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	Common Origin of Green Luminescence in Carbon Nanodots and Graphene Quantum Dots. ACS Nano, 2014, 8, 2541-2547.	7.3	701
2	Designable 3D nanofabrication by femtosecond laser direct writing. Nano Today, 2010, 5, 435-448.	6.2	452
3	Recent developments in superhydrophobic surfaces with unique structural and functional properties. Soft Matter, 2012, 8, 11217.	1.2	342
4	Laser Fabrication of Grapheneâ€Based Flexible Electronics. Advanced Materials, 2020, 32, e1901981.	11.1	312
5	Carbonâ€Based Photothermal Actuators. Advanced Functional Materials, 2018, 28, 1802235.	7.8	297
6	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
7	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
8	Graphitic carbon quantum dots as a fluorescent sensing platform for highly efficient detection of Fe3+ ions. RSC Advances, 2013, 3, 3733.	1.7	246
9	Photoreduction of Graphene Oxides: Methods, Properties, and Applications. Advanced Optical Materials, 2014, 2, 10-28.	3.6	235
10	Ferrofluids for Fabrication of Remotely Controllable Microâ€Nanomachines by Twoâ€Photon Polymerization. Advanced Materials, 2010, 22, 3204-3207.	11.1	222
11	Bioinspired Graphene Actuators Prepared by Unilateral UV Irradiation of Graphene Oxide Papers. Advanced Functional Materials, 2015, 25, 4548-4557.	7.8	219
12	Moistureâ€Responsive Graphene Paper Prepared by Selfâ€Controlled Photoreduction. Advanced Materials, 2015, 27, 332-338.	11.1	214
13	Lightâ€Mediated Manufacture and Manipulation of Actuators. Advanced Materials, 2016, 28, 8328-8343.	11.1	186
14	Efficient and mechanically robust stretchable organic light-emitting devices by a laser-programmable buckling process. Nature Communications, 2016, 7, 11573.	5.8	182
15	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
16	Fabrication and multifunction integration of microfluidic chips by femtosecond laser direct writing. Lab on A Chip, 2013, 13, 1677.	3.1	168
17	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
18	Recent developments in superhydrophobic graphene and graphene-related materials: from preparation to potential applications. Nanoscale, 2015, 7, 7101-7114.	2.8	144

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19	Plasmonicâ€Assisted Graphene Oxide Artificial Muscles. Advanced Materials, 2019, 31, e1806386.	11.1	134
20	Bioinspired Fabrication of Superhydrophobic Graphene Films by Twoâ€Beam Laser Interference. Advanced Functional Materials, 2014, 24, 4595-4602.	7.8	118
21	Femtosecond laser programmed artificial musculoskeletal systems. Nature Communications, 2020, 11, 4536.	5.8	117
22	Wearable Superhydrophobic Elastomer Skin with Switchable Wettability. Advanced Functional Materials, 2018, 28, 1800625.	7.8	115
23	Flexible Nanowiring of Metal on Nonplanar Substrates by Femtosecondâ€Laserâ€Induced Electroless Plating. Small, 2010, 6, 1762-1766.	5.2	114
24	Bandgap Tailoring and Synchronous Microdevices Patterning of Graphene Oxides. Journal of Physical Chemistry C, 2012, 116, 3594-3599.	1.5	111
25	Direct Laser Writing of Superhydrophobic PDMS Elastomers for Controllable Manipulation via Marangoni Effect. Advanced Functional Materials, 2017, 27, 1702946.	7.8	109
26	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
27	Bioinspired Photoelectric Conversion System Based on Carbon-Quantum-Dot-Doped Dyeâ€“Semiconductor Complex. ACS Applied Materials & Interfaces, 2013, 5, 5080-5084.	4.0	103
28	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
29	Sensitively Humidityâ€Driven Actuator Based on Photopolymerizable PEGâ€DA Films. Advanced Materials Interfaces, 2017, 4, 1601002.	1.9	101
30	Highly efficient SERS test strips. Chemical Communications, 2012, 48, 5913.	2.2	100
31	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
32	Femtosecondâ€Laser Direct Writing of Metallic Micro/Nanostructures: From Fabrication Strategies to Future Applications. Small Methods, 2018, 2, 1700413.	4.6	95
33	SERSâ€Enabled Labâ€onâ€aâ€Chip Systems. Advanced Optical Materials, 2015, 3, 618-633.	3.6	94
34	Airflow Enhanced Solar Evaporation Based on Janus Graphene Membranes with Stable Interfacial Floatability. ACS Applied Materials & Interfaces, 2020, 12, 25435-25443.	4.0	93
35	Dual-3D Femtosecond Laser Nanofabrication Enables Dynamic Actuation. ACS Nano, 2019, 13, 4041-4048.	7.3	90
36	Laser-structured Janus wire mesh for efficient oilâ€“water separation. Nanoscale, 2017, 9, 17933-17938.	2.8	89

