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	Structured light enables biomimetic swimming and versatile locomotion of photoresponsive softÂmicrorobots. Nature Materials, 2016, 15, 647-653.	27.5	757
2	A light-driven artificial flytrap. Nature Communications, 2017, 8, 15546.	12.8	499
3	Lightâ€Fueled Microscopic Walkers. Advanced Materials, 2015, 27, 3883-3887.	21.0	355
4	Lightâ€Driven Soft Robot Mimics Caterpillar Locomotion in Natural Scale. Advanced Optical Materials, 2016, 4, 1689-1694.	7.3	288
5	Selfâ€Regulating Iris Based on Lightâ€Actuated Liquid Crystal Elastomer. Advanced Materials, 2017, 29, 1701814.	21.0	288
6	Light Robots: Bridging the Gap between Microrobotics and Photomechanics in Soft Materials. Advanced Materials, 2018, 30, e1703554.	21.0	270
7	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
8	Reconfigurable photoactuator through synergistic use of photochemical and photothermal effects. Nature Communications, 2018, 9, 4148.	12.8	233
9	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
10	Lightâ€Driven, Caterpillarâ€Inspired Miniature Inching Robot. Macromolecular Rapid Communications, 2018, 39, 1700224.	3.9	180
11	Highâ€Resolution 3D Direct Laser Writing for Liquidâ€Crystalline Elastomer Microstructures. Advanced Materials, 2014, 26, 2319-2322.	21.0	165
12	An Artificial Nocturnal Flower via Humidityâ€Gated Photoactuation in Liquid Crystal Networks. Advanced Materials, 2019, 31, e1805985.	21.0	154
13	Kirigamiâ€Based Lightâ€Induced Shapeâ€Morphing and Locomotion. Advanced Materials, 2020, 32, e1906233.	21.0	147
14	Light-fuelled freestyle self-oscillators. Nature Communications, 2019, 10, 5057.	12.8	142
15	Stimulus-driven liquid metal and liquid crystal network actuators for programmable soft robotics. Materials Horizons, 2021, 8, 2475-2484.	12.2	142
16	Light-driven bimorph soft actuators: design, fabrication, and properties. Materials Horizons, 2021, 8, 728-757.	12.2	135
17	Programming Photoresponse in Liquid Crystal Polymer Actuators with Laser Projector. Advanced Optical Materials, 2018, 6, 1700949.	7.3	62
18	Optically controlled elastic microcavities. Light: Science and Applications, 2015, 4, e282-e282.	16.6	61

#	Article	IF	Citations
19	Alignment engineering in liquid crystalline elastomers: Free-form microstructures with multiple functionalities. Applied Physics Letters, 2015, 106, .	3.3	56
20	Fast Switching of Bright Whiteness in Channeled Hydrogel Networks. Advanced Functional Materials, 2020, 30, 2000754.	14.9	53
21	Associative Learning by Classical Conditioning in Liquid Crystal Network Actuators. Matter, 2020, 2, 194-206.	10.0	51
22	Programmable responsive hydrogels inspired by classical conditioning algorithm. Nature Communications, 2019, 10, 3267.	12.8	47
23	Bioinspired Ultrathin Piecewise Controllable Soft Robots. Advanced Materials Technologies, 2021, 6, 2001095.	5.8	27
24	Multistage Reversible T_g Photomodulation and Hardening of Hydrazone-Containing Polymers. Journal of the American Chemical Society, 2021, 143, 16348-16353.	13.7	26
25	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
26	Optically Controlled Latching and Launching in Soft Actuators. Advanced Functional Materials, 2022, 32, .	14.9	24
27	Tunable Photomechanics in Diarylethene-Driven Liquid Crystal Network Actuators. ACS Applied Materials & Interfaces, 2020, 12, 47939-47947.	8.0	23
28	Controllable light diffraction in woodpile photonic crystals filled with liquid crystal. Applied Physics Letters, 2015, 106, 021113.	3.3	21
29	Viewpoint: Pavlovian Materialsâ”Functional Biomimetics Inspired by Classical Conditioning. Advanced Materials, 2020, 32, e1906619.	21.0	21
30	Nearâ€Infrared Lightâ€Driven Shapeâ€Morphing of Programmable Anisotropic Hydrogels Enabled by MXene Nanosheets. Angewandte Chemie, 2021, 133, 3432-3438.	2.0	20
31	Beam focalization in reflection from flat dielectric subwavelength gratings. Optics Letters, 2014, 39, 6086.	3.3	18
32	Design principles for non-reciprocal photomechanical actuation. Soft Matter, 2020, 16, 5951-5958.	2.7	17
33	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
34	Photoelastic plasmonic metasurfaces with ultra-large near infrared spectral tuning. Materials Horizons, 2022, 9, 942-951.	12.2	9
35	Transcription of domain patterns in near-stoichiometric magnesium-doped lithium niobate. Applied Physics Letters, 2010, 97, 201901.	3.3	8
36	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

#	Article	IF	Citations
37	Soft Robotics: Light-Driven Soft Robot Mimics Caterpillar Locomotion in Natural Scale (Advanced) Tj ETQq1 1 0.784314 rgBT /Overlock	7.3	5
38	Optically controlled grasping-slipping robot moving on tubular surfaces. Multifunctional Materials, 2022, 5, 024001.	3.7	5
39	Locomotion of light-driven soft microrobots through a hydrogel via local melting. , 2017, , .		3
40	Soft continuous microrobots with multiple intrinsic degrees of freedom. , 2016, , .		2
41	Opto-Mechanically Tunable Polymeric Microlasers. , 2014, , .		1
42	Artificial Muscle: Lightâ€Fueled Microscopic Walkers (Adv. Mater. 26/2015). Advanced Materials, 2015, 27, 3842-3842.	21.0	1
43	Towards photo-induced swimming: actuation of liquid crystalline elastomer in water. Proceedings of SPIE, 2016, , .	0.8	1
44	Bending the ferroelectric domain wall by a bubble. Journal of Physics Condensed Matter, 2011, 23, 345901.	1.8	0
45	Free-form Light Actuators — Fabrication and Control of Actuation in Microscopic Scale. Journal of Visualized Experiments, 2016, , .	0.3	0
46	Photonics walking up a human hair. , 2016, , .		0
47	Thermo- and chemical-triggered overhand and reef knots based on liquid crystal gels. Journal of Materials Chemistry C, 0, , .	5.5	0
48	Frontispiece: Nearâ€Infrared Lightâ€Driven Shapeâ€Morphing of Programmable Anisotropic Hydrogels Enabled by MXene Nanosheets. Angewandte Chemie - International Edition, 2021, 60, .	13.8	0
49	Frontispiz: Nearâ€Infrared Lightâ€Driven Shapeâ€Morphing of Programmable Anisotropic Hydrogels Enabled by MXene Nanosheets. Angewandte Chemie, 2021, 133, .	2.0	0