Abby R Whittington

List of Publications by Year
in descending order

31 papers	2,265 citations	471509 17 h-index	454955 30 g-index
31 all docs	31 docs citations	31 times ranked	3778 citing authors

#	Article	IF	Citations
1	The mechanical properties and osteoconductivity of hydroxyapatite bone scaffolds with multi-scale porosity. Biomaterials, 2007, 28, 45-54.	11.4	698
2	Calcium phosphate ceramics in bone tissue engineering: A review of properties and their influence on cell behavior. Acta Biomaterialia, 2013, 9, 8037-8045.	8.3	645
3	A review on fabricating tissue scaffolds using vat photopolymerization. Acta Biomaterialia, 2018, 74, 90-111.	8.3	168
4	Characterization and optimization of RGD-containing silk blends to support osteoblastic differentiation. Biomaterials, 2008, 29, 2556-2563.	11.4	113
5	Fabrication of a model continuously graded co-electrospun mesh for regeneration of the ligamentâ€“bone interface. Acta Biomaterialia, 2011, 7, 4131-4138.	8.3	97
6	Response of bone marrow stromal cells to graded co-electrospun scaffolds and its implications for engineering the ligament-bone interface. Biomaterials, 2012, 33, 7727-7735.	11.4	73
7	Vat photopolymerization 3D printing of acid-cleavable PEG-methacrylate networks for biomaterial applications. Materials Today Communications, 2019, 19, 204-211.	1.9	59
8	Electrospun meshes possessing regionâ€wise differences in fiber orientation, diameter, chemistry and mechanical properties for engineering boneâ€ligamentâ€bone tissues. Biotechnology and Bioengineering, 2014, 111, 2549-2559.	3.3	45
9	Angiopoietin/Tie2 Axis Regulates the Age-at-Injury Cerebrovascular Response to Traumatic Brain Injury. Journal of Neuroscience, 2018, 38, 9618-9634.	3.6	44
10	Fabrication and characterization of medical grade polyurethane composite catheters for near-infrared imaging. Biomaterials, 2015, 54, 168-176.	11.4	32
11	Using startup of steady shear flow in a sliding plate rheometer to determine material parameters for the purpose of predicting long fiber orientation. Journal of Rheology, 2012, 56, 955-981.	2.6	30
12	Inclusion complex formation of Î²-cyclodextrin and Naproxen: a study on exothermic complex formation by differential scanning calorimetry. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2013, 77, 269-277.	1.6	29
13	In Vivo Skeletal Muscle Biocompatibility of Composite, Coaxial Electrospun, and Microfibrous Scaffolds. Tissue Engineering - Part A, 2014, 20, 1961-1970.	3.1	29
14	Influence of therapeutic radiation on polycaprolactone and polyurethane biomaterials. Materials Science and Engineering C, 2016, 60, 78-83.	7.3	27
15	Poly(ether ester) Ionomers as Water-Soluble Polymers for Material Extrusion Additive Manufacturing Processes. ACS Applied Materials & Interfaces, 2017, 9, 12324-12331.	8.0	25
16	Cell Interactions with Biomaterials Gradients and Arrays. Combinatorial Chemistry and High Throughput Screening, 2009, 12, 544-553.	1.1	24
17	Effect of transforming growth factor-1 on bone regeneration in critical-sized bone defects after irradiation of host tissues. American Journal of Veterinary Research, 2005, 66, 1039-1045.	0.6	19
18	Melting point depression of Piroxicam in carbon dioxide + co-solvent mixtures and inclusion complex formation with Î²-cyclodextrin. Journal of Supercritical Fluids, 2012, 71, 19-25.	3.2	17

#	Article	IF	Citations
19	Tuning the material properties of a water-soluble ionic polymer using different counterions for material extrusion additive manufacturing. Polymer, 2019, 176, 283-292.	3.8	16
20	Ovalbumin-BasedPorous Scaffolds for Bone Tissue Regeneration. Journal of Tissue Engineering, 2010, 1, 209860.	5.5	15
21	Application and evaluation of the method of ellipses for measuring the orientation of long, semiâ€flexible fibers. Polymer Composites, 2013, 34, 390-398.	4.6	15
22	Fabrication and Characterization of Three-Dimensional Electrospun Scaffolds for Bone Tissue Engineering. Regenerative Engineering and Translational Medicine, 2015, 1, 32-41.	2.9	12
23	Investigation into Polyurethane at Varying Dose Rates of Ionizing Radiation for Clinical Application. Journal of Chemistry, 2018, 2018, 1-8.	1.9	6
24	The correlation between gelatin macroscale differences and nanoparticle properties: providing insight into biopolymer variability. Nanoscale, 2018, 10, 10094-10108.	5.6	6
25	Detection of growth factor binding to gelatin and heparin using a photonic crystal optical biosensor. Materials Science and Engineering C, 2010, 30, 686-690.	7.3	5
26	Filtration initiated selective homogeneity (FISH) desolvation: A new method to prepare gelatin nanoparticles with high physicochemical consistency. Food Hydrocolloids, 2018, 84, 337-342.	10.7	5
27	The curve integration method is comparable to manual segmentation for the analysis of bone/scaffold composites using microâ€CT. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 88B, 271-279.	3.4	4
28	Digestibility Kinetics of Polyhydroxyalkanoate and Poly(butylene succinate-co-adipate) after In Vitro Fermentation in Rumen Fluid. Polymers, 2022, 14, 2103.	4.5	3
29	The Effect of Crosslinking Time and Nanoparticle Content on Electroactive, Multi-Component Scaffolds. Journal of Biomaterials and Tissue Engineering, 2013, 3, 479-485.	0.1	2
30	Electroactive, Multi-Component Scaffolds for Skeletal Muscle Regeneration. , 2013, , .		1
31	Developing Echogenic Materials as Catheters for Use with Ultrasound. ACS Biomaterials Science and Engineering, 2022, 8, 1312-1319.	5.2	1