

Li Zhang

List of Publications by Year in descending order

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papers

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9756

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293
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293
docs citations

293
times ranked

17107
citing authors

#	ARTICLE	IF	CITATIONS
1	Erythrocyte membrane-camouflaged polymeric nanoparticles as a biomimetic delivery platform. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 10980-10985.	3.3	1,749
2	Magnetic Helical Micromachines: Fabrication, Controlled Swimming, and Cargo Transport. Advanced Materials, 2012, 24, 811-816.	11.1	983
3	Artificial bacterial flagella: Fabrication and magnetic control. Applied Physics Letters, 2009, 94, .	1.5	932
4	Highly conductive NiCo ₂ S ₄ urchin-like nanostructures for high-rate pseudocapacitors. Nanoscale, 2013, 5, 8879.	2.8	848
5	Bio-inspired magnetic swimming microrobots for biomedical applications. Nanoscale, 2013, 5, 1259-1272.	2.8	652
6	Multifunctional biohybrid magnetite microrobots for imaging-guided therapy. Science Robotics, 2017, 2, .	9.9	594
7	How Should Microrobots Swim?. International Journal of Robotics Research, 2009, 28, 1434-1447.	5.8	563
8	All-Solid-State Flexible Ultrathin Micro-Supercapacitors Based on Graphene. Advanced Materials, 2013, 25, 4035-4042.	11.1	503
9	Characterizing the Swimming Properties of Artificial Bacterial Flagella. Nano Letters, 2009, 9, 3663-3667.	4.5	436
10	Fabrication and Characterization of Magnetic Microrobots for Three-Dimensional Cell Culture and Targeted Transportation. Advanced Materials, 2013, 25, 5863-5868.	11.1	360
11	Magnetically Driven Micro and Nanorobots. Chemical Reviews, 2021, 121, 4999-5041.	23.0	345
12	Ultra-extensible ribbon-like magnetic microswarm. Nature Communications, 2018, 9, 3260.	5.8	298
13	Artificial bacterial flagella for micromanipulation. Lab on A Chip, 2010, 10, 2203.	3.1	279
14	Magnetic Helical Microswimmers Functionalized with Lipoplexes for Targeted Gene Delivery. Advanced Functional Materials, 2015, 25, 1666-1671.	7.8	279
15	Controlled Propulsion and Cargo Transport of Rotating Nickel Nanowires near a Patterned Solid Surface. ACS Nano, 2010, 4, 6228-6234.	7.3	269
16	Trends in Micro-Nanorobotics: Materials Development, Actuation, Localization, and System Integration for Biomedical Applications. Advanced Materials, 2021, 33, e2002047.	11.1	256
17	Facilely synthesized porous NiCo ₂ O ₄ flowerlike nanostructure for high-rate supercapacitors. Journal of Power Sources, 2014, 248, 28-36.	4.0	248
18	Full synergistic contribution of electrodeposited three-dimensional NiCo ₂ O ₄ @MnO ₂ nanosheet networks electrode for asymmetric supercapacitors. Nano Energy, 2016, 27, 627-637.	8.2	232

