

# Yu Shrike Zhang

## List of Publications by Year in descending order

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Version: 2024-02-01

333  
papers

27,179  
citations

5574

82  
h-index

7348

152  
g-index

348  
all docs

348  
docs citations

348  
times ranked

28453  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Advances in engineering hydrogels. <i>Science</i> , 2017, 356, .   | 12.6 | 1,836     |
| 2  | Engineered Nanoparticles for Drug Delivery in Cancer Therapy. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 12320-12364.  | 13.8 | 1,447     |
| 3  | Bioinks for 3D bioprinting: an overview. <i>Biomaterials Science</i> , 2018, 6, 915-946.   | 5.4  | 828       |
| 4  | Direct 3D bioprinting of perfusable vascular constructs using a blend bioink. <i>Biomaterials</i> , 2016, 106, 58-68.  | 11.4 | 727       |
| 5  | Bioprinting 3D microfibrinous scaffolds for engineering endothelialized myocardium and heart-on-a-chip. <i>Biomaterials</i> , 2016, 110, 45-59.  | 11.4 | 699       |
| 6  | Multisensor-integrated organs-on-chips platform for automated and continual in situ monitoring of organoid behaviors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E2293-E2302. | 7.1  | 570       |
| 7  | Comparison Study of Gold Nanohexapods, Nanorods, and Nanocages for Photothermal Cancer Treatment. <i>ACS Nano</i> , 2013, 7, 2068-2077.  | 14.6 | 557       |
| 8  | Graphene-based materials for tissue engineering. <i>Advanced Drug Delivery Reviews</i> , 2016, 105, 255-274.   | 13.7 | 537       |
| 9  | 3D Bioprinting for Tissue and Organ Fabrication. <i>Annals of Biomedical Engineering</i> , 2017, 45, 148-163.  | 2.5  | 507       |
| 10 | Cell-laden hydrogels for osteochondral and cartilage tissue engineering. <i>Acta Biomaterialia</i> , 2017, 57, 1-25.   | 8.3  | 490       |
| 11 | A liver-on-a-chip platform with bioprinted hepatic spheroids. <i>Biofabrication</i> , 2016, 8, 014101.   | 7.1  | 466       |
| 12 | Multi-tissue interactions in an integrated three-tissue organ-on-a-chip platform. <i>Scientific Reports</i> , 2017, 7, 8837.   | 3.3  | 407       |
| 13 | Reduced Graphene Oxideâ€œGelMA Hybrid Hydrogels as Scaffolds for Cardiac Tissue Engineering. <i>Small</i> , 2016, 12, 3677-3689.   | 10.0 | 385       |
| 14 | Extrusion Bioprinting of Shearâ€œThinning Gelatin Methacryloyl Bioinks. <i>Advanced Healthcare Materials</i> , 2017, 6, 1601451.   | 7.6  | 352       |
| 15 | Vascularized 3D printed scaffolds for promoting bone regeneration. <i>Biomaterials</i> , 2019, 190-191, 97-110.  | 11.4 | 345       |
| 16 | Organ-on-a-chip platforms for studying drug delivery systems. <i>Journal of Controlled Release</i> , 2014, 190, 82-93.   | 9.9  | 308       |
| 17 | Gold Nanocomposite Bioink for Printing 3D Cardiac Constructs. <i>Advanced Functional Materials</i> , 2017, 27, 1605352.  | 14.9 | 278       |
| 18 | Microfluidicsâ€œEnabled Multimaterial Maskless Stereolithographic Bioprinting. <i>Advanced Materials</i> , 2018, 30, e1800242.   | 21.0 | 277       |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 19 | Rapid Continuous Multimaterial Extrusion Bioprinting. <i>Advanced Materials</i> , 2017, 29, 1604630.   | 21.0 | 275       |
| 20 | 4D bioprinting: the next-generation technology for biofabrication enabled by stimuli-responsive materials. <i>Biofabrication</i> , 2017, 9, 012001.                            | 7.1  | 271       |
| 21 | An injectable self-healing coordinative hydrogel with antibacterial and angiogenic properties for diabetic skin wound repair. <i>NPG Asia Materials</i> , 2019, 11, .          | 7.9  | 260       |
| 22 | Interplay between materials and microfluidics. <i>Nature Reviews Materials</i> , 2017, 2, .  | 48.7 | 236       |
| 23 | An Advanced Multifunctional Hydrogel-Based Dressing for Wound Monitoring and Drug Delivery. <i>Advanced Healthcare Materials</i> , 2017, 6, 1700718.                           | 7.6  | 236       |
| 24 | 3D Bioprinting: from Benches to Translational Applications. <i>Small</i> , 2019, 15, e1805510.   | 10.0 | 235       |
| 25 | Coaxial extrusion bioprinting of 3D microfibrinous constructs with cell-favorable gelatin methacryloyl microenvironments. <i>Biofabrication</i> , 2018, 10, 024102.            | 7.1  | 219       |
| 26 | Aqueous Two-Phase Emulsion Bioink-Enabled 3D Bioprinting of Porous Hydrogels. <i>Advanced Materials</i> , 2018, 30, e1805460.  | 21.0 | 217       |
| 27 | A Temperature-Sensitive Drug Release System Based on Phase-Change Materials. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 7904-7908.                           | 13.8 | 211       |
| 28 | Glucose-Sensitive Hydrogel Optical Fibers Functionalized with Phenylboronic Acid. <i>Advanced Materials</i> , 2017, 29, 1606380.   | 21.0 | 206       |
| 29 | A Bioactive Carbon Nanotube-Based Ink for Printing 2D and 3D Flexible Electronics. <i>Advanced Materials</i> , 2016, 28, 3280-3289.  | 21.0 | 199       |
| 30 | Digitally Tunable Microfluidic Bioprinting of Multilayered Cannular Tissues. <i>Advanced Materials</i> , 2018, 30, e1706913.   | 21.0 | 199       |
| 31 | Evolution and clinical translation of drug delivery nanomaterials. <i>Nano Today</i> , 2017, 15, 91-106.   | 11.9 | 196       |
| 32 | Bioprinting the Cancer Microenvironment. <i>ACS Biomaterials Science and Engineering</i> , 2016, 2, 1710-1721.   | 5.2  | 194       |
| 33 | Mussel-Inspired Multifunctional Hydrogel Coating for Prevention of Infections and Enhanced Osteogenesis. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 11428-11439. | 8.0  | 193       |
| 34 | Supercritical Fluid Technology: An Emphasis on Drug Delivery and Related Biomedical Applications. <i>Advanced Healthcare Materials</i> , 2017, 6, 1700433.                     | 7.6  | 186       |
| 35 | Bioprinted thrombosis-on-a-chip. <i>Lab on A Chip</i> , 2016, 16, 4097-4105.   | 6.0  | 183       |
| 36 | Aptamer-Based Microfluidic Electrochemical Biosensor for Monitoring Cell-Secreted Trace Cardiac Biomarkers. <i>Analytical Chemistry</i> , 2016, 88, 10019-10027.               | 6.5  | 181       |

