

Hongzhong Liu

List of Publications by Year in descending order

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56
papers

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all docs

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57
times ranked

1431
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermal Diodes Based on Fractal Structures with Tunable Thermal Threshold. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	3
2	Varifocal liquid microlens in scaffold microstructures under electrothermal actuation. <i>Sensors and Actuators A: Physical</i> , 2022, 341, 113584.	4.1	0
3	Submersible Softâ€“Robotic Platform for Noiseâ€“Free Hovering Utilizing Liquidâ€“Vapor Phase Transition. <i>Advanced Intelligent Systems</i> , 2021, 3, 2000147.	6.1	2
4	Light-driven untethered soft actuators based on biomimetic microstructure arrays. <i>Soft Matter</i> , 2021, 17, 8651-8661.	2.7	9
5	10.1063/5.0030241.1. , 2021, , .		0
6	Three-dimensional patterned distribution of thermal conductivity in the volume for effective thermal concentration. <i>Journal of Applied Physics</i> , 2021, 129, .	2.5	4
7	Crawlingâ€“jumping synergic bioinspired robots harnessing electroactive bistable actuators by adjusting mechanical responses and forces. <i>Applied Materials Today</i> , 2021, 24, 101091.	4.3	7
8	A novel intrinsically strain sensor for large strain detection. <i>Sensors and Actuators A: Physical</i> , 2021, 332, 113081.	4.1	4
9	Submersible Softâ€“Robotic Platform for Noiseâ€“Free Hovering Utilizing Liquidâ€“Vapor Phase Transition. <i>Advanced Intelligent Systems</i> , 2021, 3, 2170013.	6.1	0
10	Improved Eccentricity Self-Detection Method Based on Least Square Algorithm for Polar Coordinate Encoder. <i>IEEE Sensors Journal</i> , 2021, 21, 26902-26911.	4.7	4
11	Precise Phase Demodulation Algorithm for Sinusoidal Encoders and Resolvers. <i>IEEE Transactions on Industrial Electronics</i> , 2020, 67, 8778-8787.	7.9	13
12	Bacterial nanotubes mediate bacterial growth on periodic nano-pillars. <i>Soft Matter</i> , 2020, 16, 7613-7623.	2.7	6
13	Reconfigurable and tunable photo-controlled hydrogel using hydrogen bonding to drive molecule self-assembly and cross-linking. <i>Journal of Materials Science</i> , 2020, 55, 14740-14750.	3.7	8
14	Enhancements of Loading Capacity and Moving Ability by Microstructures for Wireless Soft Robot Boats. <i>Langmuir</i> , 2020, 36, 14728-14736.	3.5	4
15	Optimal design of a reflective diffraction grating scale with sine-trapezoidal groove for interferential optical encoders. <i>Optics and Lasers in Engineering</i> , 2020, 134, 106196.	3.8	12
16	Multidomain Oriented Particle Chains Based on Spatial Electric Field and Their Optical Application. <i>Langmuir</i> , 2020, 36, 11546-11555.	3.5	4
17	Bilayer liquid-filled compound microlens arrays: A way to compensate aberration. <i>Journal of Applied Physics</i> , 2020, 128, .	2.5	3
18	Intergrated Shape Memory Alloys Soft Actuators with Periodic and Inhomogeneous Deformations by Modulating Elastic Tendon Structures. <i>Advanced Engineering Materials</i> , 2020, 22, 2000640.	3.5	3

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19	Untethered, ultra-light soft actuator based on positively charged 3D fluffy silica micro-nanofibers by electrospinning. <i>Journal of Materials Science</i> , 2020, 55, 12789-12800.	3.7	3
20	Effects of antiferroelectric substitution on the structure and ferroelectric properties of a complex perovskite solid solution. <i>Journal of Materials Chemistry C</i> , 2020, 8, 5795-5806.	5.5	11
21	Electronic Interpolation Interface Based on Linear Subdivision Method for Sinusoidal Optical Encoders. <i>IEEE Sensors Journal</i> , 2020, 20, 3646-3654.	4.7	13
22	Photothermally triggered soft robot with adaptive local deformations and versatile bending modes. <i>Smart Materials and Structures</i> , 2019, 28, 02LT01.	3.5	12
23	Untethered Soft Actuators by Liquid Vapor Phase Transition: Remote and Programmable Actuation. <i>Advanced Intelligent Systems</i> , 2019, 1, 1900109.	6.1	42
24	Hierarchical Rose Petal Surfaces Delay the Early-Stage Bacterial Biofilm Growth. <i>Langmuir</i> , 2019, 35, 14670-14680.	3.5	33
25	Formation of highly ordered micro fillers in polymeric matrix by electro-field-assisted aligning. <i>RSC Advances</i> , 2019, 9, 15238-15245.	3.6	4
26	Bioinspired from butterfly wings: programmable actuation of isolated rods architectures for magnetic-assisted microswitches. <i>Smart Materials and Structures</i> , 2019, 28, 075014.	3.5	4
27	Biomimetic magnetic-responsive cilia-like soft device: surface energy control and external field actuation. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 3767-3772.	2.2	6
28	Graphene-elastomer nanocomposites based flexible piezoresistive sensors for strain and pressure detection. <i>Materials Research Bulletin</i> , 2018, 102, 92-99.	5.2	76
29	Ratiometric-Linearization-Based High-Precision Electronic Interpolator for Sinusoidal Optical Encoders. <i>IEEE Transactions on Industrial Electronics</i> , 2018, 65, 8224-8231.	7.9	34
30	Micro-/nanodomains and their switching in a high Curie-temperature ferroelectric single crystal of Bi(Zn ₂ /3Nb ₁ /3)O ₃ -PbTiO ₃ . <i>Ceramics International</i> , 2018, 44, S189-S194.	4.8	7
31	Controllable actuation of photomechanical bilayer nanocomposites for in vitro cell manipulation. <i>Carbon</i> , 2018, 139, 1048-1056.	10.3	10
32	Liquid microsphere arrays for imaging magnification. <i>Optics Communications</i> , 2018, 428, 89-94.	2.1	3
33	Development of a polar-coordinate optical encoder: principle and application. <i>Optical Engineering</i> , 2018, 57, 1.	1.0	6
34	Design and development of an optical encoder with sub-micron accuracy using a multiple-tracks analyser grating. <i>Review of Scientific Instruments</i> , 2017, 88, 015003.	1.3	15
35	Flexible pyroelectric device for scavenging thermal energy from chemical process and as self-powered temperature monitor. <i>Applied Energy</i> , 2017, 195, 754-760.	10.1	42
36	Fabrication of high edge-definition steel-tape gratings for optical encoders. <i>Review of Scientific Instruments</i> , 2017, 88, 105006.	1.3	3