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19	Magnetic Helical Micromachines. <i>Chemistry - A European Journal</i> , 2013, 19, 28-38.	1.7	214
20	Magnetite Nanostructured Porous Hollow Helical Microswimmers for Targeted Delivery. <i>Advanced Functional Materials</i> , 2015, 25, 5333-5342.	7.8	210
21	Facile Synthesis of Graphite/PEDOT/MnO ₂ Composites on Commercial Supercapacitor Separator Membranes as Flexible and High-Performance Supercapacitor Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 10506-10515.	4.0	205
22	Active generation and magnetic actuation of microrobotic swarms in bio-fluids. <i>Nature Communications</i> , 2019, 10, 5631.	5.8	204
23	Nanorobotic Spot Welding: Controlled Metal Deposition with Attogram Precision from Copper-Filled Carbon Nanotubes. <i>Nano Letters</i> , 2007, 7, 58-63.	4.5	194
24	Ultrasound Doppler-guided real-time navigation of a magnetic microswarm for active endovascular delivery. <i>Science Advances</i> , 2021, 7, .	4.7	186
25	Artificial Bacterial Flagella for Remote-Controlled Targeted Single-Cell Drug Delivery. <i>Small</i> , 2014, 10, 1953-1957.	5.2	178
26	Magnetic Actuation Based Motion Control for Microrobots: An Overview. <i>Micromachines</i> , 2015, 6, 1346-1364.	1.4	170
27	Metal-organic framework-based nanofiber filters for effective indoor air quality control. <i>Journal of Materials Chemistry A</i> , 2018, 6, 15807-15814.	5.2	169
28	Real-time tracking of fluorescent magnetic spore-based microrobots for remote detection of <i>C. diff</i> toxins. <i>Science Advances</i> , 2019, 5, eaau9650.	4.7	169
29	Magnetic Actuation Systems for Miniature Robots: A Review. <i>Advanced Intelligent Systems</i> , 2020, 2, 2000082.	3.3	164
30	Endoscopy-assisted magnetic navigation of biohybrid soft microrobots with rapid endoluminal delivery and imaging. <i>Science Robotics</i> , 2021, 6, .	9.9	164
31	Anomalous Coiling of SiGe/Si and SiGe/Si/Cr Helical Nanobelts. <i>Nano Letters</i> , 2006, 6, 1311-1317.	4.5	163
32	Elucidating the Intercalation Pseudocapacitance Mechanism of MoS ₂ -Carbon Monolayer Interoverlapped Superstructure: Toward High-Performance Sodium-Ion-Based Hybrid Supercapacitor. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 32745-32755.	4.0	156
33	Fabrication and Characterization of Three-Dimensional InGaAs/GaAs Nanosprings. <i>Nano Letters</i> , 2006, 6, 725-729.	4.5	155
34	Caging Nb ₂ O ₅ Nanowires in PECVD-Derived Graphene Capsules toward Bendable Sodium-Ion Hybrid Supercapacitors. <i>Advanced Materials</i> , 2018, 30, e1800963.	11.1	155
35	Selective Trapping and Manipulation of Microscale Objects Using Mobile Microvortices. <i>Nano Letters</i> , 2012, 12, 156-160.	4.5	153
36	Engineering layer structure of MoS ₂ -graphene composites with robust and fast lithium storage for high-performance Li-ion capacitors. <i>Energy Storage Materials</i> , 2017, 9, 195-205.	9.5	153

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37	Hierarchical Co ₃ O ₄ @PPy@MnO ₂ core-shell nanowire arrays for enhanced electrochemical energy storage. <i>Nano Energy</i> , 2014, 7, 42-51.	8.2	152
38	External Power-Driven Microrobotic Swarm: From Fundamental Understanding to Imaging-Guided Delivery. <i>ACS Nano</i> , 2021, 15, 149-174.	7.3	138
39	Sulfated hyaluronic acid hydrogels with retarded degradation and enhanced growth factor retention promote hMSC chondrogenesis and articular cartilage integrity with reduced hypertrophy. <i>Acta Biomaterialia</i> , 2017, 53, 329-342.	4.1	136
40	Graphene-coupled Ti ₃ C ₂ MXenes-derived TiO ₂ mesostructure: promising sodium-ion capacitor anode with fast ion storage and long-term cycling. <i>Journal of Materials Chemistry A</i> , 2018, 6, 1017-1027.	5.2	133
41	Four-dimensional direct laser writing of reconfigurable compound micromachines. <i>Materials Today</i> , 2020, 32, 19-25.	8.3	131
42	Pattern generation and motion control of a vortex-like paramagnetic nanoparticle swarm. <i>International Journal of Robotics Research</i> , 2018, 37, 912-930.	5.8	129
43	Controllable fabrication of SiGe/Si and SiGe/Si/Cr helical nanobelts. <i>Nanotechnology</i> , 2005, 16, 655-663.	1.3	128
44	Synthesis and characterization of a nanocomposite of goethite nanorods and reduced graphene oxide for electrochemical capacitors. <i>Journal of Solid State Chemistry</i> , 2012, 185, 191-197.	1.4	123
45	Facile fabrication and characterization of multi-type carbon-doped TiO ₂ for visible light-activated photocatalytic mineralization of gaseous toluene. <i>Journal of Materials Chemistry A</i> , 2013, 1, 4497.	5.2	122
46	Botanical-Inspired 4D Printing of Hydrogel at the Microscale. <i>Advanced Functional Materials</i> , 2020, 30, 1907377.	7.8	122
47	Targeted cargo delivery using a rotating nickel nanowire. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2012, 8, 1074-1080.	1.7	120
48	Engineering metal organic framework derived 3D nanostructures for high performance hybrid supercapacitors. <i>Journal of Materials Chemistry A</i> , 2017, 5, 292-302.	5.2	118
49	Enhanced Removal of Toxic Heavy Metals Using Swarming Biohybrid Adsorbents. <i>Advanced Functional Materials</i> , 2018, 28, 1806340.	7.8	118
50	Fabrication and Manipulation of Ciliary Microrobots with Non-reciprocal Magnetic Actuation. <i>Scientific Reports</i> , 2016, 6, 30713.	1.6	114
51	Asymmetric electrochemical capacitors with high energy and power density based on graphene/CoAl-LDH and activated carbon electrodes. <i>RSC Advances</i> , 2013, 3, 2483.	1.7	112
52	Reconfigurable Swarms of Ferromagnetic Colloids for Enhanced Local Hyperthermia. <i>Advanced Functional Materials</i> , 2018, 28, 1705701.	7.8	112
53	Artificial bacterial flagella functionalized with temperature-sensitive liposomes for controlled release. <i>Sensors and Actuators B: Chemical</i> , 2014, 196, 676-681.	4.0	109
54	Synthesis of multi-branched porous carbon nanofibers and their application in electrochemical double-layer capacitors. <i>Carbon</i> , 2006, 44, 1425-1428.	5.4	105

