolling, Folding, Curving, and Buckling Approaches (Adv. Mater. 36/2019). <i>Advanced Materials</i> , 2019 , 31, 1970254	24	1

132	Toward Imperfection-Insensitive Soft Network Materials for Applications in Stretchable Electronics. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 36100-36109	9.5	10
131	A nonlinear mechanics model of soft network metamaterials with unusual swelling behavior and tunable phononic band gaps. <i>Composites Science and Technology</i> , 2019 , 183, 107822	8.6	17
130	Mechanics of buckled serpentine structures formed via mechanics-guided, deterministic three-dimensional assembly. <i>Journal of the Mechanics and Physics of Solids</i> , 2019 , 125, 736-748	5	20
129	Multimodal Sensing with a Three-Dimensional Piezoresistive Structure. <i>ACS Nano</i> , 2019 , 13, 10972-10979	6.7	75
128	Manufacturing of 3D multifunctional microelectronic devices: challenges and opportunities. <i>NPG Asia Materials</i> , 2019 , 11,	10.3	15
127	Buckling and twisting of advanced materials into morphable 3D mesostructures. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 13239-13248	11.5	51
126	Postbuckling analyses of frame mesostructures consisting of straight ribbons for mechanically guided three-dimensional assembly. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2019 , 475, 20190012	2.4	3
125	Optimization-Based Approach for the Inverse Design of Ribbon-Shaped Three-Dimensional Structures Assembled Through Compressive Buckling. <i>Physical Review Applied</i> , 2019 , 11,	4.3	13
124	Mechanics of bistable cross-shaped structures through loading-path controlled 3D assembly. <i>Journal of the Mechanics and Physics of Solids</i> , 2019 , 129, 261-277	5	22
123	Design and Assembly of Reconfigurable 3D Radio-Frequency Antennas Based on Mechanically Triggered Switches. <i>Advanced Electronic Materials</i> , 2019 , 5, 1900256	6.4	6
122	Binodal, wireless epidermal electronic systems with in-sensor analytics for neonatal intensive care. <i>Science</i> , 2019 , 363,	33.3	316
121	Analyses of mechanically-assembled 3D spiral mesostructures with applications as tunable inductors. <i>Science China Technological Sciences</i> , 2019 , 62, 243-251	3.5	13
120	Harnessing the interface mechanics of hard films and soft substrates for 3D assembly by controlled buckling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 15368-15377	11.5	49
119	Transformable, Freestanding 3D Mesostructures Based on Transient Materials and Mechanical Interlocking. <i>Advanced Functional Materials</i> , 2019 , 29, 1903181	15.6	13
118	Micro/Nanoscale 3D Assembly by Rolling, Folding, Curving, and Buckling Approaches. <i>Advanced Materials</i> , 2019 , 31, e1901895	24	54
117	Remotely Triggered Assembly of 3D Mesostructures Through Shape-Memory Effects. <i>Advanced Materials</i> , 2019 , 31, e1905715	24	27
116	4D Electronic Systems: Transformable, Freestanding 3D Mesostructures Based on Transient Materials and Mechanical Interlocking (Adv. Funct. Mater. 40/2019). <i>Advanced Functional Materials</i> , 2019 , 29, 1970277	15.6	
115	2D Mechanical Metamaterials with Widely Tunable Unusual Modes of Thermal Expansion. <i>Advanced Materials</i> , 2019 , 31, e1905405	24	35

114	Large-area MRI-compatible epidermal electronic interfaces for prosthetic control and cognitive monitoring. <i>Nature Biomedical Engineering</i> , 2019 , 3, 194-205	19	144
113	Kirigami-inspired multiscale patterning of metallic structures via predefined nanotrench templates. <i>Microsystems and Nanoengineering</i> , 2019 , 5, 54	7.7	11
112	Design and Fabrication of Heterogeneous, Deformable Substrates for the Mechanically Guided 3D Assembly. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 3482-3492	9.5	17
111	High Performance, Tunable Electrically Small Antennas through Mechanically Guided 3D Assembly. <i>Small</i> , 2019 , 15, e1804055	11	44
110	Soft Three-Dimensional Microscale Vibratory Platforms for Characterization of Nano-Thin Polymer Films. <i>ACS Nano</i> , 2019 , 13, 449-457	16.7	16
109	A Generic Soft Encapsulation Strategy for Stretchable Electronics. <i>Advanced Functional Materials</i> , 2019 , 29, 1806630	15.6	55
108	Three-dimensional piezoelectric polymer microsystems for vibrational energy harvesting, robotic interfaces and biomedical implants. <i>Nature Electronics</i> , 2019 , 2, 26-35	28.4	209
