Jia An

List of Publications by Year
in descending order

64 papers	5,764 citations	126907 33 h-index	149698 56 g-index
68 all docs	68 docs citations	68 times ranked	7586 citing authors

#	Article	IF	Citations
1	Fundamentals and applications of 3D printing for novel materials. Applied Materials Today, 2017, 7, 120-133.	4.3	925
2	Laser and electronâ€beam powderâ€bed additive manufacturing of metallic implants: A review on processes, materials and designs. Journal of Orthopaedic Research, 2016, 34, 369-385.	2.3	690
3	3D printing of smart materials: A review on recent progresses in 4D printing. Virtual and Physical Prototyping, 2015, 10, 103-122.	10.4	660
4	Design and 3D Printing of Scaffolds and Tissues. Engineering, 2015, 1, 261-268.	6.7	344
5	The potential to enhance membrane module design with 3D printing technology. Journal of Membrane Science, 2016, 499, 480-490.	8.2	238
6	Two-Way 4D Printing: A Review on the Reversibility of 3D-Printed Shape Memory Materials. Engineering, 2017, 3, 663-674.	6.7	225
7	3D neural tissue models: From spheroids to bioprinting. Biomaterials, 2018, 154, 113-133.	11.4	207
8	Layer-by-layer printing of laminated graphene-based interdigitated microelectrodes for flexible planar micro-supercapacitors. Electrochemistry Communications, 2015, 51, 33-36.	4.7	169
9	3D food printing of fresh vegetables using food hydrocolloids for dysphagic patients. Food Hydrocolloids, 2021, 114, 106546.	10.7	167
10	Metallic Nanoparticle Inks for 3D Printing of Electronics. Advanced Electronic Materials, 2019, 5, 1800831.	5.1	166
11	A highly printable and biocompatible hydrogel composite for direct printing of soft and perfusable vasculature-like structures. Scientific Reports, 2017, 7, 16902.	3.3	142
12	Bioprinting of Thermoresponsive Hydrogels for Next Generation Tissue Engineering: A Review. Macromolecular Materials and Engineering, 2017, 302, 1600266.	3.6	135
13	A Mathematical Model on the Resolution of Extrusion Bioprinting for the Development of New Bioinks. Materials, 2016, 9, 756.	2.9	113
14	3D food printing: a categorised review of inks and their development. Virtual and Physical Prototyping, 2019, 14, 203-218.	10.4	100
15	Layer-by-layer ultraviolet assisted extrusion-based (UAE) bioprinting of hydrogel constructs with high aspect ratio for soft tissue engineering applications. PLoS ONE, 2019, 14, e0216776.	2.5	99
16	A Review of Selective Laser Melted NiTi Shape Memory Alloy. Materials, 2018, 11, 519.	2.9	88
17	Acoustic absorptions of multifunctional polymeric cellular structures based on triply periodic minimal surfaces fabricated by stereolithography. Virtual and Physical Prototyping, 2020, 15, 242-249.	10.4	85
18	A Perspective on 4D Bioprinting. International Journal of Bioprinting, 2016, 2, .	3.4	84

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19	Hierarchically self-morphing structure through 4D printing. Virtual and Physical Prototyping, 2017, 12, 61-68.	10.4	70
20	Comparison of solid, liquid and powder forms of 3D printing techniques in membrane spacer fabrication. Journal of Membrane Science, 2017, 537, 283-296.	8.2	66
21	Bioprinting of 3D in vitro skeletal muscle models: A review. Materials and Design, 2020, 193, 108794.	7.0	57
22	Application of Machine Learning in 3D Bioprinting: Focus on Development of Big Data and Digital Twin. International Journal of Bioprinting, 2020, 7, 342.	3.4	54
23	Multi-stage responsive 4D printed smart structure through varying geometric thickness of shape memory polymer. Smart Materials and Structures, 2017, 26, 125001.	3.5	53
24	A review on spacers and membranes: Conventional or hybrid additive manufacturing?. Water Research, 2021, 188, 116497.	11.3	46
25	Preliminary Investigation of the Reversible 4D Printing of a Dual-Layer Component. Engineering, 2019, 5, 1159-1170.	6.7	42
26	Biodegradable Polymeric Films and Membranes Processing and Forming for Tissue Engineering. Macromolecular Materials and Engineering, 2015, 300, 858-877.	3.6	41
27	Design and 4D Printing of Cross-Folded Origami Structures: A Preliminary Investigation. Materials, 2018, 11, 376.	2.9	40
28	Induction Sintering of Silver Nanoparticle Inks on Polyimide Substrates. Advanced Materials Technologies, 2020, 5, 1900897.	5.8	39
29	Clothing polymer fibers with well-aligned and high-aspect ratio carbon nanotubes. Nanoscale, 2013, 5, 2870.	5.6	37
30	Advanced nanobiomaterial strategies for the development of organized tissue engineering constructs. Nanomedicine, 2013, 8, 591-602.	3.3	37
31	Roles of support materials in 3D bioprinting â€“ Present and future. International Journal of Bioprinting, 2017, 3, 83.	3.4	37
32	Contactless reversible 4D-printing for 3D-to-3D shape morphing. Virtual and Physical Prototyping, 2020, 15, 481-495.	10.4	36
33	Solvent-free fabrication of three dimensionally aligned polycaprolactone microfibers for engineering of anisotropic tissues. Biomedical Microdevices, 2012, 14, 863-872.	2.8	35
34	Process-structure-property of additively manufactured continuous carbon fiber reinforced thermoplastic: an investigation of mode I interlaminar fracture toughness. Mechanics of Advanced Materials and Structures, 2022, 29, 1418-1430.	2.6	35
35	Smooth Muscle Cell Alignment and Phenotype Control by Melt Spun Polycaprolactone Fibers for Seeding of Tissue Engineered Blood Vessels. International Journal of Biomaterials, 2015, 2015, 1-8.	2.4	34
36	Fabrication of SLM NiTi Shape Memory Alloy via Repetitive Laser Scanning. Shape Memory and Superelasticity, 2018, 4, 112-120.	2.2	34

