Hao Zeng

List of Publications by Year
in descending order

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49 papers	4,825 citations	279798 23 h-index	254184 43 g-index
58 all docs	58 docs citations	58 times ranked	3778 citing authors

#	Article	IF	Citations
1	Lightâ€Fueled Polymer Film Capable of Directional Crawling, Frictionâ€Controlled Climbing, and Selfâ€Sustained Motion on a Human Hair. Advanced Science, 2022, 9, e2103090.	11.2	26
2	Photoelastic plasmonic metasurfaces with ultra-large near infrared spectral tuning. Materials Horizons, 2022, 9, 942-951.	12.2	9
3	Optically controlled grasping-slipping robot moving on tubular surfaces. Multifunctional Materials, 2022, 5, 024001.	3.7	5
4	Optically Controlled Latching and Launching in Soft Actuators. Advanced Functional Materials, 2022, 32, .	14.9	24
5	Light-driven bimorph soft actuators: design, fabrication, and properties. Materials Horizons, 2021, 8, 728-757.	12.2	135
6	Nearâ€Infrared Lightâ€Driven Shapeâ€Morphing of Programmable Anisotropic Hydrogels Enabled by MXene Nanosheets. Angewandte Chemie - International Edition, 2021, 60, 3390-3396.	13.8	213
7	Nearâ€Infrared Lightâ€Driven Shapeâ€Morphing of Programmable Anisotropic Hydrogels Enabled by MXene Nanosheets. Angewandte Chemie, 2021, 133, 3432-3438.	2.0	20
8	Stimulus-driven liquid metal and liquid crystal network actuators for programmable soft robotics. Materials Horizons, 2021, 8, 2475-2484.	12.2	142
9	Frontispiece: Nearâ€Infrared Lightâ€Driven Shapeâ€Morphing of Programmable Anisotropic Hydrogels Enabled by MXene Nanosheets. Angewandte Chemie - International Edition, 2021, 60, .	13.8	0
10	Frontispiz: Nearâ€Infrared Lightâ€Driven Shapeâ€Morphing of Programmable Anisotropic Hydrogels Enabled by MXene Nanosheets. Angewandte Chemie, 2021, 133, .	2.0	0
11	Bioinspired Ultrathin Piecewise Controllable Soft Robots. Advanced Materials Technologies, 2021, 6, 2001095.	5.8	27
12	Multistage Reversible T_g Photomodulation and Hardening of Hydrazone-Containing Polymers. Journal of the American Chemical Society, 2021, 143, 16348-16353.	13.7	26
13	Kirigamiâ€Based Lightâ€Induced Shapeâ€Morphing and Locomotion. Advanced Materials, 2020, 32, e1906233.	21.0	147
14	Associative Learning by Classical Conditioning in Liquid Crystal Network Actuators. Matter, 2020, 2, 194-206.	10.0	51
15	Tunable Photomechanics in Diarylethene-Driven Liquid Crystal Network Actuators. ACS Applied Materials & Interfaces, 2020, 12, 47939-47947.	8.0	23
16	Fast Switching of Bright Whiteness in Channeled Hydrogel Networks. Advanced Functional Materials, 2020, 30, 2000754.	14.9	53
17	Design principles for non-reciprocal photomechanical actuation. Soft Matter, 2020, 16, 5951-5958.	2.7	17
18	Bioinspired underwater locomotion of light-driven liquid crystal gels. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 5125-5133.	7.1	237