107	Freestanding 3D Mesostructures, Functional Devices, and Shape-Programmable Systems Based on Mechanically Induced Assembly with Shape Memory Polymers. <i>Advanced Materials</i> , 2019 , 31, e1805615	24	72
106	Three-Dimensional Silicon Electronic Systems Fabricated by Compressive Buckling Process. <i>ACS Nano</i> , 2018 , 12, 4164-4171	16.7	23
105	Two-dimensional materials in functional three-dimensional architectures with applications in photodetection and imaging. <i>Nature Communications</i> , 2018 , 9, 1417	17.4	136
104	Morphable 3D mesostructures and microelectronic devices by multistable buckling mechanics. <i>Nature Materials</i> , 2018 , 17, 268-276	27	216
103	Fabrication and Deformation of 3D Multilayered Kirigami Microstructures. <i>Small</i> , 2018 , 14, e1703852	11	21
102	A Mechanics Model of Soft Network Materials With Periodic Lattices of Arbitrarily Shaped Filamentary Microstructures for Tunable Poisson's Ratios. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2018 , 85,	2.7	28
101	A double perturbation method of postbuckling analysis in 2D curved beams for assembly of 3D ribbon-shaped structures. <i>Journal of the Mechanics and Physics of Solids</i> , 2018 , 111, 215-238	5	38
100	A Computational Model of Bio-Inspired Soft Network Materials for Analyzing Their Anisotropic Mechanical Properties. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2018 , 85,	2.7	13
99	Assembly of Advanced Materials into 3D Functional Structures by Methods Inspired by Origami and Kirigami: A Review. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1800284	4.6	129
98	Reprogrammable 3D Mesostructures Through Compressive Buckling of Thin Films with Prestrained Shape Memory Polymer. <i>Acta Mechanica Solida Sinica</i> , 2018 , 31, 589-598	2	9
97	A theoretical model of postbuckling in straight ribbons with engineered thickness distributions for three-dimensional assembly. <i>International Journal of Solids and Structures</i> , 2018 , 147, 254-271	3.1	19

96	Soft mechanical metamaterials with unusual swelling behavior and tunable stress-strain curves. <i>Science Advances</i> , 2018 , 4, eaar8535	14.3	88
95	Soft network materials with isotropic negative Poisson's ratios over large strains. <i>Soft Matter</i> , 2018 , 14, 693-703	3.6	69
94	Vibration of Mechanically-Assembled 3D Microstructures Formed by Compressive Buckling. <i>Journal of the Mechanics and Physics of Solids</i> , 2018 , 112, 187-208	5	30
93	The equivalent medium of cellular substrate under large stretching, with applications to stretchable electronics. <i>Journal of the Mechanics and Physics of Solids</i> , 2018 , 120, 199-207	5	45
92	An analytic model of two-level compressive buckling with applications in the assembly of free-standing 3D mesostructures. <i>Soft Matter</i> , 2018 , 14, 8828-8837	3.6	6
91	Mechanically Assembled, Three-Dimensional Hierarchical Structures of Cellular Graphene with Programmed Geometries and Outstanding Electromechanical Properties. <i>ACS Nano</i> , 2018 , 12, 12456-12463	16.7	37
90	Electronic Structures: Mechanically Guided Post-Assembly of 3D Electronic Systems (Adv. Funct. Mater. 48/2018). <i>Advanced Functional Materials</i> , 2018 , 28, 1870344	15.6	1
89	Mechanically Guided Post-Assembly of 3D Electronic Systems. <i>Advanced Functional Materials</i> , 2018 , 28, 1803149	15.6	26
88	Compliant and stretchable thermoelectric coils for energy harvesting in miniature flexible devices. <i>Science Advances</i> , 2018 , 4, eaau5849	14.3	147
87	Mechanically active materials in three-dimensional mesostructures. <i>Science Advances</i> , 2018 , 4, eaat8313	14.3	57
86	Viscoelastic Characteristics of Mechanically Assembled Three-Dimensional Structures Formed by Compressive Buckling. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2018 , 85,	2.7	14
85	Controlled mechanical assembly of complex 3D mesostructures and strain sensors by tensile buckling. <i>Npj Flexible Electronics</i> , 2018 , 2,	10.7	17
84	Chemical Sensing Systems that Utilize Soft Electronics on Thin Elastomeric Substrates with Open Cellular Designs. <i>Advanced Functional Materials</i> , 2017 , 9, 1605476	15.6	51
83	Three-Dimensional Multiscale, Multistable, and Geometrically Diverse Microstructures with Tunable Vibrational Dynamics Assembled by Compressive Buckling. <i>Advanced Functional Materials</i> , 2017 , 27, 1605914	15.6	39