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|----|---|------|-----------|
| 37 | Sprayable hydrogel dressing accelerates wound healing with combined reactive oxygen species-scavenging and antibacterial abilities. <i>Acta Biomaterialia</i> , 2021, 124, 219-232.                     | 8.3  | 179       |
| 38 | 3D-Bioprinted Mini-Brain: A Glioblastoma Model to Study Cellular Interactions and Therapeutics. <i>Advanced Materials</i> , 2019, 31, e1806590.   | 21.0 | 168       |
| 39 | Circulating apoptotic bodies maintain mesenchymal stem cell homeostasis and ameliorate osteopenia via transferring multiple cellular factors. <i>Cell Research</i> , 2018, 28, 918-933.                 | 12.0 | 165       |
| 40 | Complexation-induced resolution enhancement of 3D-printed hydrogel constructs. <i>Nature Communications</i> , 2020, 11, 1267.   | 12.8 | 158       |
| 41 | Spatially and temporally controlled hydrogels for tissue engineering. <i>Materials Science and Engineering Reports</i> , 2017, 119, 1-35.   | 31.8 | 151       |
| 42 | Effective bioprinting resolution in tissue model fabrication. <i>Lab on A Chip</i> , 2019, 19, 2019-2037.   | 6.0  | 148       |
| 43 | An injectable shear-thinning biomaterial for endovascular embolization. <i>Science Translational Medicine</i> , 2016, 8, 365ra156.  | 12.4 | 147       |
| 44 | Reversed-engineered human alveolar lung-on-a-chip model. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .  | 7.1  | 144       |
| 45 | Three-dimensional bioprinting of gelatin methacryloyl (GelMA). <i>Bio-Design and Manufacturing</i> , 2018, 1, 215-224.  | 7.7  | 143       |
| 46 | Structural analysis of photocrosslinkable methacryloyl-modified protein derivatives. <i>Biomaterials</i> , 2017, 139, 163-171.  | 11.4 | 140       |
| 47 | Electrically Driven Microengineered Bioinspired Soft Robots. <i>Advanced Materials</i> , 2018, 30, 1704189.   | 21.0 | 140       |
| 48 | From cardiac tissue engineering to heart-on-a-chip: beating challenges. <i>Biomedical Materials (Bristol)</i> , 2015, 10, 034006.   | 3.3  | 134       |
| 49 | Automated microfluidic platform of bead-based electrochemical immunosensor integrated with bioreactor for continual monitoring of cell secreted biomarkers. <i>Scientific Reports</i> , 2016, 6, 24598. | 3.3  | 132       |
| 50 | Label-Free and Regenerative Electrochemical Microfluidic Biosensors for Continual Monitoring of Cell Secretomes. <i>Advanced Science</i> , 2017, 4, 1600522.  | 11.2 | 131       |
| 51 | Gold nanocages covered with thermally-responsive polymers for controlled release by high-intensity focused ultrasound. <i>Nanoscale</i> , 2011, 3, 1724.  | 5.6  | 130       |
| 52 | Dissolvable Microneedles Coupled with Nanofiber Dressings Eradicate Biofilms <i>via</i> Effectively Delivering a Database-Designed Antimicrobial Peptide. <i>ACS Nano</i> , 2020, 14, 11775-11786.      | 14.6 | 129       |
| 53 | Recent Advances in Formulating and Processing Biomaterial Inks for Vat Polymerization-Based 3D Printing. <i>Advanced Healthcare Materials</i> , 2020, 9, e2000156.                                      | 7.6  | 128       |
| 54 | Inverse Opal Scaffolds and Their Biomedical Applications. <i>Advanced Materials</i> , 2017, 29, 1701115.  | 21.0 | 127       |

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|----|--|------|-----------|
| 55 | 3D extrusion bioprinting. <i>Nature Reviews Methods Primers</i> , 2021, 1, .   | 21.2 | 127       |
| 56 | Surface acoustic waves induced micropatterning of cells in gelatin methacryloyl (GelMA) hydrogels. <i>Biofabrication</i> , 2017, 9, 015020.  | 7.1  | 126       |
| 57 | Cardiovascular Organ-on-a-Chip Platforms for Drug Discovery and Development. <i>Applied in Vitro Toxicology</i> , 2016, 2, 82-96.  | 1.1  | 124       |
| 58 | Bioprinted Injectable Hierarchically Porous Gelatin Methacryloyl Hydrogel Constructs with Shape-Memory Properties. <i>Advanced Functional Materials</i> , 2020, 30, 2003740.   | 14.9 | 122       |
| 59 | A Bioinspired Medical Adhesive Derived from Skin Secretion of <i>Andrias davidianus</i> for Wound Healing. <i>Advanced Functional Materials</i> , 2019, 29, 1809110.   | 14.9 | 121       |
| 60 | A Tumor-on-a-Chip System with Bioprinted Blood and Lymphatic Vessel Pair. <i>Advanced Functional Materials</i> , 2019, 29, 1807173.  | 14.9 | 121       |
| 61 | Bioprinted 3D vascularized tissue model for drug toxicity analysis. <i>Biomicrofluidics</i> , 2017, 11, 044109.  | 2.4  | 120       |
| 62 | Fabrication of Microbeads with a Controllable Hollow Interior and Porous Wall Using a Capillary Fluidic Device. <i>Advanced Functional Materials</i> , 2009, 19, 2943-2949.  | 14.9 | 118       |
| 63 | Neovascularization in Biodegradable Inverse Opal Scaffolds with Uniform and Precisely Controlled Pore Sizes. <i>Advanced Healthcare Materials</i> , 2013, 2, 145-154.  | 7.6  | 117       |
| 64 | Self-targeting visualizable hyaluronate nanogel for synchronized intracellular release of doxorubicin and cisplatin in combating multidrug-resistant breast cancer. <i>Nano Research</i> , 2021, 14, 846-857.          | 10.4 | 117       |
| 65 | Paper-based microfluidic system for tear electrolyte analysis. <i>Lab on A Chip</i> , 2017, 17, 1137-1148.   | 6.0  | 111       |
| 66 | Injectable, self-healing, antibacterial, and hemostatic N,O-carboxymethyl chitosan/oxidized chondroitin sulfate composite hydrogel for wound dressing. <i>Materials Science and Engineering C</i> , 2021, 118, 111324. | 7.3  | 111       |
| 67 | Hyaluronic Acid (HA)-Based Silk Fibroin/Zinc Oxide Core-Shell Electrospun Dressing for Burn Wound Management. <i>Macromolecular Bioscience</i> , 2020, 20, e1900328.   | 4.1  | 110       |
| 68 | A microfluidic optical platform for real-time monitoring of pH and oxygen in microfluidic bioreactors and organ-on-chip devices. <i>Biomicrofluidics</i> , 2016, 10, 044111.   | 2.4  | 109       |
| 69 | Rapid prototyping of whole-thermoplastic microfluidics with built-in microvalves using laser ablation and thermal fusion bonding. <i>Sensors and Actuators B: Chemical</i> , 2018, 255, 100-109.                       | 7.8  | 104       |
| 70 | Kidney-on-a-chip: untapped opportunities. <i>Kidney International</i> , 2018, 94, 1073-1086.   | 5.2  | 104       |
| 71 | The Tumor-on-Chip: Recent Advances in the Development of Microfluidic Systems to Recapitulate the Physiology of Solid Tumors. <i>Materials</i> , 2019, 12, 2945.   | 2.9  | 103       |
| 72 | Cancer-on-a-chip systems at the frontier of nanomedicine. <i>Drug Discovery Today</i> , 2017, 22, 1392-1399.   | 6.4  | 102       |

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|----|--|------|-----------|
| 73 | Low cost smart phone diagnostics for food using paper-based colorimetric sensor arrays. Food Control, 2017, 82, 227-232.   | 5.5  | 101       |
| 74 | Emerging Technologies in Multi-Material Bioprinting. Advanced Materials, 2021, 33, e2104730.   | 21.0 | 100       |
| 75 | Smart transformable nanoparticles for enhanced tumor theranostics. Applied Physics Reviews, 2021, 8, .   | 11.3 | 99        |
| 76 | Tough Bonding, On-Demand Debonding, and Facile Rebonding between Hydrogels and Diverse Metal Surfaces. Advanced Materials, 2019, 31, e1904732.   | 21.0 | 98        |
| 77 | Fabrication of injectable and superelastic nanofiber rectangle matrices (‘peanuts’) and their potential applications in hemostasis. Biomaterials, 2018, 179, 46-59.  | 11.4 | 96        |
| 78 | Locally Deployable Nanofiber Patch for Sequential Drug Delivery in Treatment of Primary and Advanced Orthotopic Hepatomas. ACS Nano, 2018, 12, 6685-6699.  | 14.6 | 95        |
| 79 | Functionalizing Double-Network Hydrogels for Applications in Remote Actuation and in Low-Temperature Strain Sensing. ACS Applied Materials & Interfaces, 2020, 12, 30247-30258.                                  | 8.0  | 93        |
| 80 | Labeling Human Mesenchymal Stem Cells with Gold Nanocages for <i>in vitro</i> and <i>in vivo</i> Tracking by Two-Photon Microscopy and Photoacoustic Microscopy. Theranostics, 2013, 3, 532-543.                 | 10.0 | 92        |
| 81 | A highly stretchable and robust non-fluorinated superhydrophobic surface. Journal of Materials Chemistry A, 2017, 5, 16273-16280.  | 10.3 | 89        |
| 82 | Label-free photoacoustic microscopy of cytochromes. Journal of Biomedical Optics, 2013, 18, 020504.  | 2.6  | 87        |
| 83 | A cost-effective fluorescence mini-microscope for biomedical applications. Lab on A Chip, 2015, 15, 3661-3669.   | 6.0  | 86        |
| 84 | Gambogic acid augments black phosphorus quantum dots (BPQDs)-based synergistic chemo-photothermal therapy through downregulating heat shock protein expression. Chemical Engineering Journal, 2020, 390, 124312. | 12.7 | 86        |
| 85 | Tet1 and Tet2 maintain mesenchymal stem cell homeostasis via demethylation of the P2rx7 promoter. Nature Communications, 2018, 9, 2143.  | 12.8 | 85        |
| 86 | Bioprinting: 3D Bioprinting: from Benches to Translational Applications (Small 23/2019). Small, 2019, 15, 1970126.   | 10.0 | 84        |
| 87 | Microfluidic integration of regeneratable electrochemical affinity-based biosensors for continual monitoring of organ-on-a-chip devices. Nature Protocols, 2021, 16, 2564-2593.                                  | 12.0 | 80        |
| 88 | Elastomeric free-form blood vessels for interconnecting organs on chip systems. Lab on A Chip, 2016, 16, 1579-1586.  | 6.0  | 79        |
| 89 | Protein/polysaccharide-based scaffolds mimicking native extracellular matrix for cardiac tissue engineering applications. Journal of Biomedical Materials Research - Part A, 2018, 106, 769-781.                 | 4.0  | 79        |
| 90 | Highly Porous Microcarriers for Minimally Invasive In Situ Skeletal Muscle Cell Delivery. Small, 2019, 15, e1901397.   | 10.0 | 77        |

