

Xuanhe Zhao

List of Publications by Year in descending order

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170
papers

34,624
citations

5430

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h-index

5739

167
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181
all docs

181
docs citations

181
times ranked

29879
citing authors

#	ARTICLE	IF	CITATIONS
1	A soft neuroprosthetic hand providing simultaneous myoelectric control and tactile feedback. Nature Biomedical Engineering, 2023, 7, 589-598.	11.6	169
2	Reply from the authors: Deformation-induced cleaning of organically fouled membranes. Journal of Membrane Science, 2022, 642, 119961.	4.1	0
3	Fracture and fatigue of entangled and unentangled polymer networks. Extreme Mechanics Letters, 2022, 51, 101608.	2.0	29
4	Magnetic soft continuum robots with contact forces. Extreme Mechanics Letters, 2022, 51, 101604.	2.0	22
5	Abstract TMP61: Telerobotic Neurovascular Interventions With Magnetic Manipulation. Stroke, 2022, 53, .	1.0	0
6	An off-the-shelf bioadhesive patch for sutureless repair of gastrointestinal defects. Science Translational Medicine, 2022, 14, eabh2857.	5.8	67
7	Magnetic Soft Materials and Robots. Chemical Reviews, 2022, 122, 5317-5364.	23.0	249
8	Ultrasoundâ€Responsive Aqueous Twoâ€Phase Microcapsules for Onâ€Demand Drug Release. Angewandte Chemie, 2022, 134, .	1.6	4
9	Ultrasoundâ€Responsive Aqueous Twoâ€Phase Microcapsules for Onâ€Demand Drug Release. Angewandte Chemie - International Edition, 2022, 61, .	7.2	14
10	Engineered Living Hydrogels. Advanced Materials, 2022, 34, e2201326.	11.1	75
11	Telerobotic neurovascular interventions with magnetic manipulation. Science Robotics, 2022, 7, eabg9907.	9.9	114
12	Nanostructured artificial-muscle fibres. Nature Nanotechnology, 2022, 17, 677-678.	15.6	2
13	An extreme toughening mechanism for soft materials. Soft Matter, 2022, 18, 5742-5749.	1.2	15
14	Telerobotically Controlled Magnetic Soft Continuum Robots for Neurovascular Interventions. , 2022, , .		2
15	A strain-programmed patch for the healing of diabetic wounds. Nature Biomedical Engineering, 2022, 6, 1118-1133.	11.6	82
16	Electrical bioadhesive interface for bioelectronics. Nature Materials, 2021, 20, 229-236.	13.3	361
17	A Multifunctional Origami Patch for Minimally Invasive Tissue Sealing. Advanced Materials, 2021, 33, e2007667.	11.1	77
18	Magnetic Living Hydrogels for Intestinal Localization, Retention, and Diagnosis. Advanced Functional Materials, 2021, 31, 2010918.	7.8	77

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19	Hydrogel-based biocontainment of bacteria for continuous sensing and computation. <i>Nature Chemical Biology</i> , 2021, 17, 724-731.	3.9	110
20	Soft Materials by Design: Unconventional Polymer Networks Give Extreme Properties. <i>Chemical Reviews</i> , 2021, 121, 4309-4372.	23.0	472
21	Evolutionary design of magnetic soft continuum robots. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	85
22	Deformation-induced cleaning of organically fouled membranes: Fundamentals and techno-economic assessment for spiral-wound membranes. <i>Journal of Membrane Science</i> , 2021, 626, 119169.	4.1	13
23	Stretchable Anti-Fogging Tapes for Diverse Transparent Materials. <i>Advanced Functional Materials</i> , 2021, 31, 2103551.	7.8	25
24	Strong fatigue-resistant nanofibrous hydrogels inspired by lobster underbelly. <i>Matter</i> , 2021, 4, 1919-1934.	5.0	56
25	Adaptive and multifunctional hydrogel hybrid probes for long-term sensing and modulation of neural activity. <i>Nature Communications</i> , 2021, 12, 3435.	5.8	130
26	Modular Integration of Hydrogel Neural Interfaces. <i>ACS Central Science</i> , 2021, 7, 1516-1523.	5.3	9
27	Rapid and coagulation-independent haemostatic sealing by a paste inspired by barnacle glue. <i>Nature Biomedical Engineering</i> , 2021, 5, 1131-1142.	11.6	146
28	Fracture and fatigue of ideal polymer networks. <i>Extreme Mechanics Letters</i> , 2021, 48, 101399.	2.0	24
29	Shaping the future of robotics through materials innovation. <i>Nature Materials</i> , 2021, 20, 1582-1587.	13.3	65
30	Hydration and swelling of dry polymers for wet adhesion. <i>Journal of the Mechanics and Physics of Solids</i> , 2020, 137, 103863.	2.3	50
31	Graded intrafillable architecture-based iontronic pressure sensor with ultra-broad-range high sensitivity. <i>Nature Communications</i> , 2020, 11, 209.	5.8	426
32	Designing Ferromagnetic Soft Robots (FerroSoRo) with Level-Set-Based Multiphysics Topology Optimization. , 2020, , .		12
33	Fracture of polymer networks with diverse topological defects. <i>Physical Review E</i> , 2020, 102, 052503.	0.8	33
34	Dynamic intermolecular interactions through hydrogen bonding of water promote heat conduction in hydrogels. <i>Materials Horizons</i> , 2020, 7, 2936-2943.	6.4	33
35	Thermodynamic analysis and material design to enhance chemo-mechanical coupling in hydrogels for energy harvesting from salinity gradients. <i>Journal of Applied Physics</i> , 2020, 128, .	1.1	8
36	Bioinspired metagel with broadband tunable impedance matching. <i>Science Advances</i> , 2020, 6, .	4.7	31