82	Patterning Curved Three-Dimensional Structures With Programmable Kirigami Designs. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2017 , 84,	2.7	24
81	Design and application of T-shaped stress-strain behavior in stretchable electronics: a review. <i>Lab on A Chip</i> , 2017 , 17, 1689-1704	7.2	99
80	Mechanically-Guided Deterministic Assembly of 3D Mesostructures Assisted by Residual Stresses. <i>Small</i> , 2017 , 13, 1700151	11	25
79	Self-assembled three dimensional network designs for soft electronics. <i>Nature Communications</i> , 2017 , 8, 15894	17.4	238

78	Printing, folding and assembly methods for forming 3D mesostructures in advanced materials. <i>Nature Reviews Materials</i> , 2017 , 2,	73.3	372
77	Deterministic assembly of 3D mesostructures in advanced materials via compressive buckling: A short review of recent progress. <i>Extreme Mechanics Letters</i> , 2017 , 11, 96-104	3.9	56
76	Three-dimensional mesostructures as high-temperature growth templates, electronic cellular scaffolds, and self-propelled microrobots. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E9455-E9464	11.5	104
75	Engineered elastomer substrates for guided assembly of complex 3D mesostructures by spatially nonuniform compressive buckling. <i>Advanced Functional Materials</i> , 2017 , 27, 1604281	15.6	41
74	Plasticity-induced origami for assembly of three dimensional metallic structures guided by compressive buckling. <i>Extreme Mechanics Letters</i> , 2017 , 11, 105-110	3.9	40
73	Mechanical assembly of complex, 3D mesostructures from releasable multilayers of advanced materials. <i>Science Advances</i> , 2016 , 2, e1601014	14.3	152
72	3D Assembly: Controlled Mechanical Buckling for Origami-Inspired Construction of 3D Microstructures in Advanced Materials (Adv. Funct. Mater. 16/2016). <i>Advanced Functional Materials</i> , 2016 , 26, 2586-2586	15.6	
71	A finite deformation model of planar serpentine interconnects for stretchable electronics. <i>International Journal of Solids and Structures</i> , 2016 , 91, 46-54	3.1	54
70	Guided Formation of 3D Helical Mesostructures by Mechanical Buckling: Analytical Modeling and Experimental Validation. <i>Advanced Functional Materials</i> , 2016 , 26, 2909-2918	15.6	57
69	Controlled mechanical buckling for origami-inspired construction of 3D microstructures in advanced materials. <i>Advanced Functional Materials</i> , 2016 , 26, 2629-2639	15.6	188
68	Mechanics of Fractal-Inspired Horseshoe Microstructures for Applications in Stretchable Electronics. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2016 , 83,	2.7	90
67	A nonlinear mechanics model of bio-inspired hierarchical lattice materials consisting of horseshoe microstructures. <i>Journal of the Mechanics and Physics of Solids</i> , 2016 , 90, 179-202	5	155
66	Mechanics and Designs of Stretchable Bioelectronics. <i>Microsystems and Nanosystems</i> , 2016 , 53-68	0.4	2
65	Theoretical and Experimental Studies of Epidermal Heat Flux Sensors for Measurements of Core Body Temperature. <i>Advanced Healthcare Materials</i> , 2016 , 5, 119-27	10.1	83
64	Flexible Electronics: Theoretical and Experimental Studies of Epidermal Heat Flux Sensors for Measurements of Core Body Temperature (Adv. Healthcare Mater. 1/2016). <i>Advanced Healthcare Materials</i> , 2016 , 5, 2	10.1	4
63	A theoretical model of reversible adhesion in shape memory surface relief structures and its application in transfer printing. <i>Journal of the Mechanics and Physics of Solids</i> , 2015 , 77, 27-42	5	29
62	Wireless Optofluidic Systems for Programmable In Vivo Pharmacology and Optogenetics. <i>Cell</i> , 2015 , 162, 662-74	56.2	326
61	Optics and Nonlinear Buckling Mechanics in Large-Area, Highly Stretchable Arrays of Plasmonic Nanostructures. <i>ACS Nano</i> , 2015 , 9, 5968-75	16.7	73

60	Soft network composite materials with deterministic and bio-inspired designs. <i>Nature Communications</i> , 2015 , 6, 6566	17.4	289
59	Analyses of postbuckling in stretchable arrays of nanostructures for wide-band tunable plasmonics. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2015 , 471, 20150632 ²⁻⁴	2	2
