Jennifer Patterson

List of Publications by Year
in descending order

33	1,906	430874 18	501196 28
papers	citations	h-index	g-index

33	33	33	3170
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Enhanced proteolytic degradation of molecularly engineered PEG hydrogels in response to MMP-1 and MMP-2. Biomaterials, 2010, 31, 7836-7845.	11.4	463
2	De novo amyloid proteins from designed combinatorial libraries. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 11211-11216.	7.1	327
3	Hyaluronic acid hydrogels with controlled degradation properties for oriented bone regeneration. Biomaterials, 2010, 31, 6772-6781.	11.4	282
4	Biomimetic materials in tissue engineering. Materials Today, 2010, 13, 14-22.	14.2	251
5	SPARC-derived protease substrates to enhance the plasmin sensitivity of molecularly engineered PEG hydrogels. Biomaterials, 2011, 32, 1301-1310.	11.4	84
6	Computational model-informed design and bioprinting of cell-patterned constructs for bone tissue engineering. Biofabrication, 2016, 8, 025009.	7.1	44
7	Skeletal tissue regeneration: where can hydrogels play a role?. International Orthopaedics, 2014, 38, 1861-1876.	1.9	42
8	Gelatin microspheres releasing transforming growth factor drive in vitro chondrogenesis of human periosteum derived cells in micromass culture. Acta Biomaterialia, 2019, 90, 287-299.	8.3	41
9	Cytocompatible carbon nanotube reinforced polyethylene glycol composite hydrogels for tissue engineering. Materials Science and Engineering C, 2019, 98, 1133-1144.	7.3	41
10	RGDâ€functionalized polyethylene glycol hydrogels support proliferation and in vitro chondrogenesis of human periosteumâ€derived cells. Journal of Biomedical Materials Research - Part A, 2018, 106, 33-42.	4.0	30
11	3D bioprinting of molecularly engineered PEG-based hydrogels utilizing gelatin fragments. Biofabrication, 2021, 13, 045008.	7.1	26
12	Robust scalable synthesis of a bis-urea derivative forming thixotropic and cytocompatible supramolecular hydrogels. Chemical Communications, 2019, 55, 7323-7326.	4.1	25
13	In SituCharacterization of the Degradation of PLGA Microspheres in Hyaluronic Acid Hydrogels by Optical Coherence Tomography. IEEE Transactions on Medical Imaging, 2009, 28, 74-81.	8.9	24
14	The Human Cornea as a Model Tissue for Additive Biomanufacturing: A Review. Procedia CIRP, 2017, 65, 56-63.	1.9	23
15	Fibrin structural and diffusional analysis suggests that fibers are permeable to solute transport. Acta Biomaterialia, 2017, 47, 25-39.	8.3	23
16	High-Resolution Bioprinting of Recombinant Human Collagen Type III. Polymers, 2021, 13, 2973.	4.5	22
17	Molecularly Engineered Polymer-Based Systems in Drug Delivery and Regenerative Medicine. Current Pharmaceutical Design, 2017, 23, 281-294.	1.9	20
18	Engineered Three-Dimensional Microenvironments with Starch Nanocrystals as Cell-Instructive Materials. Biomacromolecules, 2019, 20, 3819-3830.	5.4	19

#	Article	IF	Citations
19	A Review of the Use of Microparticles for Cartilage Tissue Engineering. International Journal of Molecular Sciences, 2021, 22, 10292.	4.1	17
20	Advanced Methods for the Characterization of Supramolecular Hydrogels. Gels, 2021, 7, 158.	4.5	17
21	Initiating human articular chondrocyte re-differentiation in a 3D system after 2D expansion. Journal of Materials Science: Materials in Medicine, 2017, 28, 156.	3.6	15
22	<sup />Harnessing the Osteogenicity of In Vitro Stem Cell-Derived Mineralized Extracellular Matrix as 3D Biotemplate to Guide Bone Regeneration. Tissue Engineering - Part A, 2017, 23, 874-890.	3.1	13
23	Multiscale Characterization of the Mechanical Properties of Fibrin and Polyethylene Glycol (PEG) Hydrogels for Tissue Engineering Applications. Macromolecular Chemistry and Physics, 2022, 223, 2100366.	2.2	13
24	In Vitro Screening of Molecularly Engineered Polyethylene Glycol Hydrogels for Cartilage Tissue Engineering using Periosteum-Derived and ATDC5 Cells. International Journal of Molecular Sciences, 2018, 19, 3341.	4.1	11
25	Towards Mimicking the Fetal Liver Niche: The Influence of Elasticity and Oxygen Tension on Hematopoietic Stem/Progenitor Cells Cultured in 3D Fibrin Hydrogels. International Journal of Molecular Sciences, 2020, 21, 6367.	4.1	10
26	Chlorite oxidized oxyamylose differentially influences the microstructure of fibrin and self assembling peptide hydrogels as well as dental pulp stem cell behavior. Scientific Reports, 2021, 11, 5687.	3.3	8
27	Synthesis and peptide functionalization of hyperbranched poly(arylene oxindole) towards versatile biomaterials. Polymer Chemistry, 2018, 9, 2775-2784.	3.9	7
28	Nanocarrier systems assembled from PEGylated hyperbranched poly(arylene oxindole). European Polymer Journal, 2019, 119, 247-259.	5.4	7
29	Imaging hydrogel implants in situ. , 2011, , 228-255.		1
30	Human Microbiome and Disease. , 2021, , .		0
31	In Vivo Imaging of Bone Regeneration Induced by Angiogenic and Osteoinductive Hydrogel Scaffolds. , 2006, , .		0
32	Biomimetic Materials. , 2017, , 189-213.		0
33	Peptide-functionalized Biomaterials with Osteoinductive or Anti-biofilm Activity. , 2020, , 129-168.		0