Hongwei Yang

List of Publications by Year
in descending order

95 papers	5,540 citations	81743 39 h-index	85405 71 g-index
95 all docs	95 docs citations	95 times ranked	6300 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	Allâ€Printed Flexible and Stretchable Electronics with Pressing or Freezing Activatable Liquidâ€Metalâ€"Silicone Inks. Advanced Functional Materials, 2020, 30, 1906683.	7.8	138
10	Fiberâ€Based Mini Tissue with Morphologyâ€Controllable GelMA Microfibers. Small, 2018, 14, e1802187.	5.2	125
11	A 3D-printed PRP-GelMA hydrogel promotes osteochondral regeneration through M2 macrophage polarization in a rabbit model. Acta Biomaterialia, 2021, 128, 150-162.	4.1	120
12	Vesselâ€onâ€aâ€chip with Hydrogelâ€based Microfluidics. Small, 2018, 14, e1802368.	5.2	119
13	Electroâ€Assisted Bioprinting of Lowâ€Concentration GelMA Microdroplets. Small, 2019, 15, e1804216.	5.2	92
14	3D Printing Surgical Implants at the clinic: A Experimental Study on Anterior Cruciate Ligament Reconstruction. Scientific Reports, 2016, 6, 21704.	1.6	91
15	3D printing of high-strength chitosan hydrogel scaffolds without any organic solvents. Biomaterials Science, 2020, 8, 5020-5028.	2.6	82
16	Printing 3D microfluidic chips with a 3D sugar printer. Microfluidics and Nanofluidics, 2015, 19, 447-456.	1.0	78
17	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
18	Airflowâ€Assisted 3D Bioprinting of Human Heterogeneous Microspheroidal Organoids with Microfluidic Nozzle. Small, 2018, 14, e1802630.	5.2	71

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19	Rapid fabrication of paper-based microfluidic analytical devices with desktop stereolithography 3D printer. RSC Advances, 2015, 5, 2694-2701.	1.7	65
20	Sacrificial microgel-laden bioink-enabled 3D bioprinting of mesoscale pore networks. Bio-Design and Manufacturing, 2020, 3, 30-39.	3.9	65
21	Grafting of 3D Bioprinting to In Vitro Drug Screening: A Review. Advanced Healthcare Materials, 2020, 9, e1901773.	3.9	63
22	Modeling and process planning for curved layer fused deposition. International Journal of Advanced Manufacturing Technology, 2017, 91, 273-285.	1.5	61
23	3D Printing of Physical Organ Models: Recent Developments and Challenges. Advanced Science, 2021, 8, e2101394.	5.6	61
24	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
25	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
26	A parallel-based path generation method for fused deposition modeling. International Journal of Advanced Manufacturing Technology, 2015, 77, 927-937.	1.5	58
27	Synchronous 3D Bioprinting of Largeâ€Scale Cellâ€Laden Constructs with Nutrient Networks. Advanced Healthcare Materials, 2020, 9, e1901142.	3.9	57
28	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
29	Hydrogels: The Next Generation Body Materials for Microfluidic Chips?. Small, 2020, 16, e2003797.	5.2	56
30	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
31	On the Investigation of Surface Integrity of Ti6Al4V ELI Using Si-Mixed Electric Discharge Machining. Materials, 2020, 13, 1549.	1.3	55
32	3D Printed Paper-Based Microfluidic Analytical Devices. Micromachines, 2016, 7, 108.	1.4	53
33	Modeling the printability of photocuring and strength adjustable hydrogel bioink during projection-based 3D bioprinting. Biofabrication, 2021, 13, 035032.	3.7	51
34	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
35	Epithelial Gasdermin D shapes the host-microbial interface by driving mucus layer formation. Science Immunology, 2022, 7, eabk2092.	5.6	48
36	Fabrication of cerebral aneurysm simulator with a desktop 3D printer. Scientific Reports, 2017, 7, 44301.	1.6	47