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37	Effect of Heat Treatment on Repetitively Scanned SLM NiTi Shape Memory Alloy. Materials, 2019, 12, 77.	2.9	32
38	3D Printing of Polymeric Multi-Layer Micro-Perforated Panels for Tunable Wideband Sound Absorption. Polymers, 2020, 12, 360.	4.5	32
39	Characterization, mechanical behavior and in vitro evaluation of a melt-drawn scaffold for esophageal tissue engineering. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 57, 246-259.	3.1	27
40	Effect of gas plasma on polycaprolactone (PCL) membrane wettability and collagen type I immobilized for enhancing cell proliferation. Materials Letters, 2016, 171, 293-296.	2.6	27
41	Three-Dimensional Printing of Food Foams Stabilized by Hydrocolloids for Hydration in Dysphagia. International Journal of Bioprinting, 2021, 7, 393.	3.4	27
42	Fouling mitigation in reverse osmosis processes with 3D printed sinusoidal spacers. Water Research, 2021, 207, 117818.	11.3	25
43	Fabrication and in vitro analysis of tubular scaffolds by melt-drawing for esophageal tissue engineering. Materials Letters, 2015, 159, 424-427.	2.6	22
44	Tissue engineering and 3D printing of bioartificial pancreas for regenerative medicine in diabetes. Trends in Endocrinology and Metabolism, 2021, 32, 609-622.	7.1	18
45	Systematic Engineering approach for optimization of multi-component alternative protein-fortified 3D printing food Ink. Food Hydrocolloids, 2022, 131, 107803.	10.7	17
46	A novel 3D printing method for cell alignment and differentiation. International Journal of Bioprinting, 2015, , .	3.4	14
47	Introduction to rapid prototyping of biomaterials. , 2014, , 1-15.		13
48	Introduction to rapid prototyping of biomaterials. , 2020, , 1-15.		11
49	An engineering perspective on 3D printed personalized scaffolds for tracheal suspension technique. Journal of Thoracic Disease, 2016, 8, E1723-E1725.	1.4	10
50	3D Printing and Bioprinting in MEMS Technology. Micromachines, 2017, 8, 229.	2.9	10
51	Antibiotic resistance modifying ability of phytoextracts in anthrax biological agent Bacillus anthracis and emerging superbugs: a review of synergistic mechanisms. Annals of Clinical Microbiology and Antimicrobials, 2021, 20, 79.	3.8	8
52	Laser sintered porous polycaprolacone scaffolds loaded with hyaluronic acid and gelatin-grafted thermoresponsive hydrogel for cartilage tissue engineering. Bio-Medical Materials and Engineering, 2013, 23, 533-543.	0.6	7
53	A Solvent-Free Surface Suspension Melt Technique for Making Biodegradable PCL Membrane Scaffolds for Tissue Engineering Applications. Molecules, 2016, 21, 386.	3.8	5
54	Advanced nanobiomaterials for tissue engineering and regenerative medicine. Nanomedicine, 2013, 8, 501-503.	3.3	3

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55	Special Issue â€œBiomaterials and Bioprintingâ€• Molecules, 2016, 21, 1231.	3.8	2
56	Impact of Additive Manufacturing on Supply Chain Complexity. , 2020, , .		2
57	A Portable Device for Fabricating Biomaterial Microfiber Bundles. Key Engineering Materials, 2010, 447-448, 750-754.	0.4	1
58	Automated fabrication of three dimensional porous microfiber scaffolds for tissue engineering. , 2010, , .		0
59	Biodegradable Double-layer Cell Carriers for Tissue Engineering. , 2011, , .		0
60	3D Printing of Polycaprolactone Membrane. , 2014, , .		0
61	Effect of Powder Particle Size on Solvent Free Membrane for 3D Hybrid Scaffold Structure. , 2014, , .		0
62	A Comparative Study on Selective Laser Melting and Electron Beam Melting Process for Orthopedic Implants. , 2014, , .		0
63	Title is missing!. , 2014, , .		0
64	Reversible 4D printing. , 2022, , 395-417.		0