58	Lateral buckling and mechanical stretchability of fractal interconnects partially bonded onto an elastomeric substrate. <i>Applied Physics Letters</i> , 2015 , 106, 091902	3-4	37
57	A mechanically driven form of Kirigami as a route to 3D mesostructures in micro/nanomembranes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 11757-64	11.5	344
56	Materials and Wireless Microfluidic Systems for Electronics Capable of Chemical Dissolution on Demand. <i>Advanced Functional Materials</i> , 2015 , 25, 1338-1343	15.6	34
55	Materials science. Assembly of micro/nanomaterials into complex, three-dimensional architectures by compressive buckling. <i>Science</i> , 2015 , 347, 154-9	33.3	587
54	Mechanics of stretchable batteries and supercapacitors. <i>Current Opinion in Solid State and Materials Science</i> , 2015 , 19, 190-199	12	147
53	All-Elastomeric, Strain-Responsive Thermochromic Color Indicators. <i>Small</i> , 2014 , 10, 1266-1271	11	46
52	Fractal design concepts for stretchable electronics. <i>Nature Communications</i> , 2014 , 5, 3266	17.4	625
51	Soft microfluidic assemblies of sensors, circuits, and radios for the skin. <i>Science</i> , 2014 , 344, 70-4	33.3	802
50	Rugged and breathable forms of stretchable electronics with adherent composite substrates for transcutaneous monitoring. <i>Nature Communications</i> , 2014 , 5, 4779	17.4	245
49	Adaptive optoelectronic camouflage systems with designs inspired by cephalopod skins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 12998-3003	11.5	159
48	Experimental and Theoretical Studies of Serpentine Microstructures Bonded To Prestrained Elastomers for Stretchable Electronics. <i>Advanced Functional Materials</i> , 2014 , 24, 2028-2037	15.6	220
47	Epidermal photonic devices for quantitative imaging of temperature and thermal transport characteristics of the skin. <i>Nature Communications</i> , 2014 , 5, 4938	17.4	185
46	Buckling of a stiff thin film on a pre-strained bi-layer substrate. <i>International Journal of Solids and Structures</i> , 2014 , 51, 3113-3118	3-1	45
45	Fabric-based stretchable electronics with mechanically optimized designs and prestrained composite substrates. <i>Extreme Mechanics Letters</i> , 2014 , 1, 120-126	3-9	23
44	Mechanics Design for Stretchable, High Areal Coverage GaAs Solar Module on an Ultrathin Substrate. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2014 , 81,	2-7	20
43	Multifunctional skin-like electronics for quantitative, clinical monitoring of cutaneous wound healing. <i>Advanced Healthcare Materials</i> , 2014 , 3, 1597-607	10-1	175

42	A hierarchical computational model for stretchable interconnects with fractal-inspired designs. <i>Journal of the Mechanics and Physics of Solids</i> , 2014 , 72, 115-130	5	89
41	Capacitive epidermal electronics for electrically safe, long-term electrophysiological measurements. <i>Advanced Healthcare Materials</i> , 2014 , 3, 642-8	10.1	200
40	Analysis of a concentric coplanar capacitor for epidermal hydration sensing. <i>Sensors and Actuators A: Physical</i> , 2013 , 203, 149-153	3.9	25
39	Epidermal impedance sensing sheets for precision hydration assessment and spatial mapping. <i>IEEE Transactions on Biomedical Engineering</i> , 2013 , 60, 2848-57	5	76
38	Ultrathin conformal devices for precise and continuous thermal characterization of human skin. <i>Nature Materials</i> , 2013 , 12, 938-44	27	826
37	Buckling in serpentine microstructures and applications in elastomer-supported ultra-stretchable electronics with high areal coverage. <i>Soft Matter</i> , 2013 , 9, 8062-8070	3.6	192
36	Mechanics of ultra-stretchable self-similar serpentine interconnects. <i>Acta Materialia</i> , 2013 , 61, 7816-7828	7.4	147
35	Stretchable batteries with self-similar serpentine interconnects and integrated wireless recharging systems. <i>Nature Communications</i> , 2013 , 4, 1543	17.4	978
34	High performance piezoelectric devices based on aligned arrays of nanofibers of poly(vinylidene fluoride-co-trifluoroethylene). <i>Nature Communications</i> , 2013 , 4, 1633	17.4	821
33	Fracture analysis of ferroelectric single crystals: Domain switching near crack tip and electric field induced crack propagation. <i>Journal of the Mechanics and Physics of Solids</i> , 2013 , 61, 114-130	5	19