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37	High performance magnetically controllable microturbines. Lab on A Chip, 2010, 10, 2902.	3.1	87
38	Biomimetic graphene films and their properties. Nanoscale, 2012, 4, 4858.	2.8	84
39	Superhydrophobic SERS chip based on a Ag coated natural taro-leaf. Nanoscale, 2016, 8, 11487-11493.	2.8	82
40	Embellishment of microfluidic devices via femtosecond laser micronanofabrication for chip functionalization. Lab on A Chip, 2010, 10, 1993.	3.1	81
41	Quantumâ€Confinedâ€Superfluidicsâ€Enabled Moisture Actuation Based on Unilaterally Structured Graphene Oxide Papers. Advanced Materials, 2019, 31, e1901585.	11.1	78
42	Biomimetic Graphene Surfaces with Superhydrophobicity and Iridescence. Chemistry - an Asian Journal, 2012, 7, 301-304.	1.7	77
43	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
44	Bioinspired Soft Robots Based on the Moistureâ€Responsive Graphene Oxide. Advanced Science, 2021, 8, 2002464.	5.6	70
45	Solvothermal Synthesis of Nanoporous Polymer Chalk for Painting Superhydrophobic Surfaces. Langmuir, 2011, 27, 12585-12590.	1.6	66
46	Improved NO2 Gas Sensing Properties of Graphene Oxide Reduced by Two-beam-laser Interference. Scientific Reports, 2018, 8, 4918.	1.6	66
47	Smart Compound Eyes Enable Tunable Imaging. Advanced Functional Materials, 2019, 29, 1903340.	7.8	66
48	Laserâ€Mediated Programmable N Doping and Simultaneous Reduction of Graphene Oxides. Advanced Optical Materials, 2014, 2, 120-125.	3.6	64
49	Solvent-tunable PDMS microlens fabricated by femtosecond laser direct writing. Journal of Materials Chemistry C, 2015, 3, 1751-1756.	2.7	62
50	Rapid Engraving of Artificial Compound Eyes from Curved Sapphire Substrate. Advanced Functional Materials, 2019, 29, 1900037.	7.8	60
51	A â€œYinâ€•â€œYangâ€•complementarity strategy for design and fabrication of dual-responsive bimorph actuators. Nano Energy, 2020, 68, 104302.	8.2	59
52	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
53	Onâ€chip laser processing for the development of multifunctional microfluidic chips. Laser and Photonics Reviews, 2017, 11, 1600116.	4.4	57
54	A SERSâ€active microfluidic device with tunable surface plasmon resonances. Electrophoresis, 2011, 32, 3378-3384.	1.3	53