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37	Bioprinting of Cellâ€Laden Microfiber: Can It Become a Standard Product?. Advanced Healthcare Materials, 2019, 8, e1900014.	3.9	45
38	3D printed multi-scale scaffolds with ultrafine fibers for providing excellent biocompatibility. Materials Science and Engineering C, 2020, 107, 110269.	3.8	44
39	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
40	Ultrahigh strength of three-dimensional printed diluted magnesium doping wollastonite porous scaffolds. MRS Communications, 2015, 5, 631-639.	0.8	41
41	HBC-nanofiber hydrogel scaffolds with 3D printed internal microchannels for enhanced cartilage differentiation. Journal of Materials Chemistry B, 2020, 8, 6115-6127.	2.9	41
42	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
43	Why choose 3D bioprinting? Part II: methods and bioprinters. Bio-Design and Manufacturing, 2020, 3, 1-4.	3.9	39
44	Bioprinting of novel 3D tumor array chip for drug screening. Bio-Design and Manufacturing, 2020, 3, 175-188.	3.9	38
45	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
46	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
47	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
48	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
49	Liquid Metal Microgels for Three-Dimensional Printing of Smart Electronic Clothes. ACS Applied Materials & Interfaces, 2022, 14, 13458-13467.	4.0	31
50	Support generation for additive manufacturing based on sliced data. International Journal of Advanced Manufacturing Technology, 2015, 80, 2041-2052.	1.5	30
51	Optimization of control parameters in micro hot embossing. Microsystem Technologies, 2008, 14, 325-329.	1.2	29
52	Rapid Customization of 3D Integrated Microfluidic Chips via Modular Structure-Based Design. ACS Biomaterials Science and Engineering, 2017, 3, 2606-2616.	2.6	29
53	Printability during projection-based 3D bioprinting. Bioactive Materials, 2022, 11, 254-267.	8.6	28
54	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

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55	Multifunctionally wearable monitoring with gelatin hydrogel electronics of liquid metals. Materials Horizons, 2022, 9, 961-972.	6.4	26
56	Three-Dimensional Coprinting of Liquid Metals for Directly Fabricating Stretchable Electronics. 3D Printing and Additive Manufacturing, 2018, 5, 195-203.	1.4	25
57	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
58	Micro structure fabrication with a simplified hot embossing method. RSC Advances, 2015, 5, 39138-39144.	1.7	24
59	A flexible porous chiral auxetic tracheal stent with ciliated epithelium. Acta Biomaterialia, 2021, 124, 153-165.	4.1	24
60	Lightweight 3D bioprinting with point by point photocuring. Bioactive Materials, 2021, 6, 1402-1412.	8.6	23
61	45S5 Bioglass analogue reinforced akermanite ceramic favorable for additive manufacturing mechanically strong scaffolds. RSC Advances, 2015, 5, 102727-102735.	1.7	21
62	Research on the electrospun foaming process to fabricate threeâ€dimensional tissue engineering scaffolds. Journal of Applied Polymer Science, 2018, 135, 46898.	1.3	21
63	Rapid assembling organ prototypes with controllable cell-laden multi-scale sheets. Bio-Design and Manufacturing, 2019, 2, 1-9.	3.9	21
64	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
65	Self-sintering liquid metal ink with LAPONITEÂ® for flexible electronics. Journal of Materials Chemistry C, 2021, 9, 3070-3080.	2.7	21
66	3D Cell Cultureâ€"Can It Be As Popular as 2D Cell Culture?. Advanced NanoBiomed Research, 2021, 1, 2000066.	1.7	20
67	Facile 3D cell culture protocol based on photocurable hydrogels. Bio-Design and Manufacturing, 2021, 4, 149-153.	3.9	19
68	Coaxial 3D bioprinting of organ prototyps from nutrients delivery to vascularization. Journal of Zhejiang University: Science A, 2020, 21, 859-875.	1.3	18
69	Projection-based 3D bioprinting for hydrogel scaffold manufacturing. Bio-Design and Manufacturing, 2022, 5, 633-639.	3.9	17
70	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
71	Protocols of 3D Bioprinting of Gelatin Methacryloyl Hydrogel Based Bioinks. Journal of Visualized Experiments, 2019, , .	0.2	16
72	Recent Progress in 3D Printing of Smart Structures: Classification, Challenges, and Trends. Advanced Intelligent Systems, 2021, 3, 2000271.	3.3	16

