Mark W Tibbitt

List of Publications by Year
in descending order

64	8,241	101384	95083
papers	citations	36 h-index	68 g-index

77	77	77	12379
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Synthesis of coagulation factors during longâ€term ex situ liver perfusion. Artificial Organs, 2022, 46, 273-280.	1.0	7
2	Biopolymer Nanoâ€Network for Antimicrobial Peptide Protection and Local Delivery. Advanced Healthcare Materials, 2022, 11, e2101426.	3.9	12
3	Dynamic and reconfigurable materials from reversible network interactions. Nature Reviews Materials, 2022, 7, 541-556.	23.3	105
4	Supramolecular Reinforcement of Polymerâ€“Nanoparticle Hydrogels for Modular Materials Design. Advanced Materials, 2022, 34, e2106941.	11.1	28
5	Continuous Production of Acoustically Patterned Cells Within Hydrogel Fibers for Musculoskeletal Tissue Engineering. Advanced Functional Materials, 2022, 32, .	7.8	15
6	Transplantation of a human liver following 3 days of ex situ normothermic preservation. Nature Biotechnology, 2022, 40, 1610-1616.	9.4	70
7	Polymer functionalization of inorganic nanoparticles for biomedical applications. Current Opinion in Chemical Engineering, 2022, 37, 100849.	3.8	11
8	Environment Controls Biomolecule Release from Dynamic Covalent Hydrogels. Biomacromolecules, 2021, 22, 146-157.	2.6	40
9	Bile formation in long-term ex situ perfused livers. Surgery, 2021, 169, 894-902.	1.0	11
10	Supramolecular engineering of hydrogels for drug delivery. Advanced Drug Delivery Reviews, 2021, 171, 240-256.	6.6	164
11	Automated Insulin Delivery - Continuous Blood Glucose Control DuringEx SituLiver Perfusion. IEEE Transactions on Biomedical Engineering, 2021, 68, 1399-1408.	2.5	7
12	Engineering Hydrogel Adhesion for Biomedical Applications via Chemical Design of the Junction. ACS Biomaterials Science and Engineering, 2021, 7, 4048-4076.	2.6	89
13	Sources and prevention of graft infection during longâ€term ex situ liver perfusion. Transplant Infectious Disease, 2021, 23, e13623.	0.7	11
14	Long-term Normothermic Machine Preservation of Partial Livers: First Experience With 21 Human Hemi-livers. Annals of Surgery, 2021, 274, 836-842.	2.1	25
15	Hierarchical biomaterials via photopatterning-enhanced direct ink writing. Biofabrication, 2021, 13, 044105.	3.7	14
16	Additive manufacturing in drug delivery: Innovative drug product design and opportunities for industrial application. Advanced Drug Delivery Reviews, 2021, 178, 113990.	6.6	28
17	3D Confinement Regulates Cell Life and Death. Advanced Functional Materials, 2021, 31, 2104098.	7.8	28
18	Surface Tension-Assisted Additive Manufacturing of Tubular, Multicomponent Biomaterials. Methods in Molecular Biology, 2021, 2147, 149-160.	0.4	0

#	Article	IF	Citations
19	Controlled delivery of gold nanoparticle-coupled miRNA therapeuticsviaan injectable self-healing hydrogel. Nanoscale, 2021, 13, 20451-20461.	2.8	15
20	Additive Manufacturing of Precision Biomaterials. Advanced Materials, 2020, 32, e1901994.	11.1	105
21	Model Assisted Analysis of the Hepatic Arterial Buffer Response During Ex Vivo Porcine Liver Perfusion. IEEE Transactions on Biomedical Engineering, 2020, 67, 667-678.	2.5	16
22	Screening method to identify hydrogel formulations that facilitate myotube formation from encapsulated primary myoblasts. Bioengineering and Translational Medicine, 2020, 5, e10181.	3.9	9
23	Human Retinal Microvasculatureâ€onâ€aâ€Chip for Drug Discovery. Advanced Healthcare Materials, 2020, 9, e2001531.	3.9	27
24	Bioprinting within live animals. Nature Biomedical Engineering, 2020, 4, 851-852.	11.6	7
25	Linking Molecular Behavior to Macroscopic Properties in Ideal Dynamic Covalent Networks. Journal of the American Chemical Society, 2020, 142, 15371-15385.	6.6	99
26	Hyperoxia in portal vein causes enhanced vasoconstriction in arterial vascular bed. Scientific Reports, 2020, 10, 20966.	1.6	9
27	Injectable Polymerâ€“Nanoparticle Hydrogels for Local Immune Cell Recruitment. Biomacromolecules, 2019, 20, 4430-4436.	2.6	58
28	Injectable Biocompatible Hydrogels from Cellulose Nanocrystals for Locally Targeted Sustained Drug Release. ACS Applied Materials & Interfaces, 2019, 11, 38578-38585.	4.0	62
29	Polymerâ€“Nanoparticle Hydrogels. Chimia, 2019, 73, 1034.	0.3	2
30	Universal Nanocarrier Ink Platform for Biomaterials Additive Manufacturing. Small, 2019, 15, e1905421.	5.2	34
31	Automated and Continuous Production of Polymeric Nanoparticles. Frontiers in Bioengineering and Biotechnology, 2019, 7, 423.	2.0	9
32	Matryoshka-Inspired Micro-Origami Capsules to Enhance Loading, Encapsulation, and Transport of Drugs. Soft Robotics, 2019, 6, 150-159.	4.6	25
33	Immunofunctional photodegradable poly(ethylene glycol) hydrogel surfaces for the capture and release of rare cells. Colloids and Surfaces B: Biointerfaces, 2019, 174, 483-492.	2.5	28
34	Design of moldable hydrogels for biomedical applications using dynamic covalent boronic esters. Materials Today Chemistry, 2019, 12, 16-33.	1.7	134
35	Thermal Stabilization of Biologics with Photoresponsive Hydrogels. Biomacromolecules, 2018, 19, 740-747.	2.6	30
36	Surface tension-assisted additive manufacturing. Nature Communications, 2018, 9, 1184.	5.8	47

