Yong He

List of Publications by Year
in descending order

140 papers	7,811 citations	38660 50 h-index	58464 82 g-index
150 all docs	150 docs citations	150 times ranked	8170 citing authors

#	Article	IF	Citations
1	Coaxial nozzle-assisted 3D bioprinting with built-in microchannels for nutrients delivery. Biomaterials, 2015, 61, 203-215.	5.7	486
2	Research on the printability of hydrogels in 3D bioprinting. Scientific Reports, 2016, 6, 29977.	1.6	428
3	A Review of 3D Printing Technologies for Soft Polymer Materials. Advanced Functional Materials, 2020, 30, 2000187.	7.8	379
4	Development of 3D bioprinting: From printing methods to biomedical applications. Asian Journal of Pharmaceutical Sciences, 2020, 15, 529-557.	4.3	264
5	Developments of 3D Printing Microfluidics and Applications in Chemistry and Biology: a Review. Electroanalysis, 2016, 28, 1658-1678.	1.5	241
6	3D Bioprinting of Vessel-like Structures with Multilevel Fluidic Channels. ACS Biomaterials Science and Engineering, 2017, 3, 399-408.	2.6	181
7	Fabrication of low cost soft tissue prostheses with the desktop 3D printer. Scientific Reports, 2014, 4, 6973.	1.6	179
8	Fabrication of paper-based microfluidic analysis devices: a review. RSC Advances, 2015, 5, 78109-78127.	1.7	177
9	3D printing of complex GelMA-based scaffolds with nanoclay. Biofabrication, 2019, 11, 035006.	3.7	159
10	Multimaterial 3D Printing of Highly Stretchable Silicone Elastomers. ACS Applied Materials & Interfaces, 2019, 11, 23573-23583.	4.0	151
11	Bone regeneration in 3D printing bioactive ceramic scaffolds with improved tissue/material interface pore architecture in thin-wall bone defect. Biofabrication, 2017, 9, 025003.	3.7	141
12	Allâ€Printed Flexible and Stretchable Electronics with Pressing or Freezing Activatable Liquidâ€Metalâ€“Silicone Inks. Advanced Functional Materials, 2020, 30, 1906683.	7.8	138
13	Fiberâ€Based Mini Tissue with Morphologyâ€Controllable GelMA Microfibers. Small, 2018, 14, e1802187.	5.2	125
14	Vesselâ€onâ€aâ€chip with Hydrogelâ€based Microfluidics. Small, 2018, 14, e1802368.	5.2	119
15	Directly coaxial 3D bioprinting of large-scale vascularized tissue constructs. Biofabrication, 2020, 12, 035014.	3.7	117
16	Three-Dimensional Printed Wearable Sensors with Liquid Metals for Detecting the Pose of Snakelike Soft Robots. ACS Applied Materials & Interfaces, 2018, 10, 23208-23217.	4.0	108
17	3D printing of gelatin methacrylate-based nerve guidance conduits with multiple channels. Materials and Design, 2020, 192, 108757.	3.3	98
18	Structure-induced cell growth by 3D printing of heterogeneous scaffolds with ultrafine fibers. Materials and Design, 2019, 181, 108092.	3.3	95

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19	Optimization of tool-path generation for material extrusion-based additive manufacturing technology. Additive Manufacturing, 2014, 1-4, 32-47.	1.7	93
20	Electroâ€Assisted Bioprinting of Lowâ€Concentration GelMA Microdroplets. Small, 2019, 15, e1804216.	5.2	92
21	3D Printing Surgical Implants at the clinic: A Experimental Study on Anterior Cruciate Ligament Reconstruction. Scientific Reports, 2016, 6, 21704.	1.6	91
22	3D printing magnesium-doped wollastonite/Î²-TCP bioceramics scaffolds with high strength and adjustable degradation. Journal of the European Ceramic Society, 2016, 36, 1495-1503.	2.8	90
23	3D printing of high-strength chitosan hydrogel scaffolds without any organic solvents. Biomaterials Science, 2020, 8, 5020-5028.	2.6	82
24	Printing 3D microfluidic chips with a 3D sugar printer. Microfluidics and Nanofluidics, 2015, 19, 447-456.	1.0	78