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73	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
74	Facial fabrication of paper-based flexible electronics with flash foam stamp lithography. Microsystem Technologies, 2017, 23, 4419-4426.	1.2	14
75	A facile and low-cost micro fabrication material: flash foam. Scientific Reports, 2015, 5, 13522.	1.6	13
76	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
77	Premigratory neural crest stem cells generate enteric neurons populating the mouse colon and regulating peristalsis in tissue-engineered intestine. Stem Cells Translational Medicine, 2021, 10, 922-938.	1.6	12
78	Research on Enhanced Detection of Benzoic Acid Additives in Liquid Food Based on Terahertz Metamaterial Devices. Sensors, 2021, 21, 3238.	2.1	12
79	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
80	Variable bead width of material extrusion-based additive manufacturing. Journal of Zhejiang University: Science A, 2019, 20, 73-82.	1.3	11
81	Synthesis of Silver Nanowires by Using Tetrabutyl Ammonium Dibromochloride as the Auxiliary for Low-Haze Flexible Transparent Conductive Films. Langmuir, 2019, 35, 11829-11835.	1.6	11
82	Detection of Foreign-Body in Milk Powder Processing Based on Terahertz Imaging and Spectrum. Journal of Infrared, Millimeter, and Terahertz Waves, 2021, 42, 878.	1.2	11
83	Scalable Milk-Derived Whey Protein Hydrogel as an Implantable Biomaterial. ACS Applied Materials & Interfaces, 2022, 14, 28501-28513.	4.0	10
84	Biomanufacturing: from biomedicine to biomedicine. Bio-Design and Manufacturing, 2021, 4, 912-913.	3.9	7
85	Ascorbic Acid-Assisted One-Step Chemical Reaction To Design an Ultralong Silver Nanowire Structure for a Highly Transparent Flexible Conducting Film. ACS Omega, 2020, 5, 18458-18464.	1.6	6
86	Dodecylamine-mediated synthesis and growth mechanism of copper nanowires with an aspect ratio of over 10000. Materials Letters, 2020, 274, 128029.	1.3	6
87	Cell-modified bioprinted microspheres for vascular regeneration. Materials Science and Engineering C, 2020, 112, 110896.	3.8	6
88	A novel wavy non-uniform ligament chiral stent with J-shaped stressâ€“strain behavior to mimic the native trachea. Bio-Design and Manufacturing, 2021, 4, 851-866.	3.9	6
89	A microfluidic cell chip for virus isolation via rapid screening for permissive cells. Virologica Sinica, 2022, , .	1.2	6
90	3D Bioprinting: Airflow-Assisted 3D Bioprinting of Human Heterogeneous Microspheroidal Organoids with Microfluidic Nozzle (Small 39/2018). Small, 2018, 14, 1870181.	5.2	4

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91	Photocurable Hydrogel Substrateâ€"Better Potential Substitute on Bone-Marrow-Derived Dendritic Cells Culturing. Materials, 2022, 15, 3322.	1.3	4
92	Microâ€Computed Tomography Analysis of Femoral Head Necrosis After Longâ€Term Internal Fixation for Femoral Neck Fracture. Orthopaedic Surgery, 2022, 14, 1186-1192.	0.7	3
93	Recent Progress in 3D Printing of Smart Structures: Classification, Challenges, and Trends. Advanced Intelligent Systems, 2021, 3, .	3.3	2
94	Synthesis and the growth mechanism of ultrafine silver nanowires by using 5-chloro-2-thienylmagnesium bromide as the additive. RSC Advances, 2021, 11, 37063-37066.	1.7	1
95	Coaxial Bioprinting: Bioprinting of Cellâ€Laden Microfiber: Can It Become a Standard Product? (Adv.) Tj ETQq1 1 0.784314 rgBT /Overlo	3.9	0