Huaping Wang

List of Publications by Year
in descending order

78 papers	939 citations	516215 16 h-index	500791 28 g-index
79 all docs	79 docs citations	79 times ranked	1071 citing authors

#	Article	IF	Citations
1	Holographic Display-Based Control for High-Accuracy Photolithography of Cellular Micro-Scaffold With Heterogeneous Architecture. IEEE/ASME Transactions on Mechatronics, 2022, 27, 1117-1127.	3.7	3
2	Preparing cationic dyeable polyamide 6 filaments by combining the masterbatch technique with melt copolymerization. Textile Reseach Journal, 2022, 92, 511-524.	1.1	2
3	Controllable Melting and Flow of Ag in Self-Formed Amorphous Carbonaceous Shell for Nanointerconnection. Micromachines, 2022, 13, 213.	1.4	1
4	Bio-inspired engineering of a perfusion culture platform for guided three-dimensional nerve cell growth and differentiation. Lab on A Chip, 2022, 22, 1006-1017.	3.1	13
5	Highly flameâ€retardant and low toxic polybutylene succinate composites with functionalized <scp>BN</scp>@<scp>APP</scp> exfoliated by ball milling. Journal of Applied Polymer Science, 2022, 139, .	1.3	7
6	Electrically Controlled Aquatic Soft Actuators with Desynchronized Actuation and Light-Mediated Reciprocal Locomotion. ACS Applied Materials & Interfaces, 2022, 14, 12936-12948.	4.0	13
7	Accurate modulation of photoprinting under stiffness imaging feedback for engineering ECMs with high-fidelity mechanical properties. Microsystems and Nanoengineering, 2022, 8, .	3.4	3
8	A clamp-free micro-stretching system for evaluating the viscoelastic response of cell-laden microfibers. Biosensors and Bioelectronics, 2022, 214, 114517.	5.3	3
9	Ionic shape-morphing microrobotic end-effectors for environmentally adaptive targeting, releasing, and sampling. Nature Communications, 2021, 12, 411.	5.8	87
10	Automated Fabrication of the High-Fidelity Cellular Micro-Scaffold Through Proportion-Corrective Control of the Photocuring Process. IEEE Robotics and Automation Letters, 2021, 6, 849-854.	3.3	1
11	Pulsed Microfluid Force-Based On-Chip Modular Fabrication for Liver Lobule-Like 3D Cellular Models. Cyborg and Bionic Systems, 2021, 2021, .	3.7	13
12	Optimization of the Fluidic-Based Assembly for Three-Dimensional Construction of Multicellular Hydrogel Micro-Architecture in Mimicking Hepatic Lobule-like Tissues. Micromachines, 2021, 12, 1129.	1.4	0
13	Micro Robotic Manipulation System for the Force Stimulation of Muscle Fiber-like Cell Structure. , 2021, , .		1
14	Biped Walking of Magnetic Microrobot in Oscillating Field for Indirect Manipulation of Non-Magnetic Objects. IEEE Nanotechnology Magazine, 2020, 19, 21-24.	1.1	12
15	Large-Scale Spinning Approach to Engineering Knittable Hydrogel Fiber for Soft Robots. ACS Nano, 2020, 14, 14929-14938.	7.3	64
16	Fabrication of vascular smooth muscle-like tissues based on self-organization of circumferentially aligned cells in microengineered hydrogels. Lab on A Chip, 2020, 20, 3120-3131.	3.1	16
17	Permeable hollow 3D tissue-like constructs engineered by on-chip hydrodynamic-driven assembly of multicellular hierarchical micromodules. Acta Biomaterialia, 2020, 113, 328-338.	4.1	12
18	Template-based fabrication of spatially organized 3D bioactive constructs using magnetic low-concentration gelation methacrylate (GelMA) microfibers. Soft Matter, 2020, 16, 3902-3913.	1.2	4