32	Thermomechanical Modeling of Scanning Joule Expansion Microscopy Imaging of Single-Walled Carbon Nanotube Devices. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2013 , 80,	2.7	2
31	Advances in Developing Electromechanically Coupled Computational Methods for Piezoelectrics/Ferroelectrics at Multiscale. <i>Applied Mechanics Reviews</i> , 2013 , 65,	8.6	11
30	Quantitative thermal imaging of single-walled carbon nanotube devices by scanning Joule expansion microscopy. <i>ACS Nano</i> , 2012 , 6, 10267-75	16.7	23
29	Flexoelectricity induced increase of critical thickness in epitaxial ferroelectric thin films. <i>Physica B: Condensed Matter</i> , 2012 , 407, 3377-3381	2.8	24
28	An electromechanical atomic-scale finite element method for simulating evolutions of ferroelectric nanodomains. <i>Journal of the Mechanics and Physics of Solids</i> , 2012 , 60, 1383-1399	5	13
27	Flexible Electronics: Materials and Designs for Wirelessly Powered Implantable Light-Emitting Systems (Small 18/2012). <i>Small</i> , 2012 , 8, 2770-2770	11	2
26	External uniform electric field removing the flexoelectric effect in epitaxial ferroelectric thin films. <i>Europhysics Letters</i> , 2012 , 99, 47003	1.6	8
25	Materials and designs for wirelessly powered implantable light-emitting systems. <i>Small</i> , 2012 , 8, 2812-811	11	88

24	Three-dimensional thermal analysis of wirelessly powered light-emitting systems. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2012 , 468, 4088-4097	2.4	4
23	Electronic sensor and actuator webs for large-area complex geometry cardiac mapping and therapy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 19910-5	11.5	190
22	OPTIMAL DESIGN OF SANDWICH BEAMS WITH LIGHTWEIGHT CORES IN THREE-POINT BENDING. <i>International Journal of Applied Mechanics</i> , 2012 , 04, 1250033	2.4	12
21	Critical Thickness and the Size-Dependent Curie Temperature of BaTiO ₃ Nanofilms. <i>Journal of Computational and Theoretical Nanoscience</i> , 2011 , 8, 867-872	0.3	2
20	A COD fracture model of ferroelectric ceramics with applications in electric field induced fatigue crack growth. <i>International Journal of Fracture</i> , 2011 , 167, 211-220	2.3	7
19	Stress concentration in two-dimensional lattices with imperfections. <i>Acta Mechanica</i> , 2011 , 216, 105-122	2.1	8
18	Stress-induced phase transition and deformation behavior of BaTiO ₃ nanowires. <i>Journal of Applied Physics</i> , 2011 , 110, 054109	2.5	11
17	A surface-layer model of ferroelectric nanowire. <i>Journal of Applied Physics</i> , 2010 , 108, 124109	2.5	8
16	Size dependent domain configuration and electric field driven evolution in ultrathin ferroelectric films: A phase field investigation. <i>Journal of Applied Physics</i> , 2010 , 107, 034107	2.5	18
15	Strain effect on ferroelectric behaviors of BaTiO ₃ nanowires: a molecular dynamics study. <i>Nanotechnology</i> , 2010 , 21, 015701	3.4	75
14	Oxygen-vacancy-induced memory effect and large recoverable strain in a barium titanate single crystal. <i>Physical Review B</i> , 2010 , 82,	3.3	42
13	Electric-field-induced fatigue crack growth in ferroelectric ceramics. <i>Theoretical and Applied Fracture Mechanics</i> , 2010 , 54, 98-104	3.7	18
12	Deformation and failure mechanisms of lattice cylindrical shells under axial loading. <i>International Journal of Mechanical Sciences</i> , 2009 , 51, 213-221	5.5	49
11	Study on crack propagation in ferroelectric single crystal under electric loading. <i>Acta Materialia</i> , 2009 , 57, 1630-1638	8.4	20
10	Molecular dynamics investigations on the size-dependent ferroelectric behavior of BaTiO ₃ nanowires. <i>Nanotechnology</i> , 2009 , 20, 405703	3.4	35
9	Plastic yield and collapse mechanism of planar lattice structures. <i>Journal of Mechanics of Materials and Structures</i> , 2008 , 3, 1257-1277	1.2	6
8	Effects of high order deformations on the strength of planar lattice materials. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2008 , 24, 533-540	2	2
7	Constitutive relations and failure criterion of planar lattice composites. <i>Composites Science and Technology</i> , 2008 , 68, 3299-3304	8.6	22

6	Differential quadrature analysis of the buckling of thin rectangular plates with cosine-distributed compressive loads on two opposite sides. <i>Advances in Engineering Software</i> , 2008 , 39, 497-504	3.6	26
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