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55	Untethered small-scale magnetic soft robot with programmable magnetization and integrated multifunctional modules. <i>Science Advances</i> , 2022, 8, .	4.7	105
56	On-Demand Disassembly of Paramagnetic Nanoparticle Chains for Microrobotic Cargo Delivery. <i>IEEE Transactions on Robotics</i> , 2017, 33, 1213-1225.	7.3	104
57	Superparamagnetic microrobots: fabrication by two-photon polymerization and biocompatibility. <i>Biomedical Microdevices</i> , 2013, 15, 997-1003.	1.4	103
58	Optimization of Organic/Water Hybrid Electrolytes for High-Rate Carbon-Based Supercapacitor. <i>Advanced Functional Materials</i> , 2019, 29, 1904136.	7.8	102
59	Transition metal oxide and graphene nanocomposites for high-performance electrochemical capacitors. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 16331.	1.3	98
60	Influence of fiber diameter, filter thickness, and packing density on PM2.5 removal efficiency of electrospun nanofiber air filters for indoor applications. <i>Building and Environment</i> , 2020, 170, 106628.	3.0	98
61	Magnetically Tuning Tether Mobility of Integrin Ligand Regulates Adhesion, Spreading, and Differentiation of Stem Cells. <i>Nano Letters</i> , 2017, 17, 1685-1695.	4.5	96
62	Magnetic Microswarm Composed of Porous Nanocatalysts for Targeted Elimination of Biofilm Occlusion. <i>ACS Nano</i> , 2021, 15, 5056-5067.	7.3	94
63	Environmentally Adaptive Shape-Morphing Microrobots for Localized Cancer Cell Treatment. <i>ACS Nano</i> , 2021, 15, 18048-18059.	7.3	94
64	Nanogap Plasmonic Structures Fabricated by Switchable Capillary-Force Driven Self-Assembly for Localized Sensing of Anticancer Medicines with Microfluidic SERS. <i>Advanced Functional Materials</i> , 2020, 30, 1909467.	7.8	91
65	Motion Control in Magnetic Microrobotics: From Individual and Multiple Robots to Swarms. <i>Annual Review of Control, Robotics, and Autonomous Systems</i> , 2021, 4, 509-534.	7.5	88
66	Stimuli-Responsive Actuator Fabricated by Dynamic Asymmetric Femtosecond Bessel Beam for <i>In Situ</i> Particle and Cell Manipulation. <i>ACS Nano</i> , 2020, 14, 5233-5242.	7.3	87
67	Assembly, Disassembly, and Anomalous Propulsion of Microscopic Helices. <i>Nano Letters</i> , 2013, 13, 4263-4268.	4.5	81
68	Nickel-Cobalt hydroxide microspheres electrodeposited on nickel cobaltite nanowires grown on Ni foam for high-performance pseudocapacitors. <i>Journal of Power Sources</i> , 2014, 267, 610-616.	4.0	81
69	Relationship between pressure drop and face velocity for electrospun nanofiber filters. <i>Energy and Buildings</i> , 2018, 158, 987-999.	3.1	81
70	Four-dimensional micro-building blocks. <i>Science Advances</i> , 2020, 6, eaav8219.	4.7	81
71	Mimicking the Structure and Function of Ant Bridges in a Reconfigurable Microswarm for Electronic Applications. <i>ACS Nano</i> , 2019, 13, 5999-6007.	7.3	80
72	Micro/Nanomachines: from Functionalization to Sensing and Removal. <i>Advanced Materials Technologies</i> , 2019, 4, 1800636.	3.0	79