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37	Tunable liquid microlens arrays actuated by infrared light-responsive graphene microsheets. <i>Journal of Micromechanics and Microengineering</i> , 2017, 27, 085006.	2.6	5
38	Optimizing design of an optical encoder based on generalized grating imaging. <i>Measurement Science and Technology</i> , 2016, 27, 115005.	2.6	13
39	Bio-inspired eyes with eyeball-shaped lenses actuated by electro-hydrodynamic forces. <i>RSC Advances</i> , 2016, 6, 23653-23657.	3.6	6
40	Tunable microlens array with a large fill-factor: Self-assembly fabrication and electrohydrodynamic actuation. <i>Sensors and Actuators A: Physical</i> , 2016, 240, 85-91.	4.1	7
41	Reversible Bending Behaviors of Photomechanical Soft Actuators Based on Graphene Nanocomposites. <i>Scientific Reports</i> , 2016, 6, 27366.	3.3	48
42	Efficient electrothermal actuation of liquid microlens arrays with low voltages. <i>RSC Advances</i> , 2016, 6, 102149-102154.	3.6	2
43	Multiple harmonics suppression for optical encoders based on generalized grating imaging. <i>Journal of Modern Optics</i> , 2016, 63, 1564-1572.	1.3	9
44	An infrared-driven flexible pyroelectric generator for non-contact energy harvester. <i>Nanoscale</i> , 2016, 8, 8111-8117.	5.6	37
45	Flexible Battery-Free Bioelectronic Implants: Wireless Powering and Manipulation by Near-Infrared Light. <i>Advanced Functional Materials</i> , 2015, 25, 7071-7079.	14.9	44
46	Precise and robust position estimation for optical incremental encoders using a linearization technique. <i>Sensors and Actuators A: Physical</i> , 2015, 232, 30-38.	4.1	22
47	Capillary number encouraged the construction of smart biomimetic eyes. <i>Journal of Materials Chemistry C</i> , 2015, 3, 5896-5902.	5.5	16
48	A theoretical investigation of generalized grating imaging and its application to optical encoders. <i>Optics Communications</i> , 2015, 354, 21-27.	2.1	16
49	Calibration of non-contact incremental linear encoders using a macro-micro dual-drive high-precision comparator. <i>Measurement Science and Technology</i> , 2015, 26, 095103.	2.6	11
50	Graphene-Based Bioinspired Compound Eyes for Programmable Focusing and Remote Actuation. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 21416-21422.	8.0	29
51	Photoresponsive Soft-Robotic Platform: Biomimetic Fabrication and Remote Actuation. <i>Advanced Functional Materials</i> , 2014, 24, 7598-7604.	14.9	188
52	Design of a precise and robust linearized converter for optical encoders using a ratiometric technique. <i>Measurement Science and Technology</i> , 2014, 25, 125003.	2.6	43
53	Adjusting light distribution for generating microlens arrays with a controllable profile and fill factor. <i>Journal of Micromechanics and Microengineering</i> , 2014, 24, 125012.	2.6	5
54	Freestanding membrane composed of micro-ring array with ultrahigh sidewall aspect ratio for application in lightweight cathode arrays. <i>Applied Surface Science</i> , 2014, 322, 28-34.	6.1	3

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55	Fabrication of Microlens Arrays with Well-controlled Curvature by Liquid Trapping and Electrohydrodynamic Deformation in Microholes. <i>Advanced Materials</i> , 2012, 24, OP165-9, OP90.	21.0	48
56	A metal/insulator/metal field-emission cannon. <i>Nanotechnology</i> , 2011, 22, 455302.	2.6	11