# Wei Zhu

List of Publications by Year
in descending order



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|---|---|---|---|
| 74 papers | 8,304 citations | 53794 45 h-index | 85541 71 g-index |
| 74 all docs | 74 docs citations | 74 times ranked | 9796 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | 3Dâ€Printed Anisotropic Polymer Materials for Functional Applications. Advanced Materials, 2022, 34, e2102877. | 21.0 | 92 |
| 2 | High throughput direct 3D bioprinting in multiwell plates. Biofabrication, 2021, 13, 025007. | 7.1 | 40 |
| 3 | Comparative study on 3D printing of polyamide 12 by selective laser sintering and multi jet fusion. Journal of Materials Processing Technology, 2021, 288, 116882. | 6.3 | 155 |
| 4 | Comparative study on the selective laser sintering of polypropylene homopolymer and copolymer: processability, crystallization kinetics, crystal phases and mechanical properties. Additive Manufacturing, 2021, 37, 101610. | 3.0 | 14 |
| 5 | Oriented structure of short fiber reinforced polymer composites processed by selective laser sintering: The role of powder-spreading process. International Journal of Machine Tools and Manufacture, 2021, 163, 103703. | 13.4 | 41 |
| 6 | Modeling the temperature, crystallization, and residual stress for selective laser sintering of polymeric powder. Acta Mechanica, 2021, 232, 3635-3653. | 2.1 | 21 |
| 7 | Bioprinting of Complex Vascularized Tissues. Methods in Molecular Biology, 2021, 2147, 163-173. | 0.9 | 4 |
| 8 | Recent Progress on Polymer Materials for Additive Manufacturing. Advanced Functional Materials, 2020, 30, 2003062. | 14.9 | 364 |
| 9 | A sequential 3D bioprinting and orthogonal bioconjugation approach for precision tissue engineering. Biomaterials, 2020, 258, 120294. | 11.4 | 27 |
| 10 | Development of organically modified montmorillonite/polypropylene composite powders for selective laser sintering. Powder Technology, 2020, 369, 25-37. | 4.2 | 27 |
| 11 | Oncogenic human herpesvirus hijacks proline metabolism for tumorigenesis. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 8083-8093. | 7.1 | 36 |
| 12 | 3D Printing of Polymeric Multi-Layer Micro-Perforated Panels for Tunable Wideband Sound Absorption. Polymers, 2020, 12, 360. | 4.5 | 32 |
| 13 | Artificial bone scaffolds of coral imitation prepared by selective laser sintering. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 104, 103664. | 3.1 | 20 |
| 14 | Photopolymerizable Biomaterials and Light-Based 3D Printing Strategies for Biomedical Applications. Chemical Reviews, 2020, 120, 10695-10743. | 47.7 | 283 |
| 15 | 4D printing smart biosystems for nanomedicine. Nanomedicine, 2019, 14, 1643-1645. | 3.3 | 25 |
| 16 | 3D Printing of Mixed Matrix Films Based on Metalâ€“Organic Frameworks and Thermoplastic Polyamide 12 by Selective Laser Sintering for Water Applications. ACS Applied Materials & Interfaces, 2019, 11, 40564-40574. | 8.0 | 75 |
| 17 | Effect of silicon addition on the microstructure, mechanical and thermal properties of Cf/SiC composite prepared via selective laser sintering. Journal of Alloys and Compounds, 2019, 792, 1045-1053. | 5.5 | 56 |
| 18 | Projection Printing of Ultrathin Structures with Nanoscale Thickness Control. ACS Applied Materials & Interfaces, 2019, 11, 16059-16064. | 8.0 | 5 |