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|-----|---|------|-----------|
| 91  | Biomechanical Strain Exacerbates Inflammation on a Progeria-on-a-Chip Model. <i>Small</i> , 2017, 13, 1603737.  | 10.0 | 75        |
| 92  | Towards the development of human immune-system-on-a-chip platforms. <i>Drug Discovery Today</i> , 2019, 24, 517-525.  | 6.4  | 75        |
| 93  | Electrospun nanofibers for the delivery of active drugs through nasal, oral and vaginal mucosa: Current status and future perspectives. <i>Materials Science and Engineering C</i> , 2020, 111, 110756. | 7.3  | 73        |
| 94  | Digital Light Processing Based Bioprinting with Composable Gradients. <i>Advanced Materials</i> , 2022, 34, e2107038.   | 21.0 | 71        |
| 95  | Uniform Beads with Controllable Pore Sizes for Biomedical Applications. <i>Small</i> , 2010, 6, 1492-1498.  | 10.0 | 70        |
| 96  | Embedded Multimaterial Extrusion Bioprinting. <i>SLAS Technology</i> , 2018, 23, 154-163.   | 1.9  | 68        |
| 97  | Three-Dimensional Bioprinting Strategies for Tissue Engineering. <i>Cold Spring Harbor Perspectives in Medicine</i> , 2018, 8, a025718.   | 6.2  | 67        |
| 98  | Liver-on-a-Chip Models of Fatty Liver Disease. <i>Hepatology</i> , 2020, 71, 733-740.   | 7.3  | 67        |
| 99  | Organ-on-a-chip platforms for accelerating the evaluation of nanomedicine. <i>Bioactive Materials</i> , 2021, 6, 1012-1027.   | 15.6 | 67        |
| 100 | Seeking the right context for evaluating nanomedicine: from tissue models in petri dishes to microfluidic organs-on-a-chip. <i>Nanomedicine</i> , 2015, 10, 685-688.                                    | 3.3  | 65        |
| 101 | Permeability mapping of gelatin methacryloyl hydrogels. <i>Acta Biomaterialia</i> , 2018, 77, 38-47.  | 8.3  | 65        |
| 102 | An enzyme-sensitive probe for photoacoustic imaging and fluorescence detection of protease activity. <i>Nanoscale</i> , 2011, 3, 950.   | 5.6  | 64        |
| 103 | Targeting Hypoxic Tumors with Hybrid Nanobullets for Oxygen-Independent Synergistic Photothermal and Thermodynamic Therapy. <i>Nano-Micro Letters</i> , 2021, 13, 99.                                   | 27.0 | 64        |
| 104 | Electrospun nanofiber blend with improved mechanical and biological performance. <i>International Journal of Nanomedicine</i> , 2018, Volume 13, 7891-7903.   | 6.7  | 63        |
| 105 | Advancing Tissue Engineering: A Tale of Nano-, Micro-, and Macroscale Integration. <i>Small</i> , 2016, 12, 2130-2145.  | 10.0 | 62        |
| 106 | 3D-printable colloidal photonic crystals. <i>Materials Today</i> , 2022, 56, 29-41.   | 14.2 | 61        |
| 107 | A General Strategy for Extrusion Bioprinting of Bio-macromolecular Bioinks through Alginate-templated Dual-stage Crosslinking. <i>Macromolecular Bioscience</i> , 2018, 18, e1800127.                   | 4.1  | 60        |
| 108 | Injectable shear-thinning hydrogels for delivering osteogenic and angiogenic cells and growth factors. <i>Biomaterials Science</i> , 2018, 6, 1604-1615.  | 5.4  | 59        |

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|-----|---|------|-----------|
| 109 | Inverse opal scaffolds for applications in regenerative medicine. <i>Soft Matter</i> , 2013, 9, 9747.   | 2.7  | 58        |
| 110 | Recent advances of microneedles used towards stimuli-responsive drug delivery, disease theranostics, and bioinspired applications. <i>Chemical Engineering Journal</i> , 2021, 426, 130561. | 12.7 | 58        |
| 111 | Visible light crosslinkable human hair keratin hydrogels. <i>Bioengineering and Translational Medicine</i> , 2018, 3, 37-48.  | 7.1  | 57        |
| 112 | A Heartâ€œBreast Cancerâ€œonâ€œaâ€œChip Platform for Disease Modeling and Monitoring of Cardiotoxicity Induced by Cancer Chemotherapy. <i>Small</i> , 2021, 17, e2004258.                   | 10.0 | 57        |
| 113 | Symbiotic Photosynthetic Oxygenation within 3D-Bioprinted Vascularized Tissues. <i>Matter</i> , 2021, 4, 217-240.   | 10.0 | 57        |
| 114 | Coaxial Extrusion of Tubular Tissue Constructs Using a Gelatin/GelMA Blend Bioink. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 5514-5524.                                    | 5.2  | 55        |
| 115 | Advancements in Hydrogel-Based Drug Sustained Release Systems for Bone Tissue Engineering. <i>Frontiers in Pharmacology</i> , 2020, 11, 622.  | 3.5  | 55        |
| 116 | Multi-Scale Molecular Photoacoustic Tomography of Gene Expression. <i>PLoS ONE</i> , 2012, 7, e43999.   | 2.5  | 54        |
| 117 | Endovascular Embolization by Transcatheter Delivery of Particles: Past, Present, and Future. <i>Journal of Functional Biomaterials</i> , 2017, 8, 12.                                       | 4.4  | 54        |
| 118 | Fabrication of whole-thermoplastic normally closed microvalve, micro check valve, and micropump. <i>Sensors and Actuators B: Chemical</i> , 2018, 262, 625-636.                             | 7.8  | 54        |
| 119 | Cardiac Fibrotic Remodeling on a Chip with Dynamic Mechanical Stimulation. <i>Advanced Healthcare Materials</i> , 2019, 8, e1801146.  | 7.6  | 54        |
| 120 | An open-source handheld extruder loaded with pore-forming bioink for in situ wound dressing. <i>Materials Today Bio</i> , 2020, 8, 100074.  | 5.5  | 52        |
| 121 | Programmable microbial ink for 3D printing of living materials produced from genetically engineered protein nanofibers. <i>Nature Communications</i> , 2021, 12, 6600.                      | 12.8 | 52        |
| 122 | Bioreactors for Cardiac Tissue Engineering. <i>Advanced Healthcare Materials</i> , 2019, 8, e1701504.   | 7.6  | 51        |
| 123 | A Foreign Body Responseâ€œonâ€œaâ€œChip Platform. <i>Advanced Healthcare Materials</i> , 2019, 8, e1801425.   | 7.6  | 51        |
| 124 | Three-Dimensional Printing: An Enabling Technology for IR. <i>Journal of Vascular and Interventional Radiology</i> , 2016, 27, 859-865.   | 0.5  | 50        |
| 125 | Hydrophobic Hydrogels: Toward Construction of Floating (Bio)microdevices. <i>Chemistry of Materials</i> , 2016, 28, 3641-3648.  | 6.7  | 49        |
| 126 | Photoacoustic microscopy in tissue engineering. <i>Materials Today</i> , 2013, 16, 67-77.   | 14.2 | 48        |