#	Article	IF	Citations
37	Engineering a 3D-Bioprinted Model of Human Heart Valve Disease Using Nanoindentation-Based Biomechanics. Nanomaterials, 2018, 8, 296.	1.9	81
38	In vitro 3D model and miRNA drug delivery to target calcific aortic valve disease. Clinical Science, 2017, 131, 181-195.	1.8	24
39	Ultrasmall Silica-Based Bismuth Gadolinium Nanoparticles for Dual Magnetic Resonanceâ€“Computed Tomography Image Guided Radiation Therapy. Nano Letters, 2017, 17, 1733-1740.	4.5	109
40	Correction to â€œLiving Biomaterialsâ€• Accounts of Chemical Research, 2017, 50, 1493-1493.	7.6	0
41	Living Biomaterials. Accounts of Chemical Research, 2017, 50, 508-513.	7.6	54
42	Synthesis and Biological Evaluation of Ionizable Lipid Materials for the In Vivo Delivery of Messenger RNA to B Lymphocytes. Advanced Materials, 2017, 29, 1606944.	11.1	174
43	Scalable manufacturing of biomimetic moldable hydrogels for industrial applications. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14255-14260.	3.3	78
44	Bioinspired Alkenyl Amino Alcohol Ionizable Lipid Materials for Highly Potent In Vivo mRNA Delivery. Advanced Materials, 2016, 28, 2939-2943.	11.1	172
45	High throughput screening for discovery of materials that control stem cell fate. Current Opinion in Solid State and Materials Science, 2016, 20, 202-211.	5.6	38
46	Emerging Frontiers in Drug Delivery. Journal of the American Chemical Society, 2016, 138, 704-717.	6.6	776
47	Progress in material design for biomedical applications. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14444-14451.	3.3	201
48	Self-assembled hydrogels utilizing polymerâ€“nanoparticle interactions. Nature Communications, 2015, 6, 6295.	5.8	425
49	Exploiting Electrostatic Interactions in Polymerâ€“Nanoparticle Hydrogels. ACS Macro Letters, 2015, 4, 848-852.	2.3	95
50	In vitro model alveoli from photodegradable microsphere templates. Biomaterials Science, 2015, 3, 821-832.	2.6	48
51	Mechanical memory and dosing influence stem cell fate. Nature Materials, 2014, 13, 645-652.	13.3	943
52	Mechanical Properties and Degradation of Chain and Step-Polymerized Photodegradable Hydrogels. Macromolecules, 2013, 46, 2785-2792.	2.2	147
53	Formation of Coreâ€“Shell Particles by Interfacial Radical Polymerization Initiated by a Glucose Oxidase-Mediated Redox System. Chemistry of Materials, 2013, 25, 761-767.	3.2	43
54	Hydrogels preserve native phenotypes of valvular fibroblasts through an elasticity-regulated PI3K/AKT pathway. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 19336-19341.	3.3	140

#	Article	IF	Citations
55	Modeling controlled photodegradation in optically thick hydrogels. Journal of Polymer Science Part A, 2013, 51, 1899-1911.	2.5	37
56	Dynamic Microenvironments: The Fourth Dimension. Science Translational Medicine, 2012, 4, 160ps24.	5.8	144
57	Responsive culture platform to examine the influence of microenvironmental geometry on cell function in 3D. Integrative Biology (United Kingdom), 2012, 4, 1540.	0.6	47
58	Photocontrolled Nanoparticles for On-Demand Release of Proteins. Biomacromolecules, 2012, 13, 2219-2224.	2.6	94
59	Light activated cell migration in synthetic extracellular matrices. Biomaterials, 2012, 33, 8040-8046.	5.7	26
60	Tunable Hydrogels for External Manipulation of Cellular Microenvironments through Controlled Photodegradation. Advanced Materials, 2010, 22, 61-66.	11.1	196
61	Synthesis of photodegradable hydrogels as dynamically tunable cell culture platforms. Nature Protocols, 2010, 5, 1867-1887.	5.5	242
62	Controlled two-photon photodegradation of PEG hydrogels to study and manipulate subcellular interactions on soft materials. Soft Matter, 2010, 6, 5100.	1.2	117
63	Hydrogels as extracellular matrix mimics for 3D cell culture. Biotechnology and Bioengineering, 2009, 103, 655-663.	1.7	2,244
64	Human Neutrophil Elastase Responsive Delivery from Poly(ethylene glycol) Hydrogels. Biomacromolecules, 2009, 10, 1484-1489.	2.6	98