Yong-Lai Zhang

List of Publications by Year
in descending order

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130 papers	9,812 citations	31949 53 h-index	37183 96 g-index
135 all docs	135 docs citations	135 times ranked	11208 citing authors

#	Article	IF	Citations
1	Laser-induced color centers in crystals. Optics and Laser Technology, 2022, 146, 107527.	2.2	14
2	Reprogrammable Soft Robot Actuation by Synergistic Magnetic and Light Fields. Advanced Functional Materials, 2022, 32, .	7.8	31
3	Multicoating Nanoarchitectonics for Facile Preparation of Multi-Responsive Paper Actuators. ACS Applied Materials & Interfaces, 2022, 14, 27242-27250.	4.0	6
4	Light-Driven Magnetic Encoding for Hybrid Magnetic Micromachines. Nano Letters, 2021, 21, 1628-1635.	4.5	17
5	Free-standing and flexible graphene supercapacitors of high areal capacitance fabricated by laser holography reduction of graphene oxide. Applied Physics Letters, 2021, 118, .	1.5	18
6	Bioinspired Soft Robots Based on the Moistureâ€Responsive Graphene Oxide. Advanced Science, 2021, 8, 2002464.	5.6	70
7	Directional Droplet Transport on Functional Surfaces with Superwettabilities. Advanced Materials Interfaces, 2021, 8, 2100043.	1.9	41
8	Electro-responsive actuators based on graphene. Innovation(China), 2021, 2, 100168.	5.2	26
9	Dynamics of Strong Coupling Between Free Charge Carriers in Organometal Halide Perovskites and Aluminum Plasmonic States. Frontiers in Chemistry, 2021, 9, 818459.	1.8	0
10	Laser Fabrication of Grapheneâ€Based Flexible Electronics. Advanced Materials, 2020, 32, e1901981.	11.1	312
11	A â€œYinâ€•â€œYangâ€•complementarity strategy for design and fabrication of dual-responsive bimorph actuators. Nano Energy, 2020, 68, 104302.	8.2	59
12	Femtosecond laser programmed artificial musculoskeletal systems. Nature Communications, 2020, 11, 4536.	5.8	117
13	Airflow Enhanced Solar Evaporation Based on Janus Graphene Membranes with Stable Interfacial Floatability. ACS Applied Materials & Interfaces, 2020, 12, 25435-25443.	4.0	93
14	Laser Fabrication of Bioinspired Graphene Surfaces With Superwettability. Frontiers in Chemistry, 2020, 8, 525.	1.8	10
15	Multi-field-coupling energy conversion for flexible manipulation of graphene-based soft robots. Nano Energy, 2020, 71, 104578.	8.2	44
16	Programmable deformation of patterned bimorph actuator swarm. National Science Review, 2020, 7, 775-785.	4.6	50
17	Bioinspired Zoom Compound Eyes Enable Variable-Focus Imaging. ACS Applied Materials & Interfaces, 2020, 12, 10107-10117.	4.0	50
18	In Situ Integration of SERS Sensors for Onâ€Chip Catalytic Reactions. Advanced Materials Technologies, 2020, 5, 1900963.	3.0	11