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|---|---|---|---|
| 19 | Rapid 3D bioprinting of in vitro cardiac tissue models using human embryonic stem cell-derived cardiomyocytes. Bioprinting, 2019, 13, e00040. | 5.8 | 52 |
| 20 | Biomimetic 3D-printed scaffolds for spinal cord injury repair. Nature Medicine, 2019, 25, 263-269. | 30.7 | 460 |
| 21 | Scanningless and continuous 3D bioprinting of human tissues with decellularized extracellular matrix. Biomaterials, 2019, 194, 1-13. | 11.4 | 197 |
| 22 | 3D bioprinting mesenchymal stem cell-laden construct with coreâ€“shell nanospheres for cartilage tissue engineering. Nanotechnology, 2018, 29, 185101. | 2.6 | 134 |
| 23 | Three-Dimensional Printing of Bisphenol A-Free Polycarbonates. ACS Applied Materials & Interfaces, 2018, 10, 5331-5339. | 8.0 | 17 |
| 24 | How can 3D printing be a powerful tool in nanomedicine?. Nanomedicine, 2018, 13, 251-253. | 3.3 | 15 |
| 25 | 3Dâ€Printing of Functional Biomedical Microdevices via Lightâ€•and Extrusionâ€Based Approaches. Small Methods, 2018, 2, 1700277. | 8.6 | 79 |
| 26 | Rapid continuous 3D printing of customizable peripheral nerve guidance conduits. Materials Today, 2018, 21, 951-959. | 14.2 | 173 |
| 27 | Nanoscale 3D printing of hydrogels for cellular tissue engineering. Journal of Materials Chemistry B, 2018, 6, 2187-2197. | 5.8 | 78 |
| 28 | Systematical mechanism of Polyamide-12 aging and its micro-structural evolution during laser sintering. Polymer Testing, 2018, 67, 370-379. | 4.8 | 61 |
| 29 | Modulating physical, chemical, and biological properties in 3D printing for tissue engineering applications. Applied Physics Reviews, 2018, 5, . | 11.3 | 28 |
| 30 | Preparation and selective laser sintering of a new nylon elastomer powder. Rapid Prototyping Journal, 2018, 24, 1026-1033. | 3.2 | 2 |
| 31 | 3D bioprinting of hydrogels for retina cell culturing. Bioprinting, 2018, 12, e00029. | 5.8 | 38 |
| 32 | 3D bioprinting of functional tissue models for personalized drug screening and in vitro disease modeling. Advanced Drug Delivery Reviews, 2018, 132, 235-251. | 13.7 | 297 |
| 33 | Investigation into the processability, recyclability and crystalline structure of selective laser sintered Polyamide 6 in comparison with Polyamide 12. Polymer Testing, 2018, 69, 366-374. | 4.8 | 62 |
| 34 | Fabrication and characterization of carbon fiber reinforced SiC ceramic matrix composites based on 3D printing technology. Journal of the European Ceramic Society, 2018, 38, 4604-4613. | 5.7 | 89 |
| 35 | Enhanced neural stem cell functions in conductive annealed carbon nanofibrous scaffolds with electrical stimulation. Nanomedicine: Nanotechnology, Biology, and Medicine, 2018, 14, 2485-2494. | 3.3 | 89 |
| 36 | Direct 3D bioprinting of prevascularized tissue constructs with complex microarchitecture. Biomaterials, 2017, 124, 106-115. | 11.4 | 433 |

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|---|---|---|---|
| 37 | A macroscale FEM-based approach for selective laser sintering of thermoplastics. International Journal of Advanced Manufacturing Technology, 2017, 91, 3169-3180. | 3.0 | 15 |
| 38 | 3D printing scaffold coupled with low level light therapy for neural tissue regeneration. Biofabrication, 2017, 9, 025002. | 7.1 | 68 |
| 39 | Continuous Optical 3D Printing of Green Aliphatic Polyurethanes. ACS Applied Materials & Interfaces, 2017, 9, 836-844. | 8.0 | 56 |
| 40 | The Strong Cell-based Hydrogen Peroxide Generation Triggered by Cold Atmospheric Plasma. Scientific Reports, 2017, 7, 10831. | 3.3 | 56 |
| 41 | 4D printing of polymeric materials for tissue and organ regeneration. Materials Today, 2017, 20, 577-591. | 14.2 | 292 |
| 42 | The Specific Vulnerabilities of Cancer Cells to the Cold Atmospheric Plasma-Stimulated Solutions. Scientific Reports, 2017, 7, 4479. | 3.3 | 83 |
| 43 | Inaugural Charles River World Congress on Animal Models in Drug Discovery and Development. Journal of Translational Medicine, 2017, 15, . | 4.4 | 1 |
| 44 | A 3D printed nano bone matrix for characterization of breast cancer cell and osteoblast interactions. Nanotechnology, 2016, 27, 315103. | 2.6 | 62 |
| 45 | Tunable Surface and Matrix Chemistries in Optically Printed (0â€“3) Piezoelectric Nanocomposites. ACS Applied Materials & Interfaces, 2016, 8, 33394-33398. | 8.0 | 18 |
| 46 | Synergistic Effect of Cold Atmospheric Plasma and Drug Loaded Core-shell Nanoparticles on Inhibiting Breast Cancer Cell Growth. Scientific Reports, 2016, 6, 21974. | 3.3 | 70 |
| 47 | Design and 3D Printing of Hydrogel Scaffolds with Fractal Geometries. ACS Biomaterials Science and Engineering, 2016, 2, 1763-1770. | 5.2 | 82 |
| 48 | Study on the selective laser sintering of a low-isotacticity polypropylene powder. Rapid Prototyping Journal, 2016, 22, 621-629. | 3.2 | 22 |
| 49 | 3D printing of functional biomaterials for tissue engineering. Current Opinion in Biotechnology, 2016, 40, 103-112. | 6.6 | 584 |
| 50 | 3D Bioprinting: Biologically Inspired Smart Release System Based on 3D Bioprinted Perfused Scaffold for Vascularized Tissue Regeneration (Adv. Sci. 8/2016). Advanced Science, 2016, 3, . | 11.2 | 0 |
| 51 | Hierarchical Fabrication of Engineered Vascularized Bone Biphasic Constructs via Dual 3D Bioprinting: Integrating Regional Bioactive Factors into Architectural Design. Advanced Healthcare Materials, 2016, 5, 2174-2181. | 7.6 | 153 |
| 52 | 4D printing smart biomedical scaffolds with novel soybean oil epoxidized acrylate. Scientific Reports, 2016, 6, 27226. | 3.3 | 296 |
| 53 | Improved Human Bone Marrow Mesenchymal Stem Cell Osteogenesis in 3D Bioprinted Tissue Scaffolds with Low Intensity Pulsed Ultrasound Stimulation. Scientific Reports, 2016, 6, 32876. | 3.3 | 99 |
| 54 | Four-Dimensional Printing Hierarchy Scaffolds with Highly Biocompatible Smart Polymers for Tissue Engineering Applications. Tissue Engineering - Part C: Methods, 2016, 22, 952-963. | 2.1 | 128 |