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|-----|---|------|-----------|
| 127 | Copper Sulfide Nanoparticle/Cellulose Composite Paper: Room-Temperature Green Fabrication for NIR Laser-Inducible Ablation of Pathogenic Microorganisms. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 2648-2655.                                   | 6.7  | 48        |
| 128 | Mimicking Human Pathophysiology in Organ-on-a-Chip Devices. <i>Advanced Biology</i> , 2018, 2, 1800109.   | 3.0  | 48        |
| 129 | Colloidal Photonic Crystals for Biomedical Applications. <i>Small Structures</i> , 2021, 2, 2000110.  | 12.0 | 47        |
| 130 | A hemostatic sponge derived from skin secretion of <i>Andrias davidianus</i> and nanocellulose. <i>Chemical Engineering Journal</i> , 2021, 416, 129136.  | 12.7 | 46        |
| 131 | Generation of Cost-Effective Paper-Based Tissue Models through Matrix-Assisted Sacrificial 3D Printing. <i>Nano Letters</i> , 2019, 19, 3603-3611.  | 9.1  | 45        |
| 132 | A Smartphone-Enabled Portable Digital Light Processing 3D Printer. <i>Advanced Materials</i> , 2021, 33, e2102153.  | 21.0 | 45        |
| 133 | Facile fabrication of a biocompatible composite gel with sustained release of aspirin for bone regeneration. <i>Bioactive Materials</i> , 2022, 11, 130-139.  | 15.6 | 45        |
| 134 | Hybrid Microscopy: Enabling Inexpensive High-Performance Imaging through Combined Physical and Optical Magnifications. <i>Scientific Reports</i> , 2016, 6, 22691.  | 3.3  | 44        |
| 135 | Nanoparticles for immune system targeting. <i>Drug Discovery Today</i> , 2017, 22, 1295-1301.   | 6.4  | 43        |
| 136 | Hydrogen sulfide maintains dental pulp stem cell function via TRPV1-mediated calcium influx. <i>Cell Death Discovery</i> , 2018, 4, 1.  | 4.7  | 43        |
| 137 | Using chaotic advection for facile high-throughput fabrication of ordered multilayer micro- and nanostructures: continuous chaotic printing. <i>Biofabrication</i> , 2020, 12, 035023.  | 7.1  | 43        |
| 138 | Molecularly cleavable bioinks facilitate high-performance digital light processing-based bioprinting of functional volumetric soft tissues. <i>Nature Communications</i> , 2022, 13, .  | 12.8 | 43        |
| 139 | Influence of Surface Chemistry on Adhesion and Osteo/Odontogenic Differentiation of Dental Pulp Stem Cells. <i>ACS Biomaterials Science and Engineering</i> , 2017, 3, 1119-1128.   | 5.2  | 42        |
| 140 | Colorimetric loop-mediated isothermal amplification (LAMP) for cost-effective and quantitative detection of SARS-CoV-2: the change in color in LAMP-based assays quantitatively correlates with viral copy number. <i>Analytical Methods</i> , 2021, 13, 169-178. | 2.7  | 42        |
| 141 | An oxidative stress-responsive electrospun polyester membrane capable of releasing anti-bacterial and anti-inflammatory agents for postoperative anti-adhesion. <i>Journal of Controlled Release</i> , 2021, 335, 359-368.  | 9.9  | 42        |
| 142 | Supercritical Fluid-Assisted Fabrication of Indocyanine Green-Encapsulated Silk Fibroin Nanoparticles for Dual-Triggered Cancer Therapy. <i>ACS Biomaterials Science and Engineering</i> , 2018, 4, 3487-3497.  | 5.2  | 41        |
| 143 | Faithful Fabrication of Biocompatible Multicompartmental Memomicrospheres for Digitally Color-Tunable Barcoding. <i>Small</i> , 2020, 16, e1907586.   | 10.0 | 41        |
| 144 | Controlling the Pore Sizes and Related Properties of Inverse Opal Scaffolds for Tissue Engineering Applications. <i>Macromolecular Rapid Communications</i> , 2013, 34, 485-491.  | 3.9  | 40        |