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55	Graphene quantum dots prepared from chemical exfoliation of multiwall carbon nanotubes: An efficient photocatalyst promoter. Catalysis Communications, 2016, 74, 104-109.	1.6	51
56	Versatile Electronic Skins with Biomimetic Micronanostructures Fabricated Using Natural Reed Leaves as Templates. ACS Applied Materials & Interfaces, 2019, 11, 38084-38091.	4.0	50
57	Programmable deformation of patterned bimorph actuator swarm. National Science Review, 2020, 7, 775-785.	4.6	50
58	Bioinspired Zoom Compound Eyes Enable Variable-Focus Imaging. ACS Applied Materials & Interfaces, 2020, 12, 10107-10117.	4.0	50
59	Surface-Plasmon-Mediated Programmable Optical Nanofabrication of an Oriented Silver Nanoplate. ACS Nano, 2014, 8, 6682-6692.	7.3	49
60	Onâ€Chip Catalytic Microreactors for Modern Catalysis Research. ChemCatChem, 2013, 5, 2091-2099.	1.8	48
61	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
62	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
63	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
64	Sunlightâ€Reduced Graphene Oxides as Sensitive Moisture Sensors for Smart Device Design. Advanced Materials Technologies, 2017, 2, 1700045.	3.0	45
65	Multi-field-coupling energy conversion for flexible manipulation of graphene-based soft robots. Nano Energy, 2020, 71, 104578.	8.2	44
66	Plasmonic nanopillar array embedded microfluidic chips: an in situ SERS monitoring platform. Journal of Materials Chemistry A, 2015, 3, 6408-6413.	5.2	43
67	Reed Leaf-Inspired Graphene Films with Anisotropic Superhydrophobicity. ACS Applied Materials & Interfaces, 2018, 10, 18416-18425.	4.0	43
68	Direct laser writing of flexible planar supercapacitors based on GO and black phosphorus quantum dot nanocomposites. Nanoscale, 2019, 11, 9133-9140.	2.8	41
69	Directional Droplet Transport on Functional Surfaces with Superwettabilities. Advanced Materials Interfaces, 2021, 8, 2100043.	1.9	41
70	Biomimetic Graphene Actuators Enabled by Multiresponse Graphene Oxide Paper with Pretailored Reduction Gradient. Advanced Materials Technologies, 2018, 3, 1800258.	3.0	40
71	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
72	Laser Programmable Patterning of RGO/GO Janus Paper for Multiresponsive Actuators. Advanced Materials Technologies, 2019, 4, 1900554.	3.0	38

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73	Pneumatic smart surfaces with rapidly switchable dominant and latent superhydrophobicity. NPG Asia Materials, 2018, 10, e470-e470.	3.8	37
74	Directly drawing high-performance capacitive sensors on copying tissues. Nanoscale, 2018, 10, 17002-17006.	2.8	36
75	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
76	Laser fabrication of graphene-based supercapacitors. Photonics Research, 2020, 8, 577.	3.4	35
77	Solvent response of polymers for micromachine manipulation. Physical Chemistry Chemical Physics, 2011, 13, 4835.	1.3	33
78	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
79	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
80	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
81	Reprogrammable Soft Robot Actuation by Synergistic Magnetic and Light Fields. Advanced Functional Materials, 2022, 32, .	7.8	31
82	Theoretical characterization of reduction dynamics for graphene oxide by alkaline-earth metals. Carbon, 2013, 52, 122-127.	5.4	30
83	Surface and Interface Engineering of Graphene Oxide Films by Controllable Photoreduction. Chemical Record, 2016, 16, 1244-1255.	2.9	29
84	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
85	Programmable assembly of CdTe quantum dots into microstructures by femtosecond laser direct writing. Journal of Materials Chemistry C, 2013, 1, 4699.	2.7	27
86	Nacre-inspired moisture-responsive graphene actuators with robustness and self-healing properties. Nanoscale, 2019, 11, 20614-20619.	2.8	26
87	Electro-responsive actuators based on graphene. Innovation(China), 2021, 2, 100168.	5.2	26
88	Laser fabrication of graphene-based electrothermal actuators enabling predicable deformation. Optics Letters, 2019, 44, 1363.	1.7	26
89	Controllable assembly of silver nanoparticles induced by femtosecond laser direct writing. Science and Technology of Advanced Materials, 2015, 16, 024805.	2.8	25
90	Femtosecond laser direct patterning of sensing materials toward flexible integration of micronanosensors. Optics Letters, 2010, 35, 1695.	1.7	24