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|---|---|---|---|
| 55 | A novel method based on selective laser sintering for preparing high-performance carbon fibres/polyamide12/epoxy ternary composites. Scientific Reports, 2016, 6, 33780. | 3.3 | 57 |
| 56 | Deterministically patterned biomimetic human iPSC-derived hepatic model via rapid 3D bioprinting. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2206-2211. | 7.1 | 676 |
| 57 | 3D printed nanocomposite matrix for the study of breast cancer bone metastasis. Nanomedicine: Nanotechnology, Biology, and Medicine, 2016, 12, 69-79. | 3.3 | 162 |
| 58 | 3Dâ€Printed Artificial Microfish. Advanced Materials, 2015, 27, 4411-4417. | 21.0 | 251 |
| 59 | Three-dimensional direct cell patterning in collagen hydrogels with near-infrared femtosecond laser. Scientific Reports, 2015, 5, 17203. | 3.3 | 78 |
| 60 | Cold Atmospheric Plasma Modified Electrospun Scaffolds with Embedded Microspheres for Improved Cartilage Regeneration. PLoS ONE, 2015, 10, e0134729. | 2.5 | 29 |
| 61 | Enhanced human bone marrow mesenchymal stem cell functions on cathodic arc plasma-treated titanium. International Journal of Nanomedicine, 2015, 10, 7385. | 6.7 | 8 |
| 62 | Material optimization and post-processing of sand moulds manufactured by the selective laser sintering of binder-coated Al2O3 sands. Journal of Materials Processing Technology, 2015, 225, 93-102. | 6.3 | 33 |
| 63 | Engineering a biomimetic three-dimensional nanostructured bone model for breast cancer bone metastasis study. Acta Biomaterialia, 2015, 14, 164-174. | 8.3 | 70 |
| 64 | Microstructure and mechanical properties of aluminium alloy cellular lattice structures manufactured by direct metal laser sintering. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 628, 238-246. | 5.6 | 241 |
| 65 | 3D Printing and Nanomanufacturing. , 2015, , 25-55. | | 5 |
| 66 | Highly aligned nanocomposite scaffolds by electrospinning and electrospraying for neural tissue regeneration. Nanomedicine: Nanotechnology, Biology, and Medicine, 2015, 11, 693-704. | 3.3 | 108 |
| 67 | Investigation into mechanical and microstructural properties of polypropylene manufactured by selective laser sintering in comparison with injection molding counterparts. Materials and Design, 2015, 82, 37-45. | 7.0 | 88 |
| 68 | Enhanced Human Bone Marrow Mesenchymal Stem Cell Chondrogenic Differentiation on Cold Atmospheric Plasma Modified Cartilage Scaffold. Materials Research Society Symposia Proceedings, 2014, 1723, 1. | 0.1 | 3 |
| 69 | Development of a Novel 3D Bioprinted In Vitro Nano Bone Model for Breast Cancer Bone Metastasis Study. Materials Research Society Symposia Proceedings, 2014, 1724, 1. | 0.1 | 5 |
| 70 | 3D Optical Printing of Piezoelectric Nanoparticleâ€“Polymer Composite Materials. ACS Nano, 2014, 8, 9799-9806. | 14.6 | 296 |
| 71 | Structural reinforcement of cell-laden hydrogels with microfabricated three dimensional scaffolds. Biomaterials Science, 2014, 2, 703-709. | 5.4 | 88 |
| 72 | 3D nano/microfabrication techniques and nanobiomaterials for neural tissue regeneration. Nanomedicine, 2014, 9, 859-875. | 3.3 | 98 |

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|---|---|---|---|
| 73 | Bio-inspired detoxification using 3D-printed hydrogel nanocomposites. Nature Communications, 2014, 5, 3774. | 12.8 | 271 |
| 74 | Relative impact of uniaxial alignment vs. form-induced stress on differentiation of human adipose derived stem cells. Biomaterials, 2013, 34, 9812-9818. | 11.4 | 31 |