#	ARTICLE	IF	CITATIONS
19	Stretchable Textiles with Superwettabilities for Tunable Oilâ€Water Separation. ChemNanoMat, 2020, 6, 1111-1118.	1.5	6
20	Flexible Electronics: Laser Fabrication of Grapheneâ€Based Flexible Electronics (Adv. Mater. 15/2020). Advanced Materials, 2020, 32, 2070112.	11.1	5
21	Ag nanoparticle ink coupled with graphene oxide cellulose paper: a flexible and tunable SERS sensing platform. Optics Letters, 2020, 45, 4208.	1.7	13
22	Laser fabrication of graphene-based supercapacitors. Photonics Research, 2020, 8, 577.	3.4	35
23	Plasmonicâ€Assisted Graphene Oxide Artificial Muscles. Advanced Materials, 2019, 31, e1806386.	11.1	134
24	Actuators: Quantum-Confined-Superfluidics-Enabled Moisture Actuation Based on Unilaterally Structured Graphene Oxide Papers (Adv. Mater. 32/2019). Advanced Materials, 2019, 31, 1970231.	11.1	6
25	Smart Compound Eyes Enable Tunable Imaging. Advanced Functional Materials, 2019, 29, 1903340.	7.8	66
26	Laser Programmable Patterning of RGO/GO Janus Paper for Multiresponsive Actuators. Advanced Materials Technologies, 2019, 4, 1900554.	3.0	38
27	Femtosecond laser fabrication of 3D templates for mass production of artificial compound eyes. Nami Jishu Yu Jingmi Gongcheng/Nanotechnology and Precision Engineering, 2019, 2, 110-117.	1.7	20
28	Gradient Assembly of Polymer Nanospheres and Graphene Oxide Sheets for Dual-Responsive Soft Actuators. ACS Applied Materials & Interfaces, 2019, 11, 37130-37138.	4.0	32
29	Versatile Electronic Skins with Biomimetic Micronanostructures Fabricated Using Natural Reed Leaves as Templates. ACS Applied Materials & Interfaces, 2019, 11, 38084-38091.	4.0	50
30	Dual-3D Femtosecond Laser Nanofabrication Enables Dynamic Actuation. ACS Nano, 2019, 13, 4041-4048.	7.3	90
31	Quantumâ€Confinedâ€Superfluidicsâ€Enabled Moisture Actuation Based on Unilaterally Structured Graphene Oxide Papers. Advanced Materials, 2019, 31, e1901585.	11.1	78
32	High-Efficiency Spiral Zone Plates in Sapphire. IEEE Photonics Technology Letters, 2019, 31, 979-982.	1.3	9
33	Rapid Engraving of Artificial Compound Eyes from Curved Sapphire Substrate. Advanced Functional Materials, 2019, 29, 1900037.	7.8	60
34	Direct laser writing of flexible planar supercapacitors based on GO and black phosphorus quantum dot nanocomposites. Nanoscale, 2019, 11, 9133-9140.	2.8	41
35	A complementary strategy for producing moisture and alkane dual-responsive actuators based on graphene oxide and PDMS bimorph. Sensors and Actuators B: Chemical, 2019, 290, 133-139.	4.0	35
36	Laser fabrication of graphene-based soft robots. Journal of Semiconductors, 2019, 40, 120401.	2.0	0

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37	Nacre-inspired moisture-responsive graphene actuators with robustness and self-healing properties. Nanoscale, 2019, 11, 20614-20619.	2.8	26
38	Programmable Laser Patterning of Ag Nanoparticles and Reduced Graphene Oxide Hybrid Electrodes for Nonenzymatic Hydrogen Peroxide Detection. ACS Applied Nano Materials, 2019, 2, 7989-7996.	2.4	18
39	Kraft Mesh Origami for Efficient Oilâ€“Water Separation. Langmuir, 2019, 35, 815-823.	1.6	13
40	Laser fabrication of graphene-based electrothermal actuators enabling predicable deformation. Optics Letters, 2019, 44, 1363.	1.7	26
41	Hierarchically structuring and synchronous photoreduction of graphene oxide films by laser holography for supercapacitors. Optics Letters, 2019, 44, 1714.	1.7	8
42	Pneumatic smart surfaces with rapidly switchable dominant and latent superhydrophobicity. NPG Asia Materials, 2018, 10, e470-e470.	3.8	37
43	Wearable Superhydrophobic Elastomer Skin with Switchable Wettability. Advanced Functional Materials, 2018, 28, 1800625.	7.8	115
44	Laser Reduction of Nitrogen-Rich Carbon Nanoparticles@Graphene Oxides Composites for High Rate Performance Supercapacitors. ACS Applied Nano Materials, 2018, 1, 777-784.	2.4	17
45	Reed Leaf-Inspired Graphene Films with Anisotropic Superhydrophobicity. ACS Applied Materials & Interfaces, 2018, 10, 18416-18425.	4.0	43
46	Intense Femtosecond Laser-Mediated Electrical Discharge Enables Preparation of Amorphous Nickel Phosphide Nanoparticles. Langmuir, 2018, 34, 5712-5718.	1.6	6
47	Improved NO2 Gas Sensing Properties of Graphene Oxide Reduced by Two-beam-laser Interference. Scientific Reports, 2018, 8, 4918.	1.6	66
48	Biomimetic Graphene Actuators Enabled by Multiresponse Graphene Oxide Paper with Pretailored Reduction Gradient. Advanced Materials Technologies, 2018, 3, 1800258.	3.0	40
49	Fabrication of flexible room-temperature NO2 sensors by direct laser writing of In2O3 and graphene oxide composites. Sensors and Actuators B: Chemical, 2018, 277, 114-120.	4.0	46
50	Direct laser scribing of AgNPs@RGO biochip as a reusable SERS sensor for DNA detection. Sensors and Actuators B: Chemical, 2018, 270, 500-507.	4.0	58
51	Femtosecond laser direct writing of ion exchangeable multifunctional microstructures. Optics Letters, 2018, 43, 1139.	1.7	6
52	Femtosecondâ€Laser Direct Writing of Metallic Micro/Nanostructures: From Fabrication Strategies to Future Applications. Small Methods, 2018, 2, 1700413.	4.6	95
53	Carbonâ€Based Photothermal Actuators. Advanced Functional Materials, 2018, 28, 1802235.	7.8	297
54	Directly drawing high-performance capacitive sensors on copying tissues. Nanoscale, 2018, 10, 17002-17006.	2.8	36