#	Article	IF	Citations
19	Magnetically Actuated Pick-and-place Operations of Cellular Micro-rings for High-speed Assembly of Micro-scale Biological Tube. , 2020, , .		0
20	Design and Characterization of a 16-DOFs Nanorobotic Manipulation System for Repetitive and Pre-Programmable Tasks. IEEE Nanotechnology Magazine, 2019, 18, 1208-1212.	1.1	3
21	Three-Dimensional Autofocusing Visual Feedback for Automated Rare Cells Sorting in Fluorescence Microscopy. Micromachines, 2019, 10, 567.	1.4	3
22	Contact Annealing for Self-Soldering: In Situ Investigation into Interfaces between PVP-Coated Silver Nanoelectrodes and Carbon Nanotubes. ACS Applied Materials & Interfaces, 2019, 11, 36035-36043.	4.0	2
23	Magnetic Micromachine Using Nickel Nanoparticles for Propelling and Releasing in Indirect Assembly of Cell-Laden Micromodules. Micromachines, 2019, 10, 370.	1.4	11
24	3D Construction of Shape-Controllable Tissues through Self-Bonding of Multicellular Microcapsules. ACS Applied Materials & Interfaces, 2019, 11, 22950-22961.	4.0	18
25	Multicellular Co-Culture in Three-Dimensional Gelatin Methacryloyl Hydrogels for Liver Tissue Engineering. Molecules, 2019, 24, 1762.	1.7	34
26	Engineered tissue micro-rings fabricated from aggregated fibroblasts and microfibres for a bottom-up tissue engineering approach. Biofabrication, 2019, 11, 035029.	3.7	9
27	Nanorobot assisted self-soldering investigation between PVP-coated silver electrodes and carbon nanotubes. , 2019, , .		0
28	Automated Sorting of Rare Cells Based on Autofocusing Visual Feedback in Fluorescence Microscopy. , 2019, , .		4
29	Untethered Micromachines Using Magnetic Nanoparticles for Wireless Assembly of Cell-laden Heterogeneous Micromodules*. , 2019, , .		0
30	Fabrication of perfusable 3D hepatic lobule-like constructs through assembly of multiple cell type laden hydrogel microstructures. Biofabrication, 2019, 11, 015016.	3.7	35
31	Development of a Highly Compact Microgripper Capable of Online Calibration for Multisized Microobject Manipulation. IEEE Nanotechnology Magazine, 2018, 17, 657-661.	1.1	22
32	Automated Fluidic Assembly of Microvessel-Like Structures Using a Multimicromanipulator System. IEEE/ASME Transactions on Mechatronics, 2018, 23, 667-678.	3.7	19
33	Properties and phase morphology of cellulose/aromatic polysulfonamide alloy fibers regulated by the viscosity ratio of solution. Cellulose, 2018, 25, 903-914.	2.4	7
34	Microrobotic Assembly of Shape-Customized Three-Dimensional Microtissues Based on Surface Tension Driven Self-Alignment. IEEE Nanotechnology Magazine, 2018, 17, 684-687.	1.1	7
35	Construction of Multilayer Porous Scaffold Based on Magnetically Guided Assembly of Microfiber. Journal of Systems Science and Complexity, 2018, 31, 581-595.	1.6	1
36	Magnetic alginate microfibers as scaffolding elements for the fabrication of microvascular-like structures. Acta Biomaterialia, 2018, 66, 272-281.	4.1	45

#	Article	IF	Citations
37	Construction of 3D Micro-Tissue Based on Electrodeposition and Robotic Manipulation. , 2018, , .		1
38	3-D Visual Feedback for Automated Sorting of Cells with ultra-low Proportion under Dark Field. , 2018, , .		0
39	Assembly of Cellular Microstructures into Lobule-Like 3D Microtissues Based on Microrobotic Manipulation* Research supported by the Beijing Natural Science Foundation under Grant 4164099and the National Natural Science Foundation of China under grants 61603044and 61520106011.. , 2018, , .		0
40	Design and Online Calibration of a Highly Compact Microgripper. , 2018, , .		0
41	Microfluidic Spun Alginate Hydrogel Microfibers and Their Application in Tissue Engineering. Gels, 2018, 4, 38.	2.1	28
42	A Vision-Based Automated Manipulation System for the Pick-Up of Carbon Nanotubes. IEEE/ASME Transactions on Mechatronics, 2017, 22, 845-854.	3.7	35
43	How to achieve precise operation of a robotic manipulator on a macro to micro/nano scale. Assembly Automation, 2017, 37, 186-199.	1.0	8
44	Robotics-based micro-reeling of magnetic microfibers to fabricate helical structure for smooth muscle cells culture. , 2017, , .		4
45	3D assembly of carbon nanotubes for fabrication of field-effect transistors through nanomanipulation and electron-beam-induced deposition. Journal of Micromechanics and Microengineering, 2017, 27, 105007.	1.5	7
46	Assembly of RGD-Modified Hydrogel Micromodules into Permeable Three-Dimensional Hollow Microtissues Mimicking in Vivo Tissue Structures. ACS Applied Materials & Interfaces, 2017, 9, 41669-41679.	4.0	50
47	Magnetically-guided assembly of microfluidic fibers for ordered construction of diverse netlike modules. Journal of Micromechanics and Microengineering, 2017, 27, 125014.	1.5	4
48	Nanomanipulation of a single carbon nanotube for the fabrication of a field-effect transistor. , 2017, , .		1
49	Characterization of the Resistance and Force of a Carbon Nanotube/Metal Side Contact by Nanomanipulation. Scanning, 2017, 2017, 1-11.	0.7	26
50	Non-contact transportation and rotation of micro objects by vibrating glass needle circularly under water. , 2017, , .		2
51	Microrobotic assembly of shape-controllable microstructures to perfusable 3D cell-laden microtissues. , 2017, , .		0
52	Automated pick-up of carbon nanotubes inside a scanning electron microscope. , 2016, , .		1
53	Astridia velutina-like S, N-codoped hierarchical porous carbon from silk cocoon for superior oxygen reduction reaction. RSC Advances, 2016, 6, 73560-73565.	1.7	15
54	Magnetically-guided manipulation of microfiber for fabrication of porous cell scaffold. , 2016, , .		0