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|-----|--|------|-----------|
| 145 | Boosting clinical translation of nanomedicine. <i>Nanomedicine</i> , 2016, 11, 1495-1497.  | 3.3  | 40        |
| 146 | Modeling Endothelialized Hepatic Tumor Microtissues for Drug Screening. <i>Advanced Science</i> , 2020, 7, 2002002.  | 11.2 | 40        |
| 147 | 3D Immunocompetent Organ-on-a-Chip Models. <i>Small Methods</i> , 2020, 4, 2000235.  | 8.6  | 40        |
| 148 | A Tetra-PEG Hydrogel Based Aspirin Sustained Release System Exerts Beneficial Effects on Periodontal Ligament Stem Cells Mediated Bone Regeneration. <i>Frontiers in Chemistry</i> , 2019, 7, 682. | 3.6  | 39        |
| 149 | Synchronized electromechanical integration recording of cardiomyocytes. <i>Biosensors and Bioelectronics</i> , 2018, 117, 354-365.   | 10.1 | 38        |
| 150 | Improving Bioprinted Volumetric Tumor Microenvironments In Vitro. <i>Trends in Cancer</i> , 2020, 6, 745-756.  | 7.4  | 38        |
| 151 | High-resolution lithographic biofabrication of hydrogels with complex microchannels from low-temperature-soluble gelatin bioresins. <i>Materials Today Bio</i> , 2021, 12, 100162.                 | 5.5  | 38        |
| 152 | Invited Article: Emerging soft bioelectronics for cardiac health diagnosis and treatment. <i>APL Materials</i> , 2019, 7, 031301.  | 5.1  | 37        |
| 153 | Bioprinting of Small-Diameter Blood Vessels. <i>Engineering</i> , 2021, 7, 832-844.  | 6.7  | 37        |
| 154 | Multiple facets for extracellular matrix mimicking in regenerative medicine. <i>Nanomedicine</i> , 2015, 10, 689-692.  | 3.3  | 36        |
| 155 | Reconstruction of Large-scale Defects with a Novel Hybrid Scaffold Made from Poly(L-lactic) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tj 5 Scientific Reports, 2017, 7, 359.                           | 3.3  | 36        |
| 156 | A hepatocellular carcinoma bone metastasis-on-a-chip model for studying thymoquinone-loaded anticancer nanoparticles. <i>Bio-Design and Manufacturing</i> , 2020, 3, 189-202.                      | 7.7  | 36        |
| 157 | Enhanced electric-field-induced strains in (K,Na)NbO <sub>3</sub> piezoelectrics from heterogeneous structures. <i>Materials Today</i> , 2021, 46, 44-53.  | 14.2 | 36        |
| 158 | 3D-bioprinted cancer-on-a-chip: level-up organotypic in vitro models. <i>Trends in Biotechnology</i> , 2022, 40, 432-447.  | 9.3  | 36        |
| 159 | Freeform cell-laden cryobioprinting for shelf-ready tissue fabrication and storage. <i>Matter</i> , 2022, 5, 573-593.  | 10.0 | 36        |
| 160 | Vertical Extrusion Cryo(bio)printing for Anisotropic Tissue Manufacturing. <i>Advanced Materials</i> , 2022, 34, e2108931.   | 21.0 | 36        |
| 161 | Imaging Biomaterial-Tissue Interactions. <i>Trends in Biotechnology</i> , 2018, 36, 403-414.   | 9.3  | 35        |
| 162 | The Delivery of Extracellular Vesicles Loaded in Biomaterial Scaffolds for Bone Regeneration. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 1015.                                | 4.1  | 35        |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 163 | 3D bioprinted organ-on-a-chips. <i>Aggregate</i> , 2023, 4, .   | 9.9  | 35        |
| 164 | Google Glass-Directed Monitoring and Control of Microfluidic Biosensors and Actuators. <i>Scientific Reports</i> , 2016, 6, 22237.  | 3.3  | 34        |
| 165 | Current advances in skin-on-a-chip models for drug testing. <i>Microphysiological Systems</i> , 2018, 1, 1-1.   | 2.0  | 34        |
| 166 | Porous Electrospun Fibers with Self-Sealing Functionality: An Enabling Strategy for Trapping Biomacromolecules. <i>Small</i> , 2017, 13, 1701949.   | 10.0 | 33        |
| 167 | Hemostasis and nanotechnology. <i>Cardiovascular Diagnosis and Therapy</i> , 2017, 7, S267-S275.  | 1.7  | 33        |
| 168 | Hydrogen sulfide promotes immunomodulation of gingiva-derived mesenchymal stem cells via the Fas/FasL coupling pathway. <i>Stem Cell Research and Therapy</i> , 2018, 9, 62.  | 5.5  | 33        |
| 169 | Freeze-Casting with 3D-Printed Templates Creates Anisotropic Microchannels and Patterned Macrochannels within Biomimetic Nanofiber Aerogels for Rapid Cellular Infiltration. <i>Advanced Healthcare Materials</i> , 2021, 10, e2100238. | 7.6  | 33        |
| 170 | Deep image prior for undersampling high-speed photoacoustic microscopy. <i>Photoacoustics</i> , 2021, 22, 100266.   | 7.8  | 33        |
| 171 | Non-Invasive and In-Situ Characterization of the Degradation of Biomaterial Scaffolds by Volumetric Photoacoustic Microscopy. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 184-188.                                     | 13.8 | 31        |
| 172 | Eccentric magnetic microcapsules for orientation-specific and dual stimuli-responsive drug release. <i>Journal of Materials Chemistry B</i> , 2015, 3, 4530-4538.   | 5.8  | 31        |
| 173 | Bioinspired Universal Flexible Elastomer-Based Microchannels. <i>Small</i> , 2018, 14, e1702170.  | 10.0 | 31        |
| 174 | A Bioinspired Hemostatic Powder Derived from the Skin Secretion of <i>Andrias davidianus</i> for Rapid Hemostasis and Intraoral Wound Healing. <i>Small</i> , 2022, 18, e2101699.   | 10.0 | 31        |
| 175 | Micropore-Forming Gelatin Methacryloyl (GelMA) Bioink Toolbox 2.0: Designable Tunability and Adaptability for 3D Bioprinting Applications. <i>Small</i> , 2022, 18, .   | 10.0 | 31        |
| 176 | Microfluidic Air Sampler for Highly Efficient Bacterial Aerosol Collection and Identification. <i>Analytical Chemistry</i> , 2016, 88, 11504-11512.   | 6.5  | 30        |
| 177 | 3D-Printed Sugar-Based Stents Facilitating Vascular Anastomosis. <i>Advanced Healthcare Materials</i> , 2018, 7, e1800702.  | 7.6  | 30        |
| 178 | Composite Inks for Extrusion Printing of Biological and Biomedical Constructs. <i>ACS Biomaterials Science and Engineering</i> , 2021, 7, 4009-4026.  | 5.2  | 30        |
| 179 | Supercritical Fluid-Assisted Decoration of Nanoparticles on Porous Microcontainers for Codelivery of Therapeutics and Inhalation Therapy of Diabetes. <i>ACS Biomaterials Science and Engineering</i> , 2018, 4, 4225-4235.             | 5.2  | 29        |
| 180 | Engineering in vitro human tissue models through bio-design and manufacturing. <i>Bio-Design and Manufacturing</i> , 2020, 3, 155-159.  | 7.7  | 29        |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 181 | Designable dual-power micromotors fabricated from a biocompatible gas-shearing strategy. <i>Chemical Engineering Journal</i> , 2021, 407, 127187.  | 12.7 | 29        |
| 182 | Chaotic printing: using chaos to fabricate densely packed micro- and nanostructures at high resolution and speed. <i>Materials Horizons</i> , 2018, 5, 813-822.  | 12.2 | 28        |
| 183 | Sacrificial Bioprinting of a Mammary Ductal Carcinoma Model. <i>Biotechnology Journal</i> , 2019, 14, 1700703.   | 3.5  | 28        |
| 184 | Investigating lymphangiogenesis in a sacrificially bioprinted volumetric model of breast tumor tissue. <i>Methods</i> , 2020, 190, 72-79.  | 3.8  | 28        |
| 185 | Association Between Implementation of the Severe Sepsis and Septic Shock Early Management Bundle Performance Measure and Outcomes in Patients With Suspected Sepsis in US Hospitals. <i>JAMA Network Open</i> , 2021, 4, e2138596. | 5.9  | 28        |
| 186 | Hydrogel Bioink with Multilayered Interfaces Improves Dispersibility of Encapsulated Cells in Extrusion Bioprinting. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 30585-30595.  | 8.0  | 27        |
| 187 | Inhibition of Tet1- and Tet2-mediated DNA demethylation promotes immunomodulation of periodontal ligament stem cells. <i>Cell Death and Disease</i> , 2019, 10, 780.   | 6.3  | 27        |
| 188 | ACEI/ARB therapy in COVID-19: the double-edged sword of ACE2 and SARS-CoV-2 viral docking. <i>Critical Care</i> , 2020, 24, 475.   | 5.8  | 27        |
| 189 | Anti-fouling strategies for central venous catheters. <i>Cardiovascular Diagnosis and Therapy</i> , 2017, 7, S246-S257.  | 1.7  | 26        |
| 190 | Supercritical Fluid-Assisted Porous Microspheres for Efficient Delivery of Insulin and Inhalation Therapy of Diabetes. <i>Advanced Healthcare Materials</i> , 2019, 8, e1800910.   | 7.6  | 26        |
| 191 | High-throughput single-cell analysis of exosome mediated dual drug delivery, <i>in vivo</i> fate and synergistic tumor therapy. <i>Nanoscale</i> , 2020, 12, 13742-13756.  | 5.6  | 26        |
| 192 | A Transparent, Wearable Fluorescent Mouthguard for High-Sensitive Visualization and Accurate Localization of Hidden Dental Lesion Sites. <i>Advanced Materials</i> , 2020, 32, e2000060.   | 21.0 | 26        |
| 193 | Recent Progress in Antimicrobial Strategies for Resin-Based Restoratives. <i>Polymers</i> , 2021, 13, 1590.  | 4.5  | 26        |
| 194 | Antiviral biomaterials. <i>Matter</i> , 2021, 4, 1892-1918.  | 10.0 | 26        |
| 195 | Bridging the academia-to-industry gap: organ-on-a-chip platforms for safety and toxicology assessment. <i>Trends in Pharmacological Sciences</i> , 2021, 42, 715-728.  | 8.7  | 26        |
| 196 | Microfluidic Bioprinting for Engineering Vascularized Tissues and Organoids. <i>Journal of Visualized Experiments</i> , 2017, .  | 0.3  | 25        |
| 197 | A Dual-Layered Microfluidic System for Long-Term Controlled In Situ Delivery of Multiple Anti-Inflammatory Factors for Chronic Neural Applications. <i>Advanced Functional Materials</i> , 2018, 28, 1702009.                      | 14.9 | 25        |
| 198 | 3D bioprinting for oncology applications. <i>Journal of 3D Printing in Medicine</i> , 2019, 3, 55-58.  | 2.0  | 24        |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 199 | Accuracy of a 3-Dimensionally Printed Navigational Template for Localizing Small Pulmonary Nodules. <i>JAMA Surgery</i> , 2019, 154, 295.  | 4.3  | 24        |