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37	Ultrathin and Robust Hydrogel Coatings on Cardiovascular Medical Devices to Mitigate Thromboembolic and Infectious Complications. <i>Advanced Healthcare Materials</i> , 2020, 9, e2001116.	3.9	53
38	Hard-magnetic elastica. <i>Journal of the Mechanics and Physics of Solids</i> , 2020, 142, 104045.	2.3	123
39	Instant tough bioadhesive with triggerable benign detachment. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 15497-15503.	3.3	210
40	Strong adhesion of wet conducting polymers on diverse substrates. <i>Science Advances</i> , 2020, 6, eaay5394.	4.7	141
41	3D printing of conducting polymers. <i>Nature Communications</i> , 2020, 11, 1604.	5.8	568
42	An organosynthetic dynamic heart model with enhanced biomimicry guided by cardiac diffusion tensor imaging. <i>Science Robotics</i> , 2020, 5, .	9.9	30
43	Fatigue-resistant adhesion of hydrogels. <i>Nature Communications</i> , 2020, 11, 1071.	5.8	187
44	Hydrogel machines. <i>Materials Today</i> , 2020, 36, 102-124.	8.3	625
45	Designing complex architected materials with generative adversarial networks. <i>Science Advances</i> , 2020, 6, eaaz4169.	4.7	144
46	EML webinar overview: Extreme mechanics of soft materials for merging human-machine intelligence. <i>Extreme Mechanics Letters</i> , 2020, 39, 100784.	2.0	9
47	Superior environmentally friendly stretchable supercapacitor based on nitrogen-doped graphene/hydrogel and single-walled carbon nanotubes. <i>Journal of Energy Storage</i> , 2020, 30, 101505.	3.9	15
48	Metagel with Broadband Tunable Acoustic Properties Over Air-Water-Solid Ranges. <i>Advanced Functional Materials</i> , 2019, 29, 1903699.	7.8	31
49	A path-following simulation-based study of elastic instabilities in nearly-incompressible confined cylinders under tension. <i>Journal of the Mechanics and Physics of Solids</i> , 2019, 131, 252-275.	2.3	4
50	Dry double-sided tape for adhesion of wet tissues and devices. <i>Nature</i> , 2019, 575, 169-174.	13.7	798
51	Soft microbots programmed by nanomagnets. <i>Nature</i> , 2019, 575, 58-59.	13.7	36
52	Ferromagnetic soft continuum robots. <i>Science Robotics</i> , 2019, 4, .	9.9	698
53	High stretchability, strength, and toughness of living cells enabled by hyperelastic vimentin intermediate filaments. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 17175-17180.	3.3	103
54	Probing Surface Hydration and Molecular Structure of Zwitterionic and Polyacrylamide Hydrogels. <i>Langmuir</i> , 2019, 35, 13292-13300.	1.6	25

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55	Ingestible hydrogel device. <i>Nature Communications</i> , 2019, 10, 493.	5.8	168
56	Anti-fatigue-fracture hydrogels. <i>Science Advances</i> , 2019, 5, eaau8528.	4.7	305
57	Hydrogel bioelectronics. <i>Chemical Society Reviews</i> , 2019, 48, 1642-1667.	18.7	1,267
58	Muscle-like fatigue-resistant hydrogels by mechanical training. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 10244-10249.	3.3	318
59	Pure PEDOT:PSS hydrogels. <i>Nature Communications</i> , 2019, 10, 1043.	5.8	528
60	Multifunctional "Hydrogel Skins" on Diverse Polymers with Arbitrary Shapes. <i>Advanced Materials</i> , 2019, 31, e1807101.	11.1	258
61	Mechanics of hard-magnetic soft materials. <i>Journal of the Mechanics and Physics of Solids</i> , 2019, 124, 244-263.	2.3	307
62	Kirigami enhances film adhesion. <i>Soft Matter</i> , 2018, 14, 2515-2525.	1.2	74
63	Material-stiffening suppresses elastic fingering and fringe instabilities. <i>International Journal of Solids and Structures</i> , 2018, 139-140, 96-104.	1.3	12
64	A New 3D Printing Strategy by Harnessing Deformation, Instability, and Fracture of Viscoelastic Inks. <i>Advanced Materials</i> , 2018, 30, 1704028.	11.1	207
65	3D Printing of Living Responsive Materials and Devices. <i>Advanced Materials</i> , 2018, 30, 1704821.	11.1	277
66	Soft wall-climbing robots. <i>Science Robotics</i> , 2018, 3, .	9.9	419
67	Controlled crack propagation for atomic precision handling of wafer-scale two-dimensional materials. <i>Science</i> , 2018, 362, 665-670.	6.0	208
68	Ideal reversible polymer networks. <i>Soft Matter</i> , 2018, 14, 5186-5196.	1.2	103
69	Folding artificial mucosa with cell-laden hydrogels guided by mechanics models. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 7503-7508.	3.3	60
70	A One-Step Method of Hydrogel Modification by Single-Walled Carbon Nanotubes for Highly Stretchable and Transparent Electronics. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 28069-28075.	4.0	75
71	Composite Cellularized Structures Created from an Interpenetrating Polymer Network Hydrogel Reinforced by a 3D Woven Scaffold. <i>Macromolecular Bioscience</i> , 2018, 18, e1800140.	2.1	21
72	Printing ferromagnetic domains for untethered fast-transforming soft materials. <i>Nature</i> , 2018, 558, 274-279.	13.7	1,426

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73	Strong, Tough, Stretchable, and Self-Adhesive Hydrogels from Intrinsically Unstructured Proteins. <i>Advanced Materials</i> , 2017, 29, 1604743.	11.1	130
74	Hydraulic hydrogel actuators and robots optically and sonically camouflaged in water. <i>Nature Communications</i> , 2017, 8, 14230.	5.8	760
75	Stretchable living materials and devices with hydrogel-elastomer hybrids hosting programmed cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 2200-2205.	3.3	212
76	Revisiting the Instability and Bifurcation Behavior of Soft Dielectrics. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2017, 84, .	1.1	35
77	Tough and tunable adhesion of hydrogels: experiments and models. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2017, 33, 543-554.	1.5	62
78	Harnessing the hygroscopic and biofluorescent behaviors of genetically tractable microbial cells to design biohybrid wearables. <i>Science Advances</i> , 2017, 3, e1601984.	4.7	170
79	Multimodal Surface Instabilities in Curved Film-Substrate Structures. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2017, 84, .	1.1	39
80	Instabilities in confined elastic layers under tension: Fringe, fingering and cavitation. <i>Journal of the Mechanics and Physics of Solids</i> , 2017, 106, 229-256.	2.3	37
81	Avoiding the pull-in instability of a dielectric elastomer film and the potential for increased actuation and energy harvesting. <i>Soft Matter</i> , 2017, 13, 4552-4558.	1.2	53
82	A large deformation viscoelastic model for double-network hydrogels. <i>Journal of the Mechanics and Physics of Solids</i> , 2017, 100, 103-130.	2.3	127
83	Impermeable Robust Hydrogels via Hybrid Lamination. <i>Advanced Healthcare Materials</i> , 2017, 6, 1700520.	3.9	58
84	Designing toughness and strength for soft materials. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 8138-8140.	3.3	123
85	Mechanochemically Responsive Viscoelastic Elastomers. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2016, 83, .	1.1	10
86	Beyond wrinkles: Multimodal surface instabilities for multifunctional patterning. <i>MRS Bulletin</i> , 2016, 41, 115-122.	1.7	111
87	Fringe instability in constrained soft elastic layers. <i>Soft Matter</i> , 2016, 12, 8899-8906.	1.2	21
88	Highly Stretchable, Strain Sensing Hydrogel Optical Fibers. <i>Advanced Materials</i> , 2016, 28, 10244-10249.	11.1	327
89	Incorporation of silicone oil into elastomers enhances barnacle detachment by active surface strain. <i>Biofouling</i> , 2016, 32, 1017-1028.	0.8	19
90	Skin-inspired hydrogel-elastomer hybrids with robust interfaces and functional microstructures. <i>Nature Communications</i> , 2016, 7, 12028.	5.8	696

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91	Stretchable Hydrogel Electronics and Devices. <i>Advanced Materials</i> , 2016, 28, 4497-4505.	11.1	550
92	Tough bonding of hydrogels to diverse non-porous surfaces. <i>Nature Materials</i> , 2016, 15, 190-196.	13.3	807
93	Urinary catheter capable of repeated on-demand removal of infectious biofilms via active deformation. <i>Biomaterials</i> , 2016, 77, 77-86.	5.7	28
94	3D Printing: 3D Printing of Highly Stretchable and Tough Hydrogels into Complex, Cellularized Structures (<i>Adv. Mater.</i> 27/2015). <i>Advanced Materials</i> , 2015, 27, 4034-4034.	11.1	77
95	A three-dimensional phase diagram of growth-induced surface instabilities. <i>Scientific Reports</i> , 2015, 5, 8887.	1.6	175
96	Predicting fracture energies and crack-tip fields of soft tough materials. <i>Extreme Mechanics Letters</i> , 2015, 4, 1-8.	2.0	116
97	3D Printing of Highly Stretchable and Tough Hydrogels into Complex, Cellularized Structures. <i>Advanced Materials</i> , 2015, 27, 4035-4040.	11.1	720
98	Dynamic surface deformation of silicone elastomers for management of marine biofouling: laboratory and field studies using pneumatic actuation. <i>Biofouling</i> , 2015, 31, 265-274.	0.8	32
99	Bioinspired Reversibly Crosslinked Hydrogels Comprising Polypeptide Micelles Exhibit Enhanced Mechanical Properties. <i>Advanced Functional Materials</i> , 2015, 25, 3122-3130.	7.8	59
100	Tunable lotus-leaf and rose-petal effects via graphene paper origami. <i>Extreme Mechanics Letters</i> , 2015, 4, 18-25.	2.0	34
101	Matrix elasticity of void-forming hydrogels controls transplanted-stem-cell-mediated bone formation. <i>Nature Materials</i> , 2015, 14, 1269-1277.	13.3	390
102	Mechanics of mechanochemically responsive elastomers. <i>Journal of the Mechanics and Physics of Solids</i> , 2015, 82, 320-344.	2.3	82
103	Designing extremely resilient and tough hydrogels via delayed dissipation. <i>Extreme Mechanics Letters</i> , 2014, 1, 70-75.	2.0	34
104	Phase Diagrams of Instabilities in Compressed Film-Substrate Systems. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2014, 81, 0510041-5100410.	1.1	92
105	On-demand hierarchical patterning with electric fields. <i>Applied Physics Letters</i> , 2014, 104, 231605.	1.5	7
106	Soft Robotic Concepts in Catheter Design: an On-Demand Fouling-Release Urinary Catheter. <i>Advanced Healthcare Materials</i> , 2014, 3, 1588-1596.	3.9	50
107	Separating viscoelasticity and poroelasticity of gels with different length and time scales. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2014, 30, 20-27.	1.5	90
108	Harnessing large deformation and instabilities of soft dielectrics: Theory, experiment, and application. <i>Applied Physics Reviews</i> , 2014, 1, 021304.	5.5	144

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109	Magnetoactive sponges for dynamic control of microfluidic flow patterns in microphysiological systems. <i>Lab on A Chip</i> , 2014, 14, 514-521.	3.1	27
110	Multi-scale multi-mechanism design of tough hydrogels: building dissipation into stretchy networks. <i>Soft Matter</i> , 2014, 10, 672-687.	1.2	938
111	Design of stiff, tough and stretchy hydrogel composites via nanoscale hybrid crosslinking and macroscale fiber reinforcement. <i>Soft Matter</i> , 2014, 10, 7519-7527.	1.2	155
112	Increasing the Maximum Achievable Strain of a Covalent Polymer Gel Through the Addition of Mechanically Invisible Crosslinks. <i>Advanced Materials</i> , 2014, 26, 6013-6018.	11.1	88
113	Cephalopod-inspired design of electro-mechano-chemically responsive elastomers for on-demand fluorescent patterning. <i>Nature Communications</i> , 2014, 5, 4899.	5.8	202
114	Harnessing Localized Ridges for High Aspect Ratio Hierarchical Patterns with Dynamic Tunability and Multifunctionality. <i>Advanced Materials</i> , 2014, 26, 1763-1770.	11.1	171
115	Ultrasound-triggered disruption and self-healing of reversibly cross-linked hydrogels for drug delivery and enhanced chemotherapy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 9762-9767.	3.3	372
116	Mechanochemical Activation of Covalent Bonds in Polymers with Full and Repeatable Macroscopic Shape Recovery. <i>ACS Macro Letters</i> , 2014, 3, 216-219.	2.3	309
117	Stretchable and High-Performance Supercapacitors with Crumpled Graphene Papers. <i>Scientific Reports</i> , 2014, 4, 6492.	1.6	207
118	Cell mediated contraction in 3D cell-matrix constructs leads to spatially regulated osteogenic differentiation. <i>Integrative Biology (United Kingdom)</i> , 2013, 5, 1174.	0.6	29
119	Tunable stiffness of electrorheological elastomers by designing mesostructures. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	36
120	Composite Three-Dimensional Woven Scaffolds with Interpenetrating Network Hydrogels to Create Functional Synthetic Articular Cartilage. <i>Advanced Functional Materials</i> , 2013, 23, 5833-5839.	7.8	218
121	Magneto-rheological foams capable of tunable energy absorption. , 2013, , .		2
122	Design considerations for an integrated microphysiological muscle tissue for drug and tissue toxicity testing. <i>Stem Cell Research and Therapy</i> , 2013, 4, S10.	2.4	25
123	Multifunctionality and control of the crumpling and unfolding of large-area graphene. <i>Nature Materials</i> , 2013, 12, 321-325.	13.3	735
124	Bioinspired Surfaces with Dynamic Topography for Active Control of Biofouling. <i>Advanced Materials</i> , 2013, 25, 1430-1434.	11.1	140
125	Electromechanical instability on dielectric polymer surface: Modeling and experiment. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2013, 260, 40-49.	3.4	38
126	Reversible Sliding in Networks of Nanowires. <i>Nano Letters</i> , 2013, 13, 2381-2386.	4.5	71

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127	Separating poroviscoelastic deformation mechanisms in hydrogels. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	80
128	Creasing-wrinkling transition in elastomer films under electric fields. <i>Physical Review E</i> , 2013, 88, 042403.	0.8	51
129	Electromechanical instabilities of thermoplastics: Theory and in situ observation. <i>Applied Physics Letters</i> , 2012, 101, 141911.	1.5	16
130	Highly stretchable and tough hydrogels. <i>Nature</i> , 2012, 489, 133-136.	13.7	4,089
131	Bursting drops in solid dielectrics caused by high voltages. <i>Nature Communications</i> , 2012, 3, 1157.	5.8	60
132	A theory for large deformation and damage of interpenetrating polymer networks. <i>Journal of the Mechanics and Physics of Solids</i> , 2012, 60, 319-332.	2.3	143
133	Localized ridge wrinkling of stiff films on compliant substrates. <i>Journal of the Mechanics and Physics of Solids</i> , 2012, 60, 1265-1279.	2.3	138
134	Dynamic Electrostatic Lithography: Multiscale On-Demand Patterning on Large-Area Curved Surfaces. <i>Advanced Materials</i> , 2012, 24, 1947-1951.	11.1	49
135	Electro-creasing instability in deformed polymers: experiment and theory. <i>Soft Matter</i> , 2011, 7, 6583.	1.2	44
136	Mechanical constraints enhance electrical energy densities of soft dielectrics. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	22
137	Mechanisms of large actuation strain in dielectric elastomers. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2011, 49, 504-515.	2.4	252
138	Active scaffolds for on-demand drug and cell delivery. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 67-72.	3.3	630
139	Creasing to Cratering Instability in Polymers under Ultrahigh Electric Fields. <i>Physical Review Letters</i> , 2011, 106, 118301.	2.9	104
140	NONEQUILIBRIUM THERMODYNAMICS OF DIELECTRIC ELASTOMERS. <i>International Journal of Applied Mechanics</i> , 2011, 03, 203-217.	1.3	143
141	Large deformation and electrochemistry of polyelectrolyte gels. <i>Journal of the Mechanics and Physics of Solids</i> , 2010, 58, 558-577.	2.3	237
142	Averting cracks caused by insertion reaction in lithium-ion batteries. <i>Journal of Materials Research</i> , 2010, 25, 1007-1010.	1.2	161
143	Using indentation to characterize the poroelasticity of gels. <i>Applied Physics Letters</i> , 2010, 96, .	1.5	236
144	Theory of Dielectric Elastomers Capable of Giant Deformation of Actuation. <i>Physical Review Letters</i> , 2010, 104, 178302.	2.9	300

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145	Poroelasticity of a covalently crosslinked alginate hydrogel under compression. Journal of Applied Physics, 2010, 108, .	1.1	69
146	The Determination of the Location of Contact Electrification-Induced Discharge Events. Journal of Physical Chemistry C, 2010, 114, 20885-20895.	1.5	14
147	Stress-relaxation behavior in gels with ionic and covalent crosslinks. Journal of Applied Physics, 2010, 107, 63509.	1.1	287
148	Microbristle in gels: Toward all-polymer reconfigurable hybrid surfaces. Soft Matter, 2010, 6, 750.	1.2	32
149	A theory of constrained swelling of a pH-sensitive hydrogel. Soft Matter, 2010, 6, 784.	1.2	288
150	Maximal energy that can be converted by a dielectric elastomer generator. Applied Physics Letters, 2009, 94, .	1.5	279
151	A finite element method for transient analysis of concurrent large deformation and mass transport in gels. Journal of Applied Physics, 2009, 105, .	1.1	110
152	Formation of creases on the surfaces of elastomers and gels. Applied Physics Letters, 2009, 95, .	1.5	205
153	Dielectric elastomer membranes undergoing inhomogeneous deformation. Journal of Applied Physics, 2009, 106, .	1.1	91
154	Electromechanical instability in semicrystalline polymers. Applied Physics Letters, 2009, 95, .	1.5	62
155	Electrical breakdown and ultrahigh electrical energy density in poly(vinylidene fluoride) thin films. Applied Physics Letters, 2009, 95, 2422.	1.5	242
156	A nonlinear field theory of deformable dielectrics. Journal of the Mechanics and Physics of Solids, 2008, 56, 467-486.	2.3	465
157	A theory of coupled diffusion and large deformation in polymeric gels. Journal of the Mechanics and Physics of Solids, 2008, 56, 1779-1793.	2.3	790
158	Propagation of instability in dielectric elastomers. International Journal of Solids and Structures, 2008, 45, 3739-3750.	1.3	143
159	Stretching and polarizing a dielectric gel immersed in a solvent. International Journal of Solids and Structures, 2008, 45, 4021-4031.	1.3	16
160	Method to analyze programmable deformation of dielectric elastomer layers. Applied Physics Letters, 2008, 93, .	1.5	127
161	Electrostriction in elastic dielectrics undergoing large deformation. Journal of Applied Physics, 2008, 104, .	1.1	222
162	On designing dielectric elastomer actuators. Journal of Applied Physics, 2008, 104, .	1.1	86

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163	A theory of large deformation in soft active materials. , 2008, , .		2
164	Inhomogeneous and anisotropic equilibrium state of a swollen hydrogel containing a hard core. Applied Physics Letters, 2008, 92, .	1.5	56
165	Drying-induced bifurcation in a hydrogel-actuated nanostructure. Journal of Applied Physics, 2008, 104, .	1.1	30
166	Method to analyze electromechanical stability of dielectric elastomers. Applied Physics Letters, 2007, 91, .	1.5	395
167	Electromechanical hysteresis and coexistent states in dielectric elastomers. Physical Review B, 2007, 76, .	1.1	327
168	Three-dimensional simulations of the complex dielectric properties of random composites by finite element method. Journal of Applied Physics, 2004, 95, 8110-8117.	1.1	58
169	Simulation of polycrystalline structure with Voronoi diagram in Laguerre geometry based on random closed packing of spheres. Computational Materials Science, 2004, 29, 301-308.	1.4	142
170	Evaluation of Mixing Rules for Dielectric Constants of Composite Dielectrics by MC-FEM Calculation on 3D Cubic Lattice. , 2003, 11, 227-239.		112