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55	Wet-etching-assisted femtosecond laser holographic processing of a sapphire concave microlens array. Applied Optics, 2018, 57, 9604.	0.9	24
56	Onâ€chip laser processing for the development of multifunctional microfluidic chips. Laser and Photonics Reviews, 2017, 11, 1600116.	4.4	57
57	Sensitively Humidityâ€Driven Actuator Based on Photopolymerizable PEGâ€DA Films. Advanced Materials Interfaces, 2017, 4, 1601002.	1.9	101
58	Sunlightâ€Reduced Graphene Oxides as Sensitive Moisture Sensors for Smart Device Design. Advanced Materials Technologies, 2017, 2, 1700045.	3.0	45
59	Mosquito eyes inspired surfaces with robust antireflectivity and superhydrophobicity. Surface and Coatings Technology, 2017, 316, 85-92.	2.2	24
60	Femtosecond Laser Direct Writing of Plasmonic Ag/Pd Alloy Nanostructures Enables Flexible Integration of Robust SERS Substrates. Advanced Materials Technologies, 2017, 2, 1600270.	3.0	33
61	Laser-structured Janus wire mesh for efficient oilâ€“water separation. Nanoscale, 2017, 9, 17933-17938.	2.8	89
62	Biomimetic super hydrophobic structured graphene on stainless steel surface by laser processing and transfer technology. Surface and Coatings Technology, 2017, 328, 152-160.	2.2	24
63	Direct Laser Writing of Superhydrophobic PDMS Elastomers for Controllable Manipulation via Marangoni Effect. Advanced Functional Materials, 2017, 27, 1702946.	7.8	109
64	Facile Fabrication of High-Performance Humidity Sensors by Flash Reduction of GO. IEEE Sensors Journal, 2017, 17, 5285-5289.	2.4	16
65	Facile fabrication of moisture responsive graphene actuators by moderate flash reduction of graphene oxides films. Optical Materials Express, 2017, 7, 2617.	1.6	16
66	Facile fabrication of flexible graphene FETs by sunlight reduction of graphene oxide. Optics Letters, 2017, 42, 3403.	1.7	5
67	Surface and Interface Engineering of Graphene Oxide Films by Controllable Photoreduction. Chemical Record, 2016, 16, 1244-1255.	2.9	29
68	Bioinspired fewâ€layer graphene prepared by chemical vapor deposition on femtosecond laserâ€structured Cu foil. Laser and Photonics Reviews, 2016, 10, 441-450.	4.4	46
69	Femtosecond Laser Direct Writing of Flexible All-Reduced Graphene Oxide FET. IEEE Photonics Technology Letters, 2016, 28, 1996-1999.	1.3	21
70	Superhydrophobic SERS chip based on a Ag coated natural taro-leaf. Nanoscale, 2016, 8, 11487-11493.	2.8	82
71	Integrated optofluidic-microfluidic twin channels: toward diverse application of lab-on-a-chip systems. Scientific Reports, 2016, 6, 19801.	1.6	23
72	Lightâ€Mediated Manufacture and Manipulation of Actuators. Advanced Materials, 2016, 28, 8328-8343.	11.1	186