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91	Mosquito eyes inspired surfaces with robust antireflectivity and superhydrophobicity. Surface and Coatings Technology, 2017, 316, 85-92.	2.2	24
92	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
93	Wet-etching-assisted femtosecond laser holographic processing of a sapphire concave microlens array. Applied Optics, 2018, 57, 9604.	0.9	24
94	Integrated optofluidic-microfluidic twin channels: toward diverse application of lab-on-a-chip systems. Scientific Reports, 2016, 6, 19801.	1.6	23
95	Femtosecond Laser Direct Writing of Flexible All-Reduced Graphene Oxide FET. IEEE Photonics Technology Letters, 2016, 28, 1996-1999.	1.3	21
96	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
97	Hierarchical self-assembly of CdTe quantum dots into hyperbranched nanobundles: Suppression of biexciton Auger recombination. Nanoscale, 2011, 3, 2882.	2.8	19
98	Homogeneous-like solid base catalysts based on pyridine-functionalized swelling porous polymers. Catalysis Communications, 2011, 12, 1212-1217.	1.6	19
99	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
100	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
101	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
102	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
103	Light-Driven Magnetic Encoding for Hybrid Magnetic Micromachines. Nano Letters, 2021, 21, 1628-1635.	4.5	17
104	Flame treatment of graphene oxides: cost-effective production of nanoporous graphene electrode for Lithium-ion batteries. Scientific Reports, 2015, 5, 17522.	1.6	16
105	Photodynamic assembly of nanoparticles towards designable patterning. Nanoscale Horizons, 2016, 1, 201-211.	4.1	16
106	Facile Fabrication of High-Performance Humidity Sensors by Flash Reduction of GO. IEEE Sensors Journal, 2017, 17, 5285-5289.	2.4	16
107	Facile fabrication of moisture responsive graphene actuators by moderate flash reduction of graphene oxides films. Optical Materials Express, 2017, 7, 2617.	1.6	16
108	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

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109	Laser-induced color centers in crystals. Optics and Laser Technology, 2022, 146, 107527.	2.2	14
110	Kraft Mesh Origami for Efficient Oilâ€“Water Separation. Langmuir, 2019, 35, 815-823.	1.6	13
111	Ag nanoparticle ink coupled with graphene oxide cellulose paper: a flexible and tunable SERS sensing platform. Optics Letters, 2020, 45, 4208.	1.7	13
112	In Situ Integration of SERS Sensors for Onâ€Chip Catalytic Reactions. Advanced Materials Technologies, 2020, 5, 1900963.	3.0	11
113	Laser Fabrication of Bioinspired Graphene Surfaces With Superwettability. Frontiers in Chemistry, 2020, 8, 525.	1.8	10
114	Fabrication of photopolymer hierarchical micronanostructures by coupling electrospinning and photolithography for SERS substrates. Macromolecular Research, 2013, 21, 306-310.	1.0	9
115	High-Efficiency Spiral Zone Plates in Sapphire. IEEE Photonics Technology Letters, 2019, 31, 979-982.	1.3	9
116	Hierarchically structuring and synchronous photoreduction of graphene oxide films by laser holography for supercapacitors. Optics Letters, 2019, 44, 1714.	1.7	8
117	Intense Femtosecond Laser-Mediated Electrical Discharge Enables Preparation of Amorphous Nickel Phosphide Nanoparticles. Langmuir, 2018, 34, 5712-5718.	1.6	6
118	Femtosecond laser direct writing of ion exchangeable multifunctional microstructures. Optics Letters, 2018, 43, 1139.	1.7	6
119	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
120	Stretchable Textiles with Superwettabilities for Tunable Oilâ€Water Separation. ChemNanoMat, 2020, 6, 1111-1118.	1.5	6
121	Multicoating Nanoarchitectonics for Facile Preparation of Multi-Responsive Paper Actuators. ACS Applied Materials & Interfaces, 2022, 14, 27242-27250.	4.0	6
122	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
123	Flexible Electronics: Laser Fabrication of Grapheneâ€Based Flexible Electronics (Adv. Mater. 15/2020). Advanced Materials, 2020, 32, 2070112.	11.1	5
124	Facile fabrication of flexible graphene FETs by sunlight reduction of graphene oxide. Optics Letters, 2017, 42, 3403.	1.7	5
125	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
126	Laser nanofabrication: Applications in micro-optics, micro-electronics, micromachines, and microfluidics. , 2011, , .		0

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127	Integrating functional components into microfluidic channels by laser nanofabrication technologies toward high-performance LoCs. , 2013, , .		0
128	Graphene: Moisture-Responsive Graphene Paper Prepared by Self-Controlled Photoreduction (Adv.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	11.1	0
129	Laser fabrication of graphene-based soft robots. Journal of Semiconductors, 2019, 40, 120401.	2.0	0
130	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