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73	Dynamic Morphology and Swimming Properties of Rotating Miniature Swimmers With Soft Tails. IEEE/ASME Transactions on Mechatronics, 2019, 24, 924-934.	3.7	79
74	Foreign Direct Investment and the Formation of Global City-Regions in China. Regional Studies, 2007, 41, 979-994.	2.5	78
75	Bioinspired Superhydrophobic Fe ₃ O ₄ @Polydopamine@Ag Hybrid Nanoparticles for Liquid Marble and Oil Spill. Advanced Materials Interfaces, 2015, 2, 1500234.	1.9	76
76	Coupling effect between ultra-small Mn ₃ O ₄ nanoparticles and porous carbon microrods for hybrid supercapacitors. Energy Storage Materials, 2017, 6, 53-60.	9.5	72
77	Reconfigurable Magnetic Slime Robot: Deformation, Adaptability, and Multifunction. Advanced Functional Materials, 2022, 32, .	7.8	71
78	Real-Time Magnetic Navigation of a Rotating Colloidal Microswarm Under Ultrasound Guidance. IEEE Transactions on Biomedical Engineering, 2020, 67, 3403-3412.	2.5	70
79	Light-Driven Hovering of a Magnetic Microswarm in Fluid. ACS Nano, 2020, 14, 6990-6998.	7.3	69
80	Remote Control of Heterodimeric Magnetic Nanoswitch Regulates the Adhesion and Differentiation of Stem Cells. Journal of the American Chemical Society, 2018, 140, 5909-5913.	6.6	67
81	Collective Behavior of Reconfigurable Magnetic Droplets via Dynamic Self-Assembly. ACS Applied Materials & Interfaces, 2019, 11, 1630-1637.	4.0	66
82	Freestanding SiGe/Si/Cr and SiGe/Si/SixNy/Cr microtubes. Applied Physics Letters, 2004, 84, 3391-3393.	1.5	65
83	Noncytotoxic artificial bacterial flagella fabricated from biocompatible ORMOCOMP and iron coating. Journal of Materials Chemistry B, 2014, 2, 357-362.	2.9	64
84	Recent progress on micro- and nano-robots: towards in vivo tracking and localization. Quantitative Imaging in Medicine and Surgery, 2018, 8, 461-479.	1.1	64
85	Domino Reaction Encoded Heterogeneous Colloidal Microswarm with On-Demand Morphological Adaptability. Advanced Materials, 2021, 33, e2100070.	11.1	64
86	Three-dimensional nanosprings for electromechanical sensors. Sensors and Actuators A: Physical, 2006, 130-131, 54-61.	2.0	61
87	Statistics-Based Automated Control for a Swarm of Paramagnetic Nanoparticles in 2-D Space. IEEE Transactions on Robotics, 2020, 36, 254-270.	7.3	61
88	Autonomous environment-adaptive microrobot swarm navigation enabled by deep learning-based real-time distribution planning. Nature Machine Intelligence, 2022, 4, 480-493.	8.3	61
89	Experimental and modeling study of pressure drop across electrospun nanofiber air filters. Building and Environment, 2018, 142, 244-251.	3.0	60
90	Magnetic Microswarm and Fluoroscopy-Guided Platform for Biofilm Eradication in Biliary Stents. Advanced Materials, 2022, 34, e2201888.	11.1	60