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73	Efficient and mechanically robust stretchable organic light-emitting devices by a laser-programmable buckling process. Nature Communications, 2016, 7, 11573.	5.8	182
74	Graphene quantum dots prepared from chemical exfoliation of multiwall carbon nanotubes: An efficient photocatalyst promoter. Catalysis Communications, 2016, 74, 104-109.	1.6	51
75	Photodynamic assembly of nanoparticles towards designable patterning. Nanoscale Horizons, 2016, 1, 201-211.	4.1	16
76	Flame treatment of graphene oxides: cost-effective production of nanoporous graphene electrode for Lithium-ion batteries. Scientific Reports, 2015, 5, 17522.	1.6	16
77	Bioinspired Graphene Actuators Prepared by Unilateral UV Irradiation of Graphene Oxide Papers. Advanced Functional Materials, 2015, 25, 4548-4557.	7.8	219
78	Controllable assembly of silver nanoparticles induced by femtosecond laser direct writing. Science and Technology of Advanced Materials, 2015, 16, 024805.	2.8	25
79	Superhydrophobic SERS Substrates Based on Silver-Coated Reduced Graphene Oxide Gratings Prepared by Two-Beam Laser Interference. ACS Applied Materials & Interfaces, 2015, 7, 27059-27065.	4.0	38
80	SERSâ€Enabled Labâ€onâ€aâ€Chip Systems. Advanced Optical Materials, 2015, 3, 618-633.	3.6	94
81	Graphene: Moisture-Responsive Graphene Paper Prepared by Self-Controlled Photoreduction (Adv.) Tj ETQq1 1 0.784314 rgBT /Overlo	11.1	0
82	Recent developments in superhydrophobic graphene and graphene-related materials: from preparation to potential applications. Nanoscale, 2015, 7, 7101-7114.	2.8	144
83	Plasmonic nanopillar array embedded microfluidic chips: an in situ SERS monitoring platform. Journal of Materials Chemistry A, 2015, 3, 6408-6413.	5.2	43
84	Bioinspired Underwater Superoleophobic Membrane Based on a Graphene Oxide Coated Wire Mesh for Efficient Oil/Water Separation. ACS Applied Materials & Interfaces, 2015, 7, 20930-20936.	4.0	177
85	Solvent-tunable PDMS microlens fabricated by femtosecond laser direct writing. Journal of Materials Chemistry C, 2015, 3, 1751-1756.	2.7	62
86	Moistureâ€Responsive Graphene Paper Prepared by Selfâ€Controlled Photoreduction. Advanced Materials, 2015, 27, 332-338.	11.1	214
87	Biomimetics: Bioinspired Fabrication of Superhydrophobic Graphene Films by Two-Beam Laser Interference (Adv. Funct. Mater. 29/2014). Advanced Functional Materials, 2014, 24, 4720-4720.	7.8	5
88	Common Origin of Green Luminescence in Carbon Nanodots and Graphene Quantum Dots. ACS Nano, 2014, 8, 2541-2547.	7.3	701
89	Photoreduction of Graphene Oxides: Methods, Properties, and Applications. Advanced Optical Materials, 2014, 2, 10-28.	3.6	235
90	Bioinspired Fabrication of Superhydrophobic Graphene Films by Twoâ€Beam Laser Interference. Advanced Functional Materials, 2014, 24, 4595-4602.	7.8	118

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91	Laserâ€Mediated Programmable N Doping and Simultaneous Reduction of Graphene Oxides. Advanced Optical Materials, 2014, 2, 120-125.	3.6	64
92	Arbitrary Shape Designable Microscale Organic Light-Emitting Devices by Using Femtosecond Laser Reduced Graphene Oxide as a Patterned Electrode. ACS Photonics, 2014, 1, 690-695.	3.2	47
93	Surface-Plasmon-Mediated Programmable Optical Nanofabrication of an Oriented Silver Nanoplate. ACS Nano, 2014, 8, 6682-6692.	7.3	49
94	In situ immobilization of tin dioxide nanoparticles by nanoporous polymers scaffold toward monolithic humidity sensing devices. Journal of Colloid and Interface Science, 2014, 431, 17-23.	5.0	3
95	Fabrication of photopolymer hierarchical micronanostructures by coupling electrospinning and photolithography for SERS substrates. Macromolecular Research, 2013, 21, 306-310.	1.0	9
96	Onâ€Chip Catalytic Microreactors for Modern Catalysis Research. ChemCatChem, 2013, 5, 2091-2099.	1.8	48
97	Theoretical characterization of reduction dynamics for graphene oxide by alkaline-earth metals. Carbon, 2013, 52, 122-127.	5.4	30
98	Direct Observation of Quantumâ€Confined Grapheneâ€Like States and Novel Hybrid States in Graphene Oxide by Transient Spectroscopy. Advanced Materials, 2013, 25, 6539-6545.	11.1	74
99	Programmable assembly of CdTe quantum dots into microstructures by femtosecond laser direct writing. Journal of Materials Chemistry C, 2013, 1, 4699.	2.7	27
100	Integrating functional components into microfluidic channels by laser nanofabrication technologies toward high-performance LoCs. , 2013, , .		0
101	Graphitic carbon quantum dots as a fluorescent sensing platform for highly efficient detection of Fe3+ ions. RSC Advances, 2013, 3, 3733.	1.7	246
102	Fabrication and multifunction integration of microfluidic chips by femtosecond laser direct writing. Lab on A Chip, 2013, 13, 1677.	3.1	168
103	Unraveling Bright Moleculeâ€Like State and Dark Intrinsic State in Greenâ€Fluorescence Graphene Quantum Dots via Ultrafast Spectroscopy. Advanced Optical Materials, 2013, 1, 264-271.	3.6	144
104	Bioinspired Photoelectric Conversion System Based on Carbon-Quantum-Dot-Doped Dyeâ€“Semiconductor Complex. ACS Applied Materials & Interfaces, 2013, 5, 5080-5084.	4.0	103
105	Silverâ€Coated Rose Petal: Green, Facile, Lowâ€Cost and Sustainable Fabrication of a SERS Substrate with Unique Superhydrophobicity and High Efficiency. Advanced Optical Materials, 2013, 1, 56-60.	3.6	102
106	â€œOverpassâ€•at the junction of a crossed microchannel: An enabler for 3D microfluidic chips. Lab on A Chip, 2012, 12, 3866.	3.1	31
107	Recent developments in superhydrophobic surfaces with unique structural and functional properties. Soft Matter, 2012, 8, 11217.	1.2	342
108	Biomimetic graphene films and their properties. Nanoscale, 2012, 4, 4858.	2.8	84

