

# Rui A Sousa

## List of Publications by Year in descending order

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Version: 2024-02-01

50  
papers

4,074  
citations

117625  
34  
h-index

189892  
50  
g-index

51  
all docs

51  
docs citations

51  
times ranked

5765  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mussel-Inspired Catechol Functionalisation as a Strategy to Enhance Biomaterial Adhesion: A Systematic Review. <i>Polymers</i> , 2021, 13, 3317.	4.5	16
2	Synthesis and biological evaluation of a bioinspired, tissue-adhesive gellan gum-based hydrogel designed for minimally invasive delivery and retention of chondrogenic cells. <i>Biomaterials Science</i> , 2020, 8, 3697-3711.	5.4	12
3	<i>In vitro</i> and <i>in vivo</i> performance of methacrylated gellan gum hydrogel formulations for cartilage repair*. <i>Journal of Biