

Tongqing Lu

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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.

60 papers	1,444 citations	21 h-index	36 g-index
66 ext. papers	1,815 ext. citations	4.4 avg, IF	5.06 L-index

#	Paper	IF	Citations
60	Dielectric elastomer actuators under equal-biaxial forces, uniaxial forces, and uniaxial constraint of stiff fibers. <i>Soft Matter</i> , 2012 , 8, 6167	3.6	200
59	Fatigue of double-network hydrogels. <i>Engineering Fracture Mechanics</i> , 2018 , 187, 74-93	4.2	96
58	Large, uni-directional actuation in dielectric elastomers achieved by fiber stiffening. <i>Applied Physics Letters</i> , 2012 , 100, 211901	3.4	77
57	Two types of transitions to wrinkles in dielectric elastomers. <i>Soft Matter</i> , 2012 , 8, 8840	3.6	67
56	Experimental investigation of the electromechanical phase transition in a dielectric elastomer tube. <i>Smart Materials and Structures</i> , 2015 , 24, 035006	3.4	66
55	Integrated Soft Ionotronic Skin with Stretchable and Transparent Hydrogel-Elastomer Ionic Sensors for Hand-Motion Monitoring. <i>Soft Robotics</i> , 2019 , 6, 368-376	9.2	55
54	Bioinspired bicipital muscle with fiber-constrained dielectric elastomer actuator. <i>Extreme Mechanics Letters</i> , 2016 , 6, 75-81	3.9	50
53	Fracture Toughness and Fatigue Threshold of Tough Hydrogels. <i>ACS Macro Letters</i> , 2019 , 8, 17-23	6.6	50
52	A Constitutive Model for Soft Materials Incorporating Viscoelasticity and Mullins Effect. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2017 , 84,	2.7	49
51	Electro-mechanical coupling bifurcation and bulging propagation in a cylindrical dielectric elastomer tube. <i>Journal of the Mechanics and Physics of Solids</i> , 2015 , 85, 160-175	5	49
50	A Universal Strategy for Tough Adhesion of Wet Soft Material. <i>Advanced Functional Materials</i> , 2020 , 30, 2003207	15.6	49
49	Super tough magnetic hydrogels for remotely triggered shape morphing. <i>Journal of Materials Chemistry B</i> , 2018 , 6, 2713-2722	7.3	46
48	Mechanics of dielectric elastomer structures: A review. <i>Extreme Mechanics Letters</i> , 2020 , 38, 100752	3.9	43
47	The surface effect on the strain energy release rate of buckling delamination in thin film-substrate systems. <i>International Journal of Engineering Science</i> , 2011 , 49, 967-975	5.7	40
46	Nonlinear vibration of dielectric elastomer incorporating strain stiffening. <i>International Journal of Solids and Structures</i> , 2016 , 87, 70-80	3.1	39
45	Dielectric gels with ultra-high dielectric constant, low elastic modulus, and excellent transparency. <i>NPG Asia Materials</i> , 2018 , 10, 821-826	10.3	38
44	Large conversion of energy in dielectric elastomers by electromechanical phase transition. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2012 , 28, 1106-1114	2	36

43	Anomalous bulging behaviors of a dielectric elastomer balloon under internal pressure and electric actuation. <i>Journal of the Mechanics and Physics of Solids</i> , 2017 , 102, 1-16	5	26
42	Hydrogel 3D printing with the capacitor edge effect. <i>Science Advances</i> , 2019 , 5, eaau8769	14.3	26
41	Highly deformable actuators made of dielectric elastomers clamped by rigid rings. <i>Journal of Applied Physics</i> , 2014 , 115, 184105	2.5	25
40	Highly Stretchable and Transparent Ionic Conductor with Novel Hydrophobicity and Extreme-Temperature Tolerance. <i>Research</i> , 2020 , 2020, 2505619	7.8	23
39	Computational model of deformable lenses actuated by dielectric elastomers. <i>Journal of Applied Physics</i> , 2013 , 114, 104104	2.5	19
38	A pseudo-elasticity theory to model the strain-softening behavior of tough hydrogels. <i>Journal of the Mechanics and Physics of Solids</i> , 2020 , 137, 103832	5	19
37	Hydrogel-mesh composite for wound closure. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	19
36	Soft sensor for measuring wind pressure. <i>International Journal of Mechanical Sciences</i> , 2018 , 141, 386-393	3.5	18
35	The Stiffness-Threshold Conflict in Polymer Networks and a Resolution. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2020 , 87,	2.7	17
34	Response time and dynamic range for a dielectric elastomer actuator. <i>Sensors and Actuators A: Physical</i> , 2016 , 239, 8-17	3.9	16
33	Charge localization instability in a highly deformable dielectric elastomer. <i>Applied Physics Letters</i> , 2014 , 104, 022905	3.4	16
32	Fatigue-resistant adhesion I. Long-chain polymers as elastic dissipaters. <i>Extreme Mechanics Letters</i> , 2020 , 39, 100813	3.9	14
31	Electromechanical Catastrophe. <i>International Journal of Applied Mechanics</i> , 2016 , 08, 1640005	2.4	14
30	Current leakage performance of dielectric elastomers under different boundary conditions. <i>Applied Physics Letters</i> , 2015 , 107, 152901	3.4	13
29	Viscoelastic Effect on the Wrinkling of an Inflated Dielectric-Elastomer Balloon. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2018 , 85,	2.7	10
28	Bulge test at nano-scale: The surface effects. <i>Applied Physics Letters</i> , 2013 , 103, 053110	3.4	9
27	Band-gap tunable dielectric elastomer filter for low frequency noise. <i>Smart Materials and Structures</i> , 2016 , 25, 055047	3.4	9
26	Fine tuning the electro-mechanical response of dielectric elastomers. <i>Applied Physics Letters</i> , 2018 , 113, 162902	3.4	9

25	Experimental Investigations on the Out-of-Plane Sub-harmonic Vibration of a Circular Dielectric Elastomer Actuator. <i>Acta Mechanica Sinica</i> , 2019 , 32, 591-598	2	8
24	A Phenomenological Model for Shakedown of Tough Hydrogels Under Cyclic Loads. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2018 , 85,	2.7	8
23	Linear control of multi-electrode dielectric elastomer actuator with a finite element model. <i>International Journal of Mechanical Sciences</i> , 2019 , 159, 441-449	5.5	7
22	Electromechanical phase transition of a dielectric elastomer tube under internal pressure of constant mass. <i>Theoretical and Applied Mechanics Letters</i> , 2017 , 7, 121-125	1.8	6
21	Flaw-sensitivity of a tough hydrogel under monotonic and cyclic loads. <i>Journal of the Mechanics and Physics of Solids</i> , 2021 , 153, 104483	5	6
20	Topoarchitected polymer networks expand the space of material properties.. <i>Nature Communications</i> , 2022 , 13, 1622	17.4	6
19	A micro-structure based constitutive model for anisotropic stress-strain behaviors of artery tissues. <i>International Journal of Solids and Structures</i> , 2018 , 139-140, 55-64	3.1	5
18	Deformation study of an in-plane oscillating dielectric elastomer actuator having complex modes. <i>Journal of Sound and Vibration</i> , 2019 , 463, 114940	3.9	5
17	The Design and Analysis of Pneumatic Rubber Actuator of Soft Robotic Fish. <i>Lecture Notes in Computer Science</i> , 2014 , 320-327	0.9	5
16	Fatigue behaviors of physical hydrogels based on hydrogen bonds. <i>Extreme Mechanics Letters</i> , 2021 , 46, 101320	3.9	5
15	Static and dynamic experiments on hydrogels: Effects of the chemical composition of the fluid. <i>Mechanics of Materials</i> , 2021 , 154, 103717	3.3	4
14	Nonlinear photoelasticity of rubber-like soft materials: comparison between theory and experiment. <i>Soft Matter</i> , 2021 , 17, 4998-5005	3.6	4
13	Phase-separation induced extraordinary toughening of magnetic hydrogels. <i>Journal of Applied Physics</i> , 2018 , 123, 185105	2.5	4
12	Numerical study on the electromechanical behavior of dielectric elastomer with the influence of surrounding medium. <i>International Journal of Smart and Nano Materials</i> , 2016 , 7, 52-68	3.6	3
11	Mechanics-based design strategies for 4D printing: A review. <i>Forces in Mechanics</i> , 2022 , 7, 100081	1.5	3
10	Toughening Mechanism of Unidirectional Stretchable Composite. <i>Frontiers in Robotics and AI</i> , 2021 , 8, 673307	2.8	3
9	Highly stretchable and transparent dielectric gels for high sensitivity tactile sensors. <i>Smart Materials and Structures</i> , 2019 , 28, 024003	3.4	3
8	Swell induced stress in a hydrogel coating. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2021 , 37, 797-802	2	2

7	Preface to the Soft Matter Mechanics Special Issue of Acta Mechanica Solida Sinica. <i>Acta Mechanica Solida Sinica</i> , 2019 , 32, 533-534	2	1
6	Asymptotic solutions for buckling delamination induced crack propagation in the thin film-compliant substrate system. <i>Theoretical and Applied Mechanics Letters</i> , 2014 , 4, 041003	1.8	1
5	Fatigue-resistant adhesion II: Swell tolerance. <i>Extreme Mechanics Letters</i> , 2021 , 43, 101182	3.9	1
4	Large actuation in an electromechanical actuator using gel, elastomer, and oil. <i>International Journal of Non-Linear Mechanics</i> , 2020 , 124, 103499	2.8	0
3	Solutions to ramp-hold dynamic oscillation indentation tests for assessing the viscoelasticity of hydrogel by Kelvin-Voigt fractional derivative modeling. <i>Mechanics of Materials</i> , 2020 , 148, 103431	3.3	0
2	A thermodynamic model of phase transition of poly(N-isopropylacrylamide) hydrogels in ionic solutions. <i>International Journal of Solids and Structures</i> , 2022 , 111434	3.1	0
1	High-throughput experiments for rare-event rupture of materials. <i>Matter</i> , 2022 , 5, 654-665	12.7	0