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19	Viewpoint: Pavlovian Materialsâ€"Functional Biomimetics Inspired by Classical Conditioning. Advanced Materials, 2020, 32, e1906619.	21.0	21
20	Programmable responsive hydrogels inspired by classical conditioning algorithm. Nature Communications, 2019, 10, 3267.	12.8	47
21	Light-fuelled freestyle self-oscillators. Nature Communications, 2019, 10, 5057.	12.8	142
22	An Artificial Nocturnal Flower via Humidityâ€Gated Photoactuation in Liquid Crystal Networks. Advanced Materials, 2019, 31, e1805985.	21.0	154
23	Lightâ€Driven, Caterpillarâ€Inspired Miniature Inching Robot. Macromolecular Rapid Communications, 2018, 39, 1700224.	3.9	180
24	Light Robots: Bridging the Gap between Microrobotics and Photomechanics in Soft Materials. Advanced Materials, 2018, 30, e1703554.	21.0	270
25	Programming Photoresponse in Liquid Crystal Polymer Actuators with Laser Projector. Advanced Optical Materials, 2018, 6, 1700949.	7.3	62
26	Reconfigurable photoactuator through synergistic use of photochemical and photothermal effects. Nature Communications, 2018, 9, 4148.	12.8	233
27	Microrobotics: Light Robots: Bridging the Gap between Microrobotics and Photomechanics in Soft Materials (Adv. Mater. 24/2018). Advanced Materials, 2018, 30, 1870174.	21.0	8
28	Selfâ€Regulating Iris Based on Lightâ€Actuated Liquid Crystal Elastomer. Advanced Materials, 2017, 29, 1701814.	21.0	288
29	A light-driven artificial flytrap. Nature Communications, 2017, 8, 15546.	12.8	499
30	Locomotion of light-driven soft microrobots through a hydrogel via local melting. , 2017, , .		3
31	Towards photo-induced swimming: actuation of liquid crystalline elastomer in water. Proceedings of SPIE, 2016, , .	0.8	1
32	Lightâ€Driven Soft Robot Mimics Caterpillar Locomotion in Natural Scale. Advanced Optical Materials, 2016, 4, 1689-1694.	7.3	288
33	Soft Robotics: Light-Driven Soft Robot Mimics Caterpillar Locomotion in Natural Scale (Advanced) Tj ETQq1 1 0.784314 rgBT /Overlock	7.3	5
34	Soft continuous microrobots with multiple intrinsic degrees of freedom. , 2016, , .		2
35	Free-form Light Actuators — Fabrication and Control of Actuation in Microscopic Scale. Journal of Visualized Experiments, 2016, , .	0.3	0
36	Photonics walking up a human hair. , 2016, , .		0

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37	Structured light enables biomimetic swimming and versatile locomotion of photoresponsive softÂmicrorobots. Nature Materials, 2016, 15, 647-653.	27.5	757
38	Lightâ€Fueled Microscopic Walkers. Advanced Materials, 2015, 27, 3883-3887.	21.0	355
39	Artificial Muscle: Lightâ€Fueled Microscopic Walkers (Adv. Mater. 26/2015). Advanced Materials, 2015, 27, 3842-3842.	21.0	1
40	Optically controlled elastic microcavities. Light: Science and Applications, 2015, 4, e282-e282.	16.6	61
41	Controllable light diffraction in woodpile photonic crystals filled with liquid crystal. Applied Physics Letters, 2015, 106, 021113.	3.3	21
42	Alignment engineering in liquid crystalline elastomers: Free-form microstructures with multiple functionalities. Applied Physics Letters, 2015, 106, .	3.3	56
43	Opto-Mechanically Tunable Polymeric Microlasers. , 2014, , .		1
44	Highâ€Resolution 3D Direct Laser Writing for Liquidâ€Crystalline Elastomer Microstructures. Advanced Materials, 2014, 26, 2319-2322.	21.0	165
45	Beam focalization in reflection from flat dielectric subwavelength gratings. Optics Letters, 2014, 39, 6086.	3.3	18
46	Bending the ferroelectric domain wall by a bubble. Journal of Physics Condensed Matter, 2011, 23, 345901.	1.8	0
47	Transcription of domain patterns in near-stoichiometric magnesium-doped lithium niobate. Applied Physics Letters, 2010, 97, 201901.	3.3	8
48	Light-induced superlow electric field for domain reversal in near-stoichiometric magnesium-doped lithium niobate. Journal of Applied Physics, 2010, 107, 063514.	2.5	12
49	Thermo- and chemical-triggered overhand and reef knots based on liquid crystal gels. Journal of Materials Chemistry C, 0, , .	5.5	0