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91	Reinterpretation of China's under-urbanization: a systemic perspective. <i>Habitat International</i> , 2003, 27, 459-483.	2.3	59
92	Dumbbell Fluidic Tweezers for Dynamical Trapping and Selective Transport of Microobjects. <i>Advanced Functional Materials</i> , 2017, 27, 1604571.	7.8	58
93	In-situ encapsulation of pseudocapacitive Li ₂ TiSiO ₅ nanoparticles into fibrous carbon framework for ultrafast and stable lithium storage. <i>Nano Energy</i> , 2019, 55, 173-181.	8.2	55
94	Real-Time Ultrasound Doppler Tracking and Autonomous Navigation of a Miniature Helical Robot for Accelerating Thrombolysis in Dynamic Blood Flow. <i>ACS Nano</i> , 2022, 16, 604-616.	7.3	55
95	Transdermal Delivery of siRNA through Microneedle Array. <i>Scientific Reports</i> , 2016, 6, 21422.	1.6	54
96	Targeted Single-Cell Therapeutics with Magnetic Tubular Micromotor by One-Step Exposure of Structured Femtosecond Optical Vortices. <i>Advanced Functional Materials</i> , 2019, 29, 1905745.	7.8	54
97	Collective Behaviors of Magnetic Active Matter: Recent Progress toward Reconfigurable, Adaptive, and Multifunctional Swarming Micro/Nanorobots. <i>Accounts of Chemical Research</i> , 2022, 55, 98-109.	7.6	53
98	Control and Autonomy of Microrobots: Recent Progress and Perspective. <i>Advanced Intelligent Systems</i> , 2022, 4, .	3.3	53
99	Localized non-contact manipulation using artificial bacterial flagella. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	52
100	Molecular cargo delivery using multicellular magnetic microswimmers. <i>Applied Materials Today</i> , 2019, 15, 242-251.	2.3	52
101	Magnetic helical micro-/nanomachines: Recent progress and perspective. <i>Matter</i> , 2022, 5, 77-109.	5.0	52
102	Propulsion Gait Analysis and Fluidic Trapping of Swinging Flexible Nanomotors. <i>ACS Nano</i> , 2021, 15, 5118-5128.	7.3	51
103	In situ construction of potato starch based carbon nanofiber/activated carbon hybrid structure for high-performance electrical double layer capacitor. <i>Journal of Power Sources</i> , 2012, 207, 199-204.	4.0	50
104	Automated Control of Magnetic Spore-Based Microrobot Using Fluorescence Imaging for Targeted Delivery With Cellular Resolution. <i>IEEE Transactions on Automation Science and Engineering</i> , 2020, 17, 490-501.	3.4	50
105	Nanostructured nickel-cobalt sulfide grown on nickel foam directly as supercapacitor electrodes with high specific capacitance. <i>Materials Chemistry and Physics</i> , 2016, 173, 317-324.	2.0	48
106	Magnetic Control of a Steerable Guidewire Under Ultrasound Guidance Using Mobile Electromagnets. <i>IEEE Robotics and Automation Letters</i> , 2021, 6, 1280-1287.	3.3	47
107	Model-Free Trajectory Tracking Control of Two-Particle Magnetic Microrobot. <i>IEEE Nanotechnology Magazine</i> , 2018, 17, 697-700.	1.1	46
108	Disassembly and spreading of magnetic nanoparticle clusters on uneven surfaces. <i>Applied Materials Today</i> , 2020, 18, 100489.	2.3	46

