Changxue Xu

List of Publications by Year
in descending order

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Version: 2024-02-01

38 papers	1,911 citations	304743 22 h-index	361022 35 g-index
38 all docs	38 docs citations	38 times ranked	2084 citing authors

#	Article	IF	Citations
1	Scaffoldâ€free inkjet printing of threeâ€dimensional zigzag cellular tubes. Biotechnology and Bioengineering, 2012, 109, 3152-3160.	3.3	310
2	Freeform inkjet printing of cellular structures with bifurcations. Biotechnology and Bioengineering, 2015, 112, 1047-1055.	3.3	276
3	Digital light processing (DLP) 3D-printing technology and photoreactive polymers in fabrication of modified-release tablets. European Journal of Pharmaceutical Sciences, 2019, 135, 60-67.	4.0	158
4	Study of Droplet Formation Process during Drop-on-Demand Inkjetting of Living Cell-Laden Bioink. Langmuir, 2014, 30, 9130-9138.	3.5	144
5	Evaluation of bioink printability for bioprinting applications. Applied Physics Reviews, 2018, 5, .	11.3	129
6	Multi-purposable filaments of HPMC for 3D printing of medications with tailored drug release and timed-absorption. International Journal of Pharmaceutics, 2018, 544, 285-296.	5.2	112
7	Effects of Irgacure 2959 and lithium phenyl-2,4,6-trimethylbenzoylphosphinate on cell viability, physical properties, and microstructure in 3D bioprinting of vascular-like constructs. Biomedical Materials (Bristol), 2020, 15, 055021.	3.3	69
8	3D Printing Hierarchical Silver Nanowire Aerogel with Highly Compressive Resilience and Tensile Elongation through Tunable Poisson's Ratio. Small, 2017, 13, 1701756.	10.0	68
9	Predictive Modeling of Droplet Formation Processes in Inkjet-Based Bioprinting. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2018, 140, .	2.2	56
10	Effects of Encapsulated Cells on the Physicalâ€“Mechanical Properties and Microstructure of Gelatin Methacrylate Hydrogels. International Journal of Molecular Sciences, 2019, 20, 5061.	4.1	52
11	Biofabrication of three-dimensional cellular structures based on gelatin methacrylateâ€“alginate interpenetrating network hydrogel. Journal of Biomaterials Applications, 2019, 33, 1105-1117.	2.4	50
12	Freeform Vertical and Horizontal Fabrication of Alginate-Based Vascular-Like Tubular Constructs Using Inkjetting. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2014, 136, .	2.2	46
13	Effects of living cells on the bioink printability during laser printing. Biomicrofluidics, 2017, 11, 034120.	2.4	41
14	Predictive compensation-enabled horizontal inkjet printing of alginate tubular constructs. Manufacturing Letters, 2013, 1, 28-32.	2.2	37
15	Biofabrication of 3D cell-encapsulated tubular constructs using dynamic optical projection stereolithography. Journal of Materials Science: Materials in Medicine, 2019, 30, 36.	3.6	34
16	Effects of fluid properties and laser fluence on jet formation during laser direct writing of glycerol solution. Journal of Applied Physics, 2012, 112, .	2.5	33
17	Study of Pinch-Off Locations during Drop-on-Demand Inkjet Printing of Viscoelastic Alginate Solutions. Langmuir, 2017, 33, 5037-5045.	3.5	32
18	Sedimentation study of bioink containing living cells. Journal of Applied Physics, 2019, 125, .	2.5	30

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19	Investigation of gelatin methacrylate working curves in dynamic optical projection stereolithography of vascular-like constructs. European Polymer Journal, 2020, 124, 109487.	5.4	30
20	Effects of printing conditions on cell distribution within microspheres during inkjet-based bioprinting. AIP Advances, 2019, 9, 095055.	1.3	26
21	Prediction of cell viability in dynamic optical projection stereolithography-based bioprinting using machine learning. Journal of Intelligent Manufacturing, 2022, 33, 995-1005.	7.3	26
22	Ligament flow during drop-on-demand inkjet printing of bioink containing living cells. Journal of Applied Physics, 2017, 121, .	2.5	25
23	Synthesis of long-chain fatty acid starch esters in aqueous medium and its characterization. European Polymer Journal, 2019, 119, 136-147.	5.4	21
24	Guided cell migration on a graded micropillar substrate. Bio-Design and Manufacturing, 2020, 3, 60-70.	7.7	20
25	Electric field-assisted droplet formation using piezoactuation-based drop-on-demand inkjet printing. Journal of Micromechanics and Microengineering, 2014, 24, 115011.	2.6	16
26	Cell sedimentation during 3D bioprinting: a mini review. Bio-Design and Manufacturing, 2022, 5, 617-626.	7.7	15
27	An experimental evaluation of impact force on a fiber Bragg grating-based device for debris flow warning. Landslides, 2019, 16, 65-73.	5.4	10
28	Model test: Infrasonic features of porous soil masses as applied to landslide monitoring. Engineering Geology, 2020, 265, 105454.	6.3	9
29	Investigation and Characterization of Cell Aggregation During and After Inkjet-Based Bioprinting of Cell-Laden Bioink. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2022, 144, .	2.2	8
30	Effects of Corona Treatment on Cellular Attachment and Morphology on Polydimethylsiloxane Micropillar Substrates. Jom, 2022, 74, 3408-3418.	1.9	6
31	Deformation Compensation During Buoyancy-Enabled Inkjet Printing of Three-Dimensional Soft Tubular Structures. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2018, 140, .	2.2	5
32	Phase Diagram of Pinch-off Behaviors During Drop-on-Demand Inkjetting of Alginate Solutions. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2019, 141, .	2.2	5
33	Investigation of Cell Concentration Change and Cell Aggregation Due to Cell Sedimentation during Inkjet-Based Bioprinting of Cell-Laden Bioink. Machines, 2022, 10, 315.	2.2	5
34	Theoretical and experimental study on threeâ€layered polymeric balloon catheter processing. Polymer Engineering and Science, 2020, 60, 3244-3257.	3.1	3
35	Predictive Modeling of Droplet Velocity and Size in Inkjet-Based Bioprinting. , 2018, , .		2
36	Effect of hyperbranched poly(trimellitic glyceride) paired with different metal ions on the physicochemical properties of starch. Food Chemistry, 2020, 311, 125899.	8.2	2

#	Article	IF	Citations
37	Metallic Aerogels: 3D Printing Hierarchical Silver Nanowire Aerogel with Highly Compressive Resilience and Tensile Elongation through Tunable Poisson's Ratio (Small 38/2017). Small, 2017, 13, .	10.0	0
38	Effect of topography parameters on cellular morphology during guided cell migration on a graded micropillar surface. Acta of Bioengineering and Biomechanics, 2021, 23, 147-157.	0.4	0