#	Article	IF	Citations
55	Non-contact high-speed rotation of micro targets by vibration of single piezoelectric actuator. , 2016, , .		4
56	High-Speed Bioassembly of Cellular Microstructures With Force Characterization for Repeating Single-Step Contact Manipulation. IEEE Robotics and Automation Letters, 2016, 1, 1097-1102.	3.3	3
57	Micromanipulation for Coiling Microfluidic Spun Alginate Microfibers by Magnetically Guided System. IEEE Robotics and Automation Letters, 2016, 1, 808-813.	3.3	8
58	Microbubbles for High-Speed Assembly of Cell-Laden Vascular-Like Microtube. IEEE Robotics and Automation Letters, 2016, 1, 754-759.	3.3	1
59	3D magnetic assembly of cellular structures with "printing" manipulation by microrobot-controlled microfluidic system. , 2015, , .		3
60	Automated bubble-based assembly of cell-laden microgels into vascular-like microtubes. , 2015, , .		2
61	Automated biomanipulation to assemble cellular microstructure with railed multi-microrobotic system. , 2015, , .		0
62	Three-dimensional magnetic assembly of alginate microfibers using microfluidic “printing” method. , 2015, , .		2
63	Automated Assembly of Vascular-Like Microtube With Repetitive Single-Step Contact Manipulation. IEEE Transactions on Biomedical Engineering, 2015, 62, 2620-2628.	2.5	58
64	Magnetic assembly of microfluidic spun alginate microfibers for fabricating three-dimensional cell-laden hydrogel constructs. Microfluidics and Nanofluidics, 2015, 19, 1169-1180.	1.0	31
65	Tuning the Charge Transport Property of Naphthalene Diimide Derivatives by Changing the Substituted Position of Fluorine Atom on Molecular Backbone. Chinese Journal of Chemistry, 2014, 32, 1057-1064.	2.6	9
66	3D assembly of cellular structures with coordinated manipulation by rail-guided multi-microrobotic system. , 2014, , .		3
67	Bubble-based assembly of micro-tube with coordinated multiple manipulators. , 2014, , .		0
68	Dexterous nanomanipulation of 2D hydrogel microstructure for 3D assembly by multi-robot cooperation. , 2014, , .		0
69	Micro-Assembly of a Vascular-Like Micro-Channel with Railed Micro-Robot Team-Coordinated Manipulation. International Journal of Advanced Robotic Systems, 2014, 11, 115.	1.3	16
70	Magnetic manipulation for spatially patternel alginate hydrogel microfibers. , 2013, , .		1
71	Fabrication of multilayered tube-shaped microstructures embedding cells inside microfluidic devices. , 2013, , .		1
72	Assembly of 3D cell-laden constructs based on rail-guided dextrous stick coordination manipulation. , 2013, , .		1

#	Article	IF	Citations
73	Fabrication and assembly of multi-layered microstructures embedding cells inside microfluidic devices. , 2013, , .		1
74	The Mechanism of Yaw Torque Compensation in the Human and Motion Design for Humanoid Robots. International Journal of Advanced Robotic Systems, 2013, 10, 57.	1.3	19
75	Humanoid walking pattern generation based on the ground reaction force features of human walking. , 2012, , .		6
76	System design of an Anthropomorphic arm robot for dynamic interaction task. , 2011, , .		3
77	Preparation and properties of photochromic bacterial cellulose nanofibrous membranes. Cellulose, 2011, 18, 655-661.	2.4	60
78	Synthesis and characteristics of thermoplastic elastomer based on polyamideâ€6. Polymer International, 2011, 60, 1728-1736.	1.6	45