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109	Graphene-Based Helical Micromotors Constructed by "Microscale Liquid Rope-Coil Effect" with Microfluidics. ACS Nano, 2020, 14, 16600-16613.	7.3	46
110	Ultrasound Imaging and Tracking of Micro/Nanorobots: From Individual to Collectives. IEEE Open Journal of Nanotechnology, 2020, 1, 6-17.	0.9	46
111	Nanotube Fluidic Junctions: Internanotube Attogram Mass Transport through Walls. Nano Letters, 2009, 9, 210-214.	4.5	45
112	A Survey on Swarm Microrobotics. IEEE Transactions on Robotics, 2022, 38, 1531-1551.	7.3	45
113	Cooperative manipulation and transport of microobjects using multiple helical microcarriers. RSC Advances, 2014, 4, 26771-26776.	1.7	44
114	Scalable and sustainable synthesis of carbon microspheres via a purification-free strategy for sodium-ion capacitors. Journal of Power Sources, 2018, 379, 33-40.	4.0	44
115	Substrate Coupling Strength of Integrin-Binding Ligands Modulates Adhesion, Spreading, and Differentiation of Human Mesenchymal Stem Cells. Nano Letters, 2015, 15, 6592-6600.	4.5	43
116	Tribo-charge enhanced hybrid air filter masks for efficient particulate matter capture with greatly extended service life. Nano Energy, 2021, 85, 106015.	8.2	43
117	Fabrication and characterization of freestanding Si/Cr micro- and nanospirals. Microelectronic Engineering, 2006, 83, 1237-1240.	1.1	40
118	Non-ideal swimming of artificial bacterial flagella near a surface. , 2010, , .		40
119	Electrospun SF/PVA Nanofiber Filters for Highly Efficient PM $_{2.5}$ Capture. IEEE Nanotechnology Magazine, 2018, 17, 934-939.	1.1	40
120	Multi-stimuli-response programmable soft actuators with site-specific and anisotropic deformation behavior. Nano Energy, 2021, 88, 106254.	8.2	40
121	On-Demand Coalescence and Splitting of Liquid Marbles and Their Bioapplications. Advanced Science, 2019, 6, 1802033.	5.6	39
122	Free-standing Si/SiGe micro- and nano-objects. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 23, 280-284.	1.3	38
123	DeltaMag: An Electromagnetic Manipulation System with Parallel Mobile Coils. , 2019, , .		37
124	Independent Pattern Formation of Nanorod and Nanoparticle Swarms under an Oscillating Field. ACS Nano, 2021, 15, 4429-4439.	7.3	37
125	A method for assessing the performance of nanofiber films coated on window screens in reducing residential exposures to PM _{2.5} of outdoor origin in Beijing. Indoor Air, 2017, 27, 1190-1200.	2.0	36
126	A Miniature Flexible-Link Magnetic Swimming Robot With Two Vibration Modes: Design, Modeling and Characterization. IEEE Robotics and Automation Letters, 2017, 2, 2024-2031.	3.3	36

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127	Characterizing Nanoparticle Swarms With Tuneable Concentrations for Enhanced Imaging Contrast. IEEE Robotics and Automation Letters, 2019, 4, 2942-2949.	3.3	36
128	Magnetically Actuated Medical Robots: An in vivo Perspective. Proceedings of the IEEE, 2022, 110, 1028-1037.	16.4	36
129	Electrostatically Fabricated Three-Dimensional Magnetite and MXene Hierarchical Architecture for Advanced Lithium-Ion Capacitors. ACS Applied Materials & Interfaces, 2020, 12, 9226-9235.	4.0	35
130	Controlled Construction of Hierarchical Nanocomposites Consisting of MnO ₂ and PEDOT for High-Performance Supercapacitor Applications. ChemElectroChem, 2015, 2, 949-957.	1.7	34
131	Nanotube-like hard carbon as high-performance anode material for sodium ion hybrid capacitors. Science China Materials, 2018, 61, 285-295.	3.5	34
132	Magnetic polymer composite artificial bacterial flagella. Bioinspiration and Biomimetics, 2014, 9, 046014.	1.5	33
133	Bubble-Assisted Three-Dimensional Ensemble of Nanomotors for Improved Catalytic Performance. IScience, 2019, 19, 760-771.	1.9	33
134	Intelligent Polymer-Based Bioinspired Actuators: From Monofunction to Multifunction. Advanced Intelligent Systems, 2020, 2, 2000138.	3.3	33
135	Tethered and Untethered 3D Microactuators Fabricated by Two-Photon Polymerization: A Review. Micromachines, 2021, 12, 465.	1.4	33
136	Magnetically Powered Biodegradable Microswimmers. Micromachines, 2020, 11, 404.	1.4	32
137	A general anion exchange strategy to transform metal-organic framework embedded nanofibers into high-performance lithium-ion capacitors. Nano Energy, 2020, 75, 104935.	8.2	32
138	Reversible Swelling and Shrinking of Paramagnetic Nanoparticle Swarms in Biofluids With High Ionic Strength. IEEE/ASME Transactions on Mechatronics, 2019, 24, 154-163.	3.7	31
139	Engineering Multiwalled Carbon Nanotubes Inside a Transmission Electron Microscope Using Nanorobotic Manipulation. IEEE Nanotechnology Magazine, 2008, 7, 508-517.	1.1	30
140	Design and Real-Time Optimization for a Magnetic Actuation System With Enhanced Flexibility. IEEE/ASME Transactions on Mechatronics, 2021, 26, 1524-1535.	3.7	30
141	An Automated Microrobotic Platform for Rapid Detection of <i>C. diff</i> Toxins. IEEE Transactions on Biomedical Engineering, 2020, 67, 1517-1527.	2.5	29
142	Autonomous Navigation of Magnetic Microrobots in a Large Workspace Using Mobile-Coil System. IEEE/ASME Transactions on Mechatronics, 2021, 26, 3163-3174.	3.7	29
143	Reconfigurable Magnetic Microswarm for Accelerating tPA-Mediated Thrombolysis Under Ultrasound Imaging. IEEE/ASME Transactions on Mechatronics, 2022, 27, 2267-2277.	3.7	28
144	Carbon Helical Nanorobots Capable of Cell Membrane Penetration for Single Cell Targeted SERS Bio-Sensing and Photothermal Cancer Therapy. Advanced Functional Materials, 2022, 32, .	7.8	28

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145	Dual-Chirality Helical Nanobelts: Linear-to-Rotary Motion Converters for Three-Dimensional Microscopy. <i>Journal of Microelectromechanical Systems</i> , 2009, 18, 1047-1053.	1.7	27
146	Image-based 3D reconstruction using helical nanobelts for localized rotations. <i>Journal of Microscopy</i> , 2010, 237, 122-135.	0.8	27
147	Discrete-Time Optimal Control of Electromagnetic Coil Systems for Generation of Dynamic Magnetic Fields With High Accuracy. <i>IEEE/ASME Transactions on Mechatronics</i> , 2019, 24, 1208-1219.	3.7	27
148	Adaptive Pattern and Motion Control of Magnetic Microrobotic Swarms. <i>IEEE Transactions on Robotics</i> , 2022, 38, 1552-1570.	7.3	27
149	Nanorobotics for creating NEMS from 3D helical nanostructures. <i>Journal of Physics: Conference Series</i> , 2007, 61, 257-261.	0.3	26
150	A variable-width harmonic probe for multifrequency atomic force microscopy. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	26
151	Sodium storage in a promising MoS ₂ "carbon anode: elucidating structural and interfacial transitions in the intercalation process and conversion reactions. <i>Nanoscale</i> , 2018, 10, 11165-11175.	2.8	26
152	Molecular dynamics simulation of deformation accumulation in repeated nanometric cutting on single-crystal copper. <i>RSC Advances</i> , 2015, 5, 12678-12685.	1.7	25
153	Highly Acid-Resistant, Magnetically Steerable Acoustic Micromotors Prepared by Coating Gold Microrods with Fe ₃ O ₄ Nanoparticles via pH Adjustment. <i>Particle and Particle Systems Characterization</i> , 2017, 34, 1600277.	1.2	25
154	An optimization approach for fabricating electrospun nanofiber air filters with minimized pressure drop for indoor PM2.5 control. <i>Building and Environment</i> , 2021, 188, 107449.	3.0	25
155	Micro/Nanorobots in Antimicrobial Applications: Recent Progress, Challenges, and Opportunities. <i>Advanced Healthcare Materials</i> , 2022, 11, e2101991.	3.9	25
156	Ultra flexible SiGe/Si/Cr nanosprings. <i>Microelectronics Journal</i> , 2008, 39, 478-481.	1.1	24
157	Spore-derived color-tunable multi-doped carbon nanodots as sensitive nanosensors and intracellular imaging agents. <i>Sensors and Actuators B: Chemical</i> , 2018, 271, 128-136.	4.0	24
158	Light-Triggered Catalytic Performance Enhancement Using Magnetic Nanomotor Ensembles. <i>Research</i> , 2020, 2020, 6380794.	2.8	24
159	Decoupling and Reprogramming the Wiggling Motion of Midge Larvae Using a Soft Robotic Platform. <i>Advanced Materials</i> , 2022, 34, e2109126.	11.1	23
160	Closed-Loop Control of a Helmholtz Coil System for Accurate Actuation of Magnetic Microrobot Swarms. <i>IEEE Robotics and Automation Letters</i> , 2021, 6, 827-834.	3.3	22
161	Long-range linear elasticity and mechanical instability of self-scrolling binormal nanohelices under a uniaxial load. <i>Nanoscale</i> , 2011, 3, 4301.	2.8	21
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