| 200 | Portal Vein Embolization: Impact of Chemotherapy and Genetic Mutations. <i>Journal of Clinical Medicine</i> , 2017, 6, 26.   | 2.4  | 23        |
| 201 | Decorating 3D Printed Scaffolds with Electrospun Nanofiber Segments for Tissue Engineering. <i>Advanced Biology</i> , 2019, 3, e1900137.   | 3.0  | 23        |
| 202 | The Delivery of RNA-Interference Therapies Based on Engineered Hydrogels for Bone Tissue Regeneration. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 445.                            | 4.1  | 23        |
| 203 | High-Throughput and Continuous Chaotic Bioprinting of Spatially Controlled Bacterial Microcosms. <i>ACS Biomaterials Science and Engineering</i> , 2021, 7, 2408-2419.                                 | 5.2  | 23        |
| 204 | Imiquimod-gemcitabine nanoparticles harness immune cells to suppress breast cancer. <i>Biomaterials</i> , 2022, 280, 121302.   | 11.4 | 23        |
| 205 | Biomimetic models of the glomerulus. <i>Nature Reviews Nephrology</i> , 2022, 18, 241-257.   | 9.6  | 22        |
| 206 | Laterally Confined Microfluidic Patterning of Cells for Engineering Spatially Defined Vascularization. <i>Small</i> , 2016, 12, 5132-5139.   | 10.0 | 21        |
| 207 | Conformation-driven strategy for resilient and functional protein materials. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .                     | 7.1  | 21        |
| 208 | A Natural Hydrogel with Prohealing Properties Enhances Tendon Regeneration. <i>Small</i> , 2022, 18, e2105255.   | 10.0 | 21        |
| 209 | Artificial Intelligence-Assisted High-Throughput Screening of Printing Conditions of Hydrogel Architectures for Accelerated Diabetic Wound Healing. <i>Advanced Functional Materials</i> , 2022, 32, . | 14.9 | 21        |
| 210 | 3D human nonalcoholic hepatic steatosis and fibrosis models. <i>Bio-Design and Manufacturing</i> , 2021, 4, 157-170.   | 7.7  | 20        |
| 211 | Expanding sacrificially printed microfluidic channel-embedded paper devices for construction of volumetric tissue models in vitro. <i>Biofabrication</i> , 2020, 12, 045027.                           | 7.1  | 20        |
| 212 | Bioengineered in vitro models of thrombosis: methods and techniques. <i>Cardiovascular Diagnosis and Therapy</i> , 2017, 7, S329-S335.   | 1.7  | 19        |
| 213 | The potential of microfluidics-enhanced extrusion bioprinting. <i>Biomicrofluidics</i> , 2021, 15, 041304.   | 2.4  | 19        |
| 214 | A multifunctional micropore-forming bioink with enhanced anti-bacterial and anti-inflammatory properties. <i>Biofabrication</i> , 2022, 14, 024105.  | 7.1  | 19        |
| 215 | Optical-Resolution Photoacoustic Microscopy for Volumetric and Spectral Analysis of Histological and Immunochemical Samples. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 8099-8103.   | 13.8 | 18        |
| 216 | CRL4DCAF8 dependent opposing stability control over the chromatin remodeler LSH orchestrates epigenetic dynamics in ferroptosis. <i>Cell Death and Differentiation</i> , 2021, 28, 1593-1609.          | 11.2 | 18        |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 217 | Gut-microbiota-on-a-chip: an enabling field for physiological research. <i>Microphysiological Systems</i> , 2018, 1, 1-1.   | 2.0  | 17        |
| 218 | 3D bioprinting of glioblastoma models. <i>Journal of 3D Printing in Medicine</i> , 2020, 4, 113-125.  | 2.0  | 17        |
| 219 | State-of-art affordable bioprinters: A guide for the DiY community. <i>Applied Physics Reviews</i> , 2021, 8, .   | 11.3 | 17        |
| 220 | Targeted-gene silencing of BRAF to interrupt BRAF/MEK/ERK pathway synergized photothermal therapeutics for melanoma using a novel FA-GNR-siBRAF nanosystem. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2018, 14, 1679-1693. | 3.3  | 16        |
| 221 | Circulatory shear stress induces molecular changes and side population enrichment in primary tumor-derived lung cancer cells with higher metastatic potential. <i>Scientific Reports</i> , 2021, 11, 2800.                                    | 3.3  | 16        |
| 222 | Nature-derived bionanomaterials for sustained release of 5-fluorouracil to inhibit subconjunctival fibrosis. <i>Materials Today Advances</i> , 2021, 11, 100150.  | 5.2  | 16        |
| 223 | Blood-Vessel-on-a-Chip Platforms for Evaluating Nanoparticle Drug Delivery Systems. <i>Current Drug Metabolism</i> , 2018, 19, 100-109.   | 1.2  | 16        |
| 224 | Platinum nanopetal-based potassium sensors for acute cell death monitoring. <i>RSC Advances</i> , 2016, 6, 40517-40526.   | 3.6  | 15        |
| 225 | Special Magnetic Catalyst with Lignin-Reduced Au-Pd Nanoalloy. <i>ACS Omega</i> , 2017, 2, 4938-4945.   | 3.5  | 15        |
| 226 | Fabrication of Thymoquinone-Loaded Albumin Nanoparticles by Microfluidic Particle Synthesis and Their Effect on Planarian Regeneration. <i>Macromolecular Bioscience</i> , 2019, 19, e1900182.  | 4.1  | 15        |
| 227 | Surface Modification by Divalent Main-Group-Elemental Ions for Improved Bone Remodeling To Instruct Implant Biofabrication. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 3311-3324.   | 5.2  | 15        |
| 228 | T cells participate in bone remodeling during the rapid palatal expansion. <i>FASEB Journal</i> , 2020, 34, 15327-15337.  | 0.5  | 15        |
| 229 | Engineering (Bio)Materials through Shrinkage and Expansion. <i>Advanced Healthcare Materials</i> , 2021, 10, e2100380.  | 7.6  | 15        |
| 230 | Antibody Derived Peptides for Detection of Ebola Virus Glycoprotein. <i>PLoS ONE</i> , 2015, 10, e0135859.  | 2.5  | 15        |
| 231 | Uniaxial and Coaxial Vertical Embedded Extrusion Bioprinting. <i>Advanced Healthcare Materials</i> , 2022, 11, e2102411.  | 7.6  | 15        |
| 232 | Interplay between craniofacial stem cells and immune stimulus. <i>Stem Cell Research and Therapy</i> , 2017, 8, 147.  | 5.5  | 14        |
| 233 | A miniaturized optical tomography platform for volumetric imaging of engineered living systems. <i>Lab on A Chip</i> , 2019, 19, 550-561.   | 6.0  | 14        |
| 234 | A Modular, Reconfigurable Microfabricated Assembly Platform for Microfluidic Transport and Multitype Cell Culture and Drug Testing. <i>Micromachines</i> , 2020, 11, 2.   | 2.9  | 14        |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 235 | Attacking COVID-19 Progression Using Multi-Drug Therapy for Synergetic Target Engagement. <i>Biomolecules</i> , 2021, 11, 787.   | 4.0  | 14        |
| 236 | A 3D Bioprinted Multiple Myeloma Model. <i>Advanced Healthcare Materials</i> , 2022, 11, e2100884.   | 7.6  | 14        |
| 237 | DNA methylation and demethylation link the properties of mesenchymal stem cells: Regeneration and immunomodulation. <i>World Journal of Stem Cells</i> , 2020, 12, 351-358.                                  | 2.8  | 14        |
| 238 | Ceramic Toughening Strategies for Biomedical Applications. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022, 10, 840372.  | 4.1  | 14        |
| 239 | Seeing Through the Surface: Non-invasive Characterization of Biomaterial-Tissue Interactions Using Photoacoustic Microscopy. <i>Annals of Biomedical Engineering</i> , 2016, 44, 649-666.                    | 2.5  | 13        |
| 240 | Starting a Medical Technology Venture as a Young Academic Innovator or Student Entrepreneur. <i>Annals of Biomedical Engineering</i> , 2018, 46, 1-13.   | 2.5  | 13        |
| 241 | Universal Peptide Hydrogel for Scalable Physiological Formation and Bioprinting of 3D Spheroids from Human Induced Pluripotent Stem Cells. <i>Advanced Functional Materials</i> , 2021, 31, 2104046.         | 14.9 | 13        |
| 242 | Mechanical force-driven TNF $\alpha$ endocytosis governs stem cell homeostasis. <i>Bone Research</i> , 2020, 8, 44.  | 11.4 | 13        |
| 243 | Vascularizing the brain in vitro. <i>iScience</i> , 2022, 25, 104110.  | 4.1  | 13        |
| 244 | A novel mutation of MSX1 in oligodontia inhibits odontogenesis of dental pulp stem cells via the ERK pathway. <i>Stem Cell Research and Therapy</i> , 2018, 9, 221.  | 5.5  | 12        |
| 245 | Macrophage inhibits the osteogenesis of fibroblasts in ultrahigh molecular weight polyethylene (UHMWPE) wear particle-induced osteolysis. <i>Journal of Orthopaedic Surgery and Research</i> , 2019, 14, 80. | 2.3  | 12        |
| 246 | Exosomes targeted towards applications in regenerative medicine. <i>Nano Select</i> , 2021, 2, 880-908.  | 3.7  | 12        |
| 247 | Handheld bioprinting strategies for <i>in situ</i> wound dressing. <i>Essays in Biochemistry</i> , 2021, 65, 533-543.  | 4.7  | 12        |
| 248 | Minimally invasive co-injection of modular micro-muscular and micro-vascular tissues improves <i>in situ</i> skeletal muscle regeneration. <i>Biomaterials</i> , 2021, 277, 121072.                          | 11.4 | 12        |
| 249 | Drawn Conductive Skin Sensors from Fully Biocompatible Inks toward High Quality Electrophysiology. <i>Small</i> , 2022, 18, .  | 10.0 | 12        |
| 250 | Expansion mini-microscopy: An enabling alternative in point-of-care diagnostics. <i>Current Opinion in Biomedical Engineering</i> , 2017, 1, 45-53.  | 3.4  | 11        |
| 251 | Acetylsalicylic acid rescues the immunomodulation of inflamed gingiva-derived mesenchymal stem cells via upregulating FasL in mice. <i>Stem Cell Research and Therapy</i> , 2019, 10, 368.                   | 5.5  | 11        |
| 252 | Nanotechnologies and Nanomaterials in 3D (Bio)printing toward Bone Regeneration. <i>Advanced NanoBiomed Research</i> , 2021, 1, 2100035.   | 3.6  | 11        |



| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 253 | Tackling Current Biomedical Challenges With Frontier Biofabrication and Organ-On-A-Chip Technologies. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 732130.                  | 4.1  | 11        |
| 254 | Fabrication of paper-based devices for in vitro tissue modeling. <i>Bio-Design and Manufacturing</i> , 2020, 3, 252-265.   | 7.7  | 11        |
| 255 | Fabrication of cell patches using biodegradable scaffolds with a hexagonal array of interconnected pores (SHAIPs). <i>Polymer</i> , 2014, 55, 445-452.   | 3.8  | 10        |
| 256 | Target receptor identification and subsequent treatment of resected brain tumors with encapsulated and engineered allogeneic stem cells. <i>Nature Communications</i> , 2022, 13, 2810.        | 12.8 | 10        |
| 257 | Bioprinting: Rapid Continuous Multimaterial Extrusion Bioprinting ( <i>Adv. Mater.</i> 3/2017). <i>Advanced Materials</i> , 2017, 29, .  | 21.0 | 9         |
| 258 | Customizable Microfluidic Origami Liver-on-a-Chip (oLOC). <i>Advanced Materials Technologies</i> , 2022, 7, 2100677.   | 5.8  | 9         |
| 259 | Emerging microfluidics-enabled platforms for osteoarthritis management: from benchtop to bedside. <i>Theranostics</i> , 2022, 12, 891-909.   | 10.0 | 9         |
| 260 | Bioinspired Andrias davidianus-Derived wound dressings for localized drug-elution. <i>Bioactive Materials</i> , 2022, 15, 482-494.   | 15.6 | 9         |
| 261 | Gold Nanoprobe-Enabled Three-Dimensional Ozone Imaging by Optical Coherence Tomography. <i>Analytical Chemistry</i> , 2017, 89, 2561-2568.   | 6.5  | 8         |
| 262 | Plasmonic Nanoprobe of (Gold Triangular Nanoprism Core)/(Polyaniline Shell) for Real-Time Three-Dimensional pH Imaging of Anterior Chamber. <i>Analytical Chemistry</i> , 2017, 89, 9758-9766. | 6.5  | 8         |
| 263 | Digital Breast Tomosynthesis imaging using compressed sensing based reconstruction for 10 radiation doses real data. <i>Biomedical Signal Processing and Control</i> , 2019, 48, 26-34.        | 5.7  | 8         |
| 264 | Vascularization in 3D printed tissues: emerging technologies to overcome longstanding obstacles. <i>AIMS Cell and Tissue Engineering</i> , 2018, 2, 163-184.                                   | 0.4  | 8         |
| 265 | 3D Printed Anchoring Sutures for Permanent Shaping of Tissues. <i>Macromolecular Bioscience</i> , 2017, 17, 1700304.   | 4.1  | 7         |
| 266 | Biomedicine: Porous Electrospun Fibers with Self-Sealing Functionality: An Enabling Strategy for Trapping Biomacromolecules ( <i>Small</i> 47/2017). <i>Small</i> , 2017, 13, 1770249.         | 10.0 | 7         |
| 267 | Fracture-Resistant and Bioresorbable Drug-Eluting Poly(glycerol Sebacate) Coils. <i>Advanced Therapeutics</i> , 2019, 2, 1800109.  | 3.2  | 7         |
| 268 | Endothelialized microrods for minimally invasive <i>in situ</i> neovascularization. <i>Biofabrication</i> , 2020, 12, 015011.  | 7.1  | 7         |
| 269 | Efficiently Enhanced Triplet-Triplet Annihilation Upconversion Boosted by Multibandgaps Photonic Crystals. <i>Journal of Physical Chemistry C</i> , 2020, 124, 18482-18489.                    | 3.1  | 7         |
| 270 | Photoacoustic imaging of 3D-printed vascular networks. <i>Biofabrication</i> , 2022, 14, 025001.   | 7.1  | 7         |



| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 271 | 3D Printing of Monolithic Proteinaceous Cantilevers Using Regenerated Silk Fibroin. <i>Molecules</i> , 2022, 27, 2148.   | 3.8  | 7         |
| 272 | Co-axial printing of convoluted proximal tubule for kidney disease modeling. <i>Biofabrication</i> , 2022, 14, 044102.   | 7.1  | 7         |
| 273 | Towards engineering integrated cardiac organoids: beating recorded. <i>Journal of Thoracic Disease</i> , 2016, 8, E1683-E1687.   | 1.4  | 6         |
| 274 | Commentary: Human brain organoid-on-a-chip to model prenatal nicotine exposure. <i>Frontiers in Bioengineering and Biotechnology</i> , 2018, 6, 138.   | 4.1  | 6         |
| 275 | Vascular Tissue Engineering: The Role of 3D Bioprinting. , 2020, , 321-338.  |      | 6         |
| 276 | Digital Light Processing Based Bioprinting with Composible Gradients (Adv. Mater. 1/2022). <i>Advanced Materials</i> , 2022, 34, .   | 21.0 | 6         |
| 277 | Biosurfactant-Stabilized Micropore-Forming GelMA Inks Enable Improved Usability for 3D Printing Applications. <i>Regenerative Engineering and Translational Medicine</i> , 2022, 8, 471-481. | 2.9  | 6         |
| 278 | Eccentric magnetic microcapsules for MRI-guided local administration and pH-regulated drug release. <i>RSC Advances</i> , 2018, 8, 41956-41965.  | 3.6  | 5         |
| 279 | Bioprinting: Aqueous Two-Phase Emulsion Bioink Enabled 3D Bioprinting of Porous Hydrogels (Adv. Tj ETQq1 1,0,784314 rgBT /Ove  | 21.0 | 5         |
| 280 | Microfluidic technologies for local drug delivery. , 2019, , 281-305.  |      | 5         |
| 281 | Ultraviolet Radiant Energy-Dependent Functionalization Regulates Cellular Behavior on Titanium Dioxide Nanodots. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 31793-31803.      | 8.0  | 5         |
| 282 | Modeling aortic diseases using induced pluripotent stem cells. <i>Stem Cells Translational Medicine</i> , 2021, 10, 190-197.   | 3.3  | 5         |
| 283 | Biomaterials for on-chip organ systems. , 2020, , 669-707.   |      | 5         |
| 284 | Organic light-emitting diode microdisplay-enabled scalable visible-light 3D printing. <i>Matter</i> , 2021, 4, 3794-3797.  | 10.0 | 5         |
| 285 | Culture of cancer spheroids and evaluation of anti-cancer drugs in 3D-printed miniaturized continuous stirred tank reactors (mCSTRs). <i>Biofabrication</i> , 2022, 14, 035007.              | 7.1  | 5         |
| 286 | Bioprinting: Extrusion Bioprinting of Shear-Thinning Gelatin Methacryloyl Bioinks (Adv. Healthcare) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5  | 7.6  | 4         |
| 287 | Bioprinting: Microfluidics Enabled Multimaterial Maskless Stereolithographic Bioprinting (Adv. Mater.) Tj ETQq1 1,0,784314 rgBT /Ove   | 21.0 | 4         |
| 288 | A medical mini-me one day your doctor could prescribe drugs based on now a biochip version of you reacts. <i>IEEE Spectrum</i> , 2019, 56, 44-49.  | 0.7  | 4         |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 289 | Studying endothelial cell shedding and orientation using adaptive perfusion culture in a microfluidic vascular chip. <i>Biotechnology and Bioengineering</i> , 2021, 118, 963-978.                                 | 3.3  | 4         |
| 290 | SARS-CoV-2-related vascular injury: mechanisms, imaging and models. <i>Microphysiological Systems</i> , 2021, 5, 1-1.  | 2.0  | 4         |
| 291 | Platforms for Personalized Polytherapeutics Discovery in COVID-19. <i>Journal of Molecular Biology</i> , 2021, 433, 166945.  | 4.2  | 4         |
| 292 | Leveraging synthesis-swelling relationship to precisely engineer synthetic hydrogels. <i>Matter</i> , 2021, 4, 2676-2678.  | 10.0 | 4         |
| 293 | Deep learning-enabled resolution-enhancement in mini- and regular microscopy for biomedical imaging. <i>Sensors and Actuators A: Physical</i> , 2021, 331, 112928.   | 4.1  | 4         |
| 294 | Strategies towards kidney tissue biofabrication. <i>Current Opinion in Biomedical Engineering</i> , 2022, 21, 100362.  | 3.4  | 4         |
| 295 | Functional biomaterials. <i>APL Bioengineering</i> , 2022, 6, 010401.  | 6.2  | 4         |
| 296 | The era of translational nanomedicine. , 2022, 1, 9130006.   |      | 4         |
| 297 | Introduction to advanced functional nanomaterials for biomedical applications. <i>Nanoscale</i> , 2022, 14, 7441-7443.   | 5.6  | 4         |
| 298 | Patient-derived microphysiological model identifies the therapeutic potential of metformin for thoracic aortic aneurysm. <i>EBioMedicine</i> , 2022, 81, 104080.   | 6.1  | 4         |
| 299 | Biosensors: Label-Free and Regenerative Electrochemical Microfluidic Biosensors for Continual Monitoring of Cell Secretomes ( <i>Adv. Sci.</i> 5/2017). <i>Advanced Science</i> , 2017, 4, .                       | 11.2 | 3         |
| 300 | Tissue Engineering: Gold Nanocomposite Bioink for Printing 3D Cardiac Constructs ( <i>Adv. Funct. Mater.</i> 10/2017). <i>Advanced Functional Materials</i> , 2017, 10, 1493-1503.                                 | 14.9 | 3         |
| 301 | Wound Dressings: An Advanced Multifunctional Hydrogel-Based Dressing for Wound Monitoring and Drug Delivery ( <i>Adv. Healthcare Mater.</i> 19/2017). <i>Advanced Healthcare Materials</i> , 2017, 6, .            | 7.6  | 3         |
| 302 | Modeling and experimental investigation of polymer micropart demolding from a Zr-based bulk metallic glass mold. <i>Polymer Engineering and Science</i> , 2019, 59, 2202-2210.                                     | 3.1  | 3         |
| 303 | Perforated and Endothelialized Elastomeric Tubes for Vascular Modeling. <i>Advanced Materials Technologies</i> , 2019, 4, 1800741.   | 5.8  | 3         |
| 304 | "Steel" Concrete-Inspired Biofunctional Layered Hybrid Cage for Spine Fusion and Segmental Bone Reconstruction. <i>ACS Biomaterials Science and Engineering</i> , 2017, 3, 637-647.                                | 5.2  | 2         |
| 305 | Supercritical Fluids: Supercritical Fluid Technology: An Emphasis on Drug Delivery and Related Biomedical Applications ( <i>Adv. Healthcare Mater.</i> 16/2017). <i>Advanced Healthcare Materials</i> , 2017, 6, . | 7.6  | 2         |
| 306 | Modular multi-organ-on-chips platform with physicochemical sensor integration. , 2017, , .   |      | 2         |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 307 | Microfluidic Bioprinting: Digitally Tunable Microfluidic Bioprinting of Multilayered Cannular Tissues (Adv. Mater. 43/2018). Advanced Materials, 2018, 30, 1870322.        | 21.0 | 2         |
| 308 | Biomaterial Inks. Advanced Healthcare Materials, 2020, 9, e2001043.  | 7.6  | 2         |
| 309 | Cellularized polymeric microarchitectures for drug screening. Smart Materials in Medicine, 2021, 2, 96-113.  | 6.7  | 2         |
| 310 | Biomaterials for bioprinting. , 2022, , 51-86.   |      | 2         |
| 311 | Organ-on-a-Chip: Biomechanical Strain Exacerbates Inflammation on a Progeria-on-a-Chip Model (Small) Tj ETQq1 1 0.78431  | 10.0 | 1         |
| 312 | Engineering challenges in microphysiological systems. Future Science OA, 2017, 3, FSO209.  | 1.9  | 1         |
| 313 | Pathology-on-a-Chip: Mimicking Human Pathophysiology in Organ-on-a-Chip Devices (Adv. Biosys. 10/2018) Advanced Biology, 2018, 2, 1870092.                                 | 3.0  | 1         |
| 314 | Bioprinting: A Tumor-on-a-Chip System with Bioprinted Blood and Lymphatic Vessel Pair (Adv. Funct.) Tj ETQq0 0 0 rgBT /Overlock  | 14.9 | 1         |
| 315 | A Smartphone-Enabled Portable Digital Light Processing 3D Printer (Adv. Mater. 35/2021). Advanced Materials, 2021, 33, 2170271.  | 21.0 | 1         |
| 316 | Microfluidic Coaxial Bioprinting of Hollow, Standalone, and Perfusable Vascular Conduits. Methods in Molecular Biology, 2022, 2375, 61-75.                                 | 0.9  | 1         |
| 317 | Tumor-on-a-chip devices for cancer immunotherapy. , 2022, , 155-195.   |      | 1         |
| 318 | Abstract 4828: Recapitulating mammary ductal carcinoma microenvironment in vitro using sacrificial bioprinting. , 2017, , .  |      | 1         |
| 319 | Seven-year follow-up of the nonsurgical expansion of maxillary and mandibular arches in a young adult: A case report. World Journal of Clinical Cases, 2020, 8, 5371-5379. | 0.8  | 1         |
| 320 | Effects of the multifunctional hormone leptin on orthodontic tooth movement in rats. American Journal of Translational Research (discontinued), 2020, 12, 1976-1984.       | 0.0  | 1         |
| 321 | A CMOS Cellular Interface Array for Digital Physiology Featuring High-Density Multi-Modal Pixels and Reconfigurable Sampling Rate. , 2022, , .                             |      | 1         |
| 322 | Fabrication of cell patches using scaffolds with a hexagonal array of interconnected pores (SHAIPs). , 2014, , .   |      | 0         |
| 323 | Life as an early career researcher: interview with Yu Shrike Zhang. Future Science OA, 2018, 4, FSO262.  | 1.9  | 0         |
| 324 | Dissolvable Stents: 3D-Printed Sugar-Based Stents Facilitating Vascular Anastomosis (Adv. Healthcare) Tj ETQq0 0 0 rgBT /Overlock 10 T                                     | 7.6  | 0         |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 325 | BSCI-16. HEMODYNAMIC SHEAR STRESS SELECTS A SUBPOPULATION OF LUNG ADENOCARCINOMA CELLS WITH HIGHER METASTATIC CAPACITY. <i>Neuro-Oncology Advances</i> , 2019, 1, i4-i4.  | 0.7  | 0         |
| 326 | Osteosarcoma Therapy: Inhibition of CaMKII $\beta$ Activity Enhances Antitumor Effect of Fullerene C60 Nanocrystals by Suppression of Autophagic Degradation ( <i>Adv. Sci.</i> 8/2019). <i>Advanced Science</i> , 2019, 6, 1970051.  | 11.2 | 0         |
| 327 | Cancer Modeling: 3D Bioprinted Mini-Brain: A Glioblastoma Model to Study Cellular Interactions and Therapeutics ( <i>Adv. Mater.</i> 14/2019). <i>Advanced Materials</i> , 2019, 31, 1970101.   | 21.0 | 0         |
| 328 | Kill two birds with one stone: A novel dual-functional nanobiomaterial platform with a clear translational potential for bone regeneration. <i>Nano Research</i> , 2020, 13, 2311-2312.   | 10.4 | 0         |
| 329 | Organ-on-a-Chip: A Heart-Breast Cancer-on-a-Chip Platform for Disease Modeling and Monitoring of Cardiotoxicity Induced by Cancer Chemotherapy ( <i>Small</i> 15/2021). <i>Small</i> , 2021, 17, 2170070.                             | 10.0 | 0         |
| 330 | Label-free detection of protein biomolecules secreted from a heart-on-a-chip model for drug cardiotoxicity evaluation. , 2018, , .  |      | 0         |
| 331 | Vascular Tissue Engineering: The Role of 3D Bioprinting. , 2020, , 1-18.  |      | 0         |
| 332 | Nanocomposites: A Transparent, Wearable Fluorescent Mouthguard for High-Sensitive Visualization and Accurate Localization of Hidden Dental Lesion Sites ( <i>Adv. Mater.</i> 21/2020). <i>Advanced Materials</i> , 2020, 32, 2070162. | 21.0 | 0         |
| 333 | 3D Bioprinting for Liver Regeneration. , 2022, , 459-488.   |      | 0         |