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109	Solvothermal synthesis of highly porous polymers and their controllable transition from macro/mesoporosity to meso/microporosity. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2012, 414, 327-332.	2.3	17
110	On-chip fabrication of silver microflower arrays as a catalytic microreactor for allowing in situSERS monitoring. Chemical Communications, 2012, 48, 1680-1682.	2.2	105
111	Highly efficient SERS test strips. Chemical Communications, 2012, 48, 5913.	2.2	100
112	Bandgap Tailoring and Synchronous Microdevices Patterning of Graphene Oxides. Journal of Physical Chemistry C, 2012, 116, 3594-3599.	1.5	111
113	Biomimetic Graphene Surfaces with Superhydrophobicity and Iridescence. Chemistry - an Asian Journal, 2012, 7, 301-304.	1.7	77
114	Two-beam-laser interference mediated reduction, patterning and nanostructuring of graphene oxide for the production of a flexible humidity sensing device. Carbon, 2012, 50, 1667-1673.	5.4	290
115	Hierarchical self-assembly of CdTe quantum dots into hyperbranched nanobundles: Suppression of biexciton Auger recombination. Nanoscale, 2011, 3, 2882.	2.8	19
116	Solvothermal Synthesis of Nanoporous Polymer Chalk for Painting Superhydrophobic Surfaces. Langmuir, 2011, 27, 12585-12590.	1.6	66
117	Solvent response of polymers for micromachine manipulation. Physical Chemistry Chemical Physics, 2011, 13, 4835.	1.3	33
118	Localized flexible integration of high-efficiency surface enhanced Raman scattering (SERS) monitors into microfluidic channels. Lab on A Chip, 2011, 11, 3347.	3.1	98
119	Homogeneous-like solid base catalysts based on pyridine-functionalized swelling porous polymers. Catalysis Communications, 2011, 12, 1212-1217.	1.6	19
120	High-Quality Large-Size Organic Crystals Prepared by Improved Physical Vapor Growth Technique and Their Optical Gain Properties. Journal of Physical Chemistry C, 2011, 115, 9171-9175.	1.5	28
121	Curvatureâ€Driven Reversible In Situ Switching Between Pinned and Rollâ€Down Superhydrophobic States for Water Droplet Transportation. Advanced Materials, 2011, 23, 545-549.	11.1	268
122	A SERSâ€active microfluidic device with tunable surface plasmon resonances. Electrophoresis, 2011, 32, 3378-3384.	1.3	53
123	Solvothermal fabrication of adsorptive polymer monolith with large nanopores towards biomolecules immobilization. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 380, 29-34.	2.3	15
124	Laser nanofabrication: Applications in micro-optics, micro-electronics, micromachines, and microfluidics. , 2011, , .		0
125	Ferrofluids for Fabrication of Remotely Controllable Microâ€Nanomachines by Twoâ€Photon Polymerization. Advanced Materials, 2010, 22, 3204-3207.	11.1	222
126	Designable 3D nanofabrication by femtosecond laser direct writing. Nano Today, 2010, 5, 435-448.	6.2	452

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127	Flexible Nanowiring of Metal on Nonplanar Substrates by Femtosecondâ€Laserâ€Induced Electroless Plating. Small, 2010, 6, 1762-1766.	5.2	114
128	Femtosecond laser direct patterning of sensing materials toward flexible integration of micronanosensors. Optics Letters, 2010, 35, 1695.	1.7	24
129	High performance magnetically controllable microturbines. Lab on A Chip, 2010, 10, 2902.	3.1	87
130	Embellishment of microfluidic devices via femtosecond laser micronanofabrication for chip functionalization. Lab on A Chip, 2010, 10, 1993.	3.1	81