25	On-line Asynchronous Compensation Methods for static/quasi-static error implemented on CNC machine tools. International Journal of Machine Tools and Manufacture, 2012, 60, 14-26.	6.2	75
26	Simultaneous mechanical property and biodegradation improvement of wollastonite bioceramic through magnesium dilute doping. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 54, 60-71.	1.5	74
27	Research on optimization of the hot embossing process. Journal of Micromechanics and Microengineering, 2007, 17, 2420-2425.	1.5	71
28	Airflowâ€Assisted 3D Bioprinting of Human Heterogeneous Microspheroidal Organoids with Microfluidic Nozzle. Small, 2018, 14, e1802630.	5.2	71
29	A non-retraction path planning approach for extrusion-based additive manufacturing. Robotics and Computer-Integrated Manufacturing, 2017, 48, 132-144.	6.1	69
30	Fabrication of electrospun nanofibrous scaffolds with 3D controllable geometric shapes. Materials and Design, 2018, 157, 159-169.	3.3	68
31	Rapid fabrication of paper-based microfluidic analytical devices with desktop stereolithography 3D printer. RSC Advances, 2015, 5, 2694-2701.	1.7	65
32	Sacrificial microgel-laden bioink-enabled 3D bioprinting of mesoscale pore networks. Bio-Design and Manufacturing, 2020, 3, 30-39.	3.9	65
33	Quantitative analysis of surface profile in fused deposition modelling. Additive Manufacturing, 2015, 8, 142-148.	1.7	64
34	Grafting of 3D Bioprinting to In Vitro Drug Screening: A Review. Advanced Healthcare Materials, 2020, 9, e1901773.	3.9	63
35	Bioactive glass-reinforced bioceramic ink writing scaffolds: sintering, microstructure and mechanical behavior. Biofabrication, 2015, 7, 035010.	3.7	61
36	Modeling and process planning for curved layer fused deposition. International Journal of Advanced Manufacturing Technology, 2017, 91, 273-285.	1.5	61

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37	3D printed Lego ^{Â®} -like modular microfluidic devices based on capillary driving. Biofabrication, 2018, 10, 035001.	3.7	61
38	3D Printing of Physical Organ Models: Recent Developments and Challenges. Advanced Science, 2021, 8, e2101394.	5.6	61
39	3Dâ€Printed Atsttrinâ€Incorporated Alginate/Hydroxyapatite Scaffold Promotes Bone Defect Regeneration with TNF/TNFR Signaling Involvement. Advanced Healthcare Materials, 2015, 4, 1701-1708.	3.9	60
40	Single-Ring Magnetic Levitation Configuration for Object Manipulation and Density-Based Measurement. Analytical Chemistry, 2018, 90, 9226-9233.	3.2	60
41	Metastasis-on-a-chip mimicking the progression of kidney cancer in the liver for predicting treatment efficacy. Theranostics, 2020, 10, 300-311.	4.6	60
42	Fabrication of multi-scale and tunable auxetic scaffolds for tissue engineering. Materials and Design, 2021, 197, 109277.	3.3	60
43	A parallel-based path generation method for fused deposition modeling. International Journal of Advanced Manufacturing Technology, 2015, 77, 927-937.	1.5	58
44	3D robocasting magnesium-doped wollastonite/TCP bioceramic scaffolds with improved bone regeneration capacity in critical sized calvarial defects. Journal of Materials Chemistry B, 2017, 5, 2941-2951.	2.9	58
45	Synchronous 3D Bioprinting of Largeâ€Scale Cellâ€Laden Constructs with Nutrient Networks. Advanced Healthcare Materials, 2020, 9, e1901142.	3.9	57
46	Systematical Evaluation of Mechanically Strong 3D Printed Diluted magnesium Doping Wollastonite Scaffolds on Osteogenic Capacity in Rabbit Calvarial Defects. Scientific Reports, 2016, 6, 34029.	1.6	56
47	Hydrogels: The Next Generation Body Materials for Microfluidic Chips?. Small, 2020, 16, e2003797.	5.2	56
48	Construction of multi-scale vascular chips and modelling of the interaction between tumours and blood vessels. Materials Horizons, 2020, 7, 82-92.	6.4	55
49	On the Investigation of Surface Integrity of Ti6Al4V ELI Using Si-Mixed Electric Discharge Machining. Materials, 2020, 13, 1549.	1.3	55
50	3D Printed Paper-Based Microfluidic Analytical Devices. Micromachines, 2016, 7, 108.	1.4	53
51	Optimization of process planning for reducing material consumption in additive manufacturing. Journal of Manufacturing Systems, 2017, 44, 65-78.	7.6	52
52	In situ 3D bioprinting with bioconcrete bioink. Nature Communications, 2022, 13, .	5.8	52
53	A nondestructive online method for monitoring the injection molding process by collecting and analyzing machine running data. International Journal of Advanced Manufacturing Technology, 2014, 72, 765-777.	1.5	51
54	Modeling the printability of photocuring and strength adjustable hydrogel bioink during projection-based 3D bioprinting. Biofabrication, 2021, 13, 035032.	3.7	51

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55	Growth differentiation factor-5â€“gelatin methacryloyl injectable microspheres laden with adipose-derived stem cells for repair of disc degeneration. Biofabrication, 2021, 13, 015010.	3.7	48
56	The outstanding mechanical response and bone regeneration capacity of robocast dilute magnesium-doped wollastonite scaffolds in critical size bone defects. Journal of Materials Chemistry B, 2016, 4, 3945-3958.	2.9	47
57	Fabrication of cerebral aneurysm simulator with a desktop 3D printer. Scientific Reports, 2017, 7, 44301.	1.6	47
58	Fabrication of heterogeneous scaffolds using melt electrospinning writing: Design and optimization. Materials and Design, 2020, 185, 108274.	3.3	47
59	A robust 2D point-sequence curve offset algorithm with multiple islands for contour-parallel tool path. CAD Computer Aided Design, 2013, 45, 657-670.	1.4	46
60	Inclined layer printing for fused deposition modeling without assisted supporting structure. Robotics and Computer-Integrated Manufacturing, 2018, 51, 1-13.	6.1	46
61	Curved profiles machining of Ti6Al4V alloy through WEDM: investigations on geometrical errors. Journal of Materials Research and Technology, 2020, 9, 16186-16201.	2.6	46
62	Bioprinting of Cellâ€Ładen Microfiber: Can It Become a Standard Product?. Advanced Healthcare Materials, 2019, 8, e1900014.	3.9	45
63	3D printed multi-scale scaffolds with ultrafine fibers for providing excellent biocompatibility. Materials Science and Engineering C, 2020, 107, 110269.	3.8	44
64	4D Printing of High-Performance Thermal-Responsive Liquid Metal Elastomers Driven by Embedded Microliquid Chambers. ACS Applied Materials & Interfaces, 2020, 12, 12068-12074.	4.0	44
65	Ultrahigh strength of three-dimensional printed diluted magnesium doping wollastonite porous scaffolds. MRS Communications, 2015, 5, 631-639.	0.8	41
66	An optimization approach for path planning of high-quality and uniform additive manufacturing. International Journal of Advanced Manufacturing Technology, 2017, 92, 651-662.	1.5	39
67	Why choose 3D bioprinting? Part II: methods and bioprinters. Bio-Design and Manufacturing, 2020, 3, 1-4.	3.9	39
68	Bioprinting of novel 3D tumor array chip for drug screening. Bio-Design and Manufacturing, 2020, 3, 175-188.	3.9	38
69	Process Planning for the Fuse Deposition Modeling of Ankle-Foot-Othoses. Procedia CIRP, 2016, 42, 760-765.	1.0	37
70	Engineering three-dimensional microenvironments towards <i>in vitro</i> disease models of the central nervous system. Biofabrication, 2019, 11, 032003.	3.7	37
71	Recyclable conductive nanoclay for direct <i>in situ</i> printing flexible electronics. Materials Horizons, 2021, 8, 2006-2017.	6.4	37
72	A novel path planning methodology for extrusion-based additive manufacturing of thin-walled parts. International Journal of Computer Integrated Manufacturing, 2017, 30, 1301-1315.	2.9	36

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73	A low-cost and rapid microfluidic paper-based analytical device fabrication method: flash foam stamp lithography. RSC Advances, 2014, 4, 63860-63865.	1.7	35
74	Selfâ€Adaptive Allâ€Inâ€One Delivery Chip for Rapid Skin Nerves Regeneration by Endogenous Mesenchymal Stem Cells. Advanced Functional Materials, 2020, 30, 2001751.	7.8	32
75	Fabrication of shape controllable alginate microparticles based on drop-on-demand jetting. Journal of Sol-Gel Science and Technology, 2016, 77, 610-619.	1.1	31
76	Micro/nanofabrication of brittle hydrogels using 3D printed soft ultrafine fiber molds for damage-free demolding. Biofabrication, 2020, 12, 025015.	3.7	31
77	Optimal immunosuppressor induces stable gut microbiota after liver transplantation. World Journal of Gastroenterology, 2018, 24, 3871-3883.	1.4	31
78	Liquid Metal Microgels for Three-Dimensional Printing of Smart Electronic Clothes. ACS Applied Materials & Interfaces, 2022, 14, 13458-13467.	4.0	31
79	Support generation for additive manufacturing based on sliced data. International Journal of Advanced Manufacturing Technology, 2015, 80, 2041-2052.	1.5	30
80	Optimization of control parameters in micro hot embossing. Microsystem Technologies, 2008, 14, 325-329.	1.2	29
81	Rapid Customization of 3D Integrated Microfluidic Chips via Modular Structure-Based Design. ACS Biomaterials Science and Engineering, 2017, 3, 2606-2616.	2.6	29
82	Printability during projection-based 3D bioprinting. Bioactive Materials, 2022, 11, 254-267.	8.6	28
83	A fine-interpolation-based parametric interpolation method with a novel real-time look-ahead algorithm. CAD Computer Aided Design, 2014, 55, 37-48.	1.4	27
84	3D printing and coating to fabricate a hollow bullet-shaped implant with porous surface for controlled cytoxan release. International Journal of Pharmaceutics, 2018, 552, 91-98.	2.6	26
85	Axial-Circular Magnetic Levitation: A Three-Dimensional Density Measurement and Manipulation Approach. Analytical Chemistry, 2020, 92, 6925-6931.	3.2	26
86	Three-Dimensional Coprinting of Liquid Metals for Directly Fabricating Stretchable Electronics. 3D Printing and Additive Manufacturing, 2018, 5, 195-203.	1.4	25
87	Peripheral Nerve Regeneration with 3D Printed Bionic Scaffolds Loading Neural Crest Stem Cell Derived Schwann Cell Progenitors. Advanced Functional Materials, 2021, 31, 2010215.	7.8	25
88	Micro structure fabrication with a simplified hot embossing method. RSC Advances, 2015, 5, 39138-39144.	1.7	24
89	A flexible porous chiral auxetic tracheal stent with ciliated epithelium. Acta Biomaterialia, 2021, 124, 153-165.	4.1	24
90	Lightweight 3D bioprinting with point by point photocuring. Bioactive Materials, 2021, 6, 1402-1412.	8.6	23

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91	Effect of borosilicate glass on the mechanical and biodegradation properties of 45S5-derived bioactive glass-ceramics. Journal of Non-Crystalline Solids, 2014, 405, 91-99.	1.5	22
92	45S5 Bioglass analogue reinforced akermanite ceramic favorable for additive manufacturing mechanically strong scaffolds. RSC Advances, 2015, 5, 102727-102735.	1.7	21
93	Printing@Clinic: From Medical Models to Organ Implants. ACS Biomaterials Science and Engineering, 2017, 3, 3083-3097.	2.6	21
94	Research on the electrospun foaming process to fabricate threeâ€dimensional tissue engineering scaffolds. Journal of Applied Polymer Science, 2018, 135, 46898.	1.3	21
95	Rapid assembling organ prototypes with controllable cell-laden multi-scale sheets. Bio-Design and Manufacturing, 2019, 2, 1-9.	3.9	21
96	3D biofabrication of microfiber-laden minispheroids: a facile 3D cell co-culturing system. Biomaterials Science, 2020, 8, 109-117.	2.6	21
97	A bioartificial liver support system integrated with a DLM/GelMA-based bioengineered whole liver for prevention of hepatic encephalopathy <i>via</i> enhanced ammonia reduction. Biomaterials Science, 2020, 8, 2814-2824.	2.6	21
98	Self-sintering liquid metal ink with LAPONITEÂ® for flexible electronics. Journal of Materials Chemistry C, 2021, 9, 3070-3080.	2.7	21
99	Optimization of quantitative detection model for benzoic acid in wheat flour based on CARS variable selection and THz spectroscopy. Journal of Food Measurement and Characterization, 2020, 14, 2549-2558.	1.6	20
100	3D Cell Cultureâ€"Can It Be As Popular as 2D Cell Culture?. Advanced NanoBiomed Research, 2021, 1, 2000066.	1.7	20
101	Facile 3D cell culture protocol based on photocurable hydrogels. Bio-Design and Manufacturing, 2021, 4, 149-153.	3.9	19
102	An Adaptive Tool Path Generation for Fused Deposition Modeling. Advanced Materials Research, 2013, 819, 7-12.	0.3	18
103	Coaxial 3D bioprinting of organ prototyps from nutrients delivery to vascularization. Journal of Zhejiang University: Science A, 2020, 21, 859-875.	1.3	18
104	A look-ahead and adaptive speed control algorithm for parametric interpolation. International Journal of Advanced Manufacturing Technology, 2013, 69, 2613-2620.	1.5	17
105	Projection-based 3D bioprinting for hydrogel scaffold manufacturing. Bio-Design and Manufacturing, 2022, 5, 633-639.	3.9	17
106	Preparation and Characterization of Low Temperature Heat-Treated 45S5 Bioactive Glass-Ceramic Analogues. Biomedical Glasses, 2015, 1, .	2.4	16
107	From Microfluidic Paper-Based Analytical Devices to Paper-Based Biofluidics with Integrated Continuous Perfusion. ACS Biomaterials Science and Engineering, 2017, 3, 601-607.	2.6	16
108	Extracellular recordings of bionic engineered cardiac tissue based on a porous scaffold and microelectrode arrays. Analytical Methods, 2019, 11, 5872-5879.	1.3	16

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109	Protocols of 3D Bioprinting of Gelatin Methacryloyl Hydrogel Based Bioinks. Journal of Visualized Experiments, 2019, , .	0.2	16
110	Recent Progress in 3D Printing of Smart Structures: Classification, Challenges, and Trends. Advanced Intelligent Systems, 2021, 3, 2000271.	3.3	16
111	Why choose 3D bioprinting? Part I: a brief introduction of 3D bioprinting for the beginners. Bio-Design and Manufacturing, 2019, 2, 221-224.	3.9	15
112	Facial fabrication of paper-based flexible electronics with flash foam stamp lithography. Microsystem Technologies, 2017, 23, 4419-4426.	1.2	14
113	Droplet deviation modeling and compensation scheme of inkjet printing. International Journal of Advanced Manufacturing Technology, 2014, 75, 1405-1415.	1.5	13
114	A facile and low-cost micro fabrication material: flash foam. Scientific Reports, 2015, 5, 13522.	1.6	13
115	Why choose 3D bioprinting? Part III: printing in vitro 3D models for drug screening. Bio-Design and Manufacturing, 2020, 3, 160-163.	3.9	12
116	Research on Enhanced Detection of Benzoic Acid Additives in Liquid Food Based on Terahertz Metamaterial Devices. Sensors, 2021, 21, 3238.	2.1	12
117	Balancing the customization and standardization: exploration and layout surrounding the regulation of the growing field of 3D-printed medical devices in China. Bio-Design and Manufacturing, 2022, 5, 580-606.	3.9	12
118	Galectin-1-induced tolerogenic dendritic cells combined with apoptotic lymphocytes prolong liver allograft survival. International Immunopharmacology, 2018, 65, 470-482.	1.7	11
119	Partial Inhibition of HO-1 Attenuates HMP-Induced Hepatic Regeneration against Liver Injury in Rats. Oxidative Medicine and Cellular Longevity, 2018, 2018, 1-11.	1.9	11
120	Variable bead width of material extrusion-based additive manufacturing. Journal of Zhejiang University: Science A, 2019, 20, 73-82.	1.3	11
121	Scalable Milk-Derived Whey Protein Hydrogel as an Implantable Biomaterial. ACS Applied Materials & Interfaces, 2022, 14, 28501-28513.	4.0	10
122	Effect of microstructure evolution on chip formation and fracture during high-speed cutting of single phase metals. International Journal of Advanced Manufacturing Technology, 2017, 91, 823-833.	1.5	9
123	Enhanced polymer filling and uniform shrinkage of polymer and mold in a hot embossing process. Polymer Engineering and Science, 2013, 53, 1314-1320.	1.5	8
124	Shrinkage in UV-Curable Coatings. , 2017, , 195-223.		8
125	Biodegradable intramedullary nail (BIN) with high-strength bioceramics for bone fracture. Journal of Materials Chemistry B, 2021, 9, 969-982.	2.9	7
126	Biomanufacturing: from biomedicine to biomedicine. Bio-Design and Manufacturing, 2021, 4, 912-913.	3.9	7

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127	Nonlinear propagation of stress waves during high speed cutting. Applied Physics Letters, 2016, 109, 191904.	1.5	6
128	Cell-modified bioprinted microspheres for vascular regeneration. Materials Science and Engineering C, 2020, 112, 110896.	3.8	6
129	Demolding Defects and the Design of Demolding Device in Micro Hot Embossing Process. Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering, 2008, 44, 53.	0.7	6
130	An interpolation method for the open CNC system based on EPM. International Journal of Advanced Manufacturing Technology, 2013, 69, 405-416.	1.5	5
131	Graft protection of the liver by hypothermic machine perfusion involves recovery of graft regeneration in rats. Journal of International Medical Research, 2019, 47, 427-437.	0.4	5
132	3D printed high-resolution scaffold with hydrogel microfibers for providing excellent biocompatibility. Journal of Biomaterials Applications, 2021, 35, 633-642.	1.2	5
133	Establishment and optimization of temperature compensation model for benzoic acid detection based on terahertz metamaterial. Infrared Physics and Technology, 2022, 123, 104101.	1.3	4
134	Photocurable Hydrogel Substrateâ€"Better Potential Substitute on Bone-Marrow-Derived Dendritic Cells Culturing. Materials, 2022, 15, 3322.	1.3	4
135	Additive Manufacturing of Hydroxyapatite Bioceramic Scaffolds with Projection Based 3D Printing. , 2022, 1, 100021.		4
136	Simulation Research on Stress of Polymeric Patterns during Micro Hot Embossing. Applied Mechanics and Materials, 2011, 80-81, 339-345.	0.2	2
137	Tendril Climber Inspired Structure-Induced Cell Growth by Direct Writing Heterogeneous Scaffold. SSRN Electronic Journal, 0, , .	0.4	2
138	Integration of three-dimensional printing and microfluidics. , 2022, , 385-406.		2
139	Analysis of pattern height development in hot embossing process. Microsystem Technologies, 2009, 15, 963-968.	1.2	1
140	A Godunov â€type discrete element model for elasticâ€viscoplastic continuum impact problems. International Journal for Numerical Methods in Engineering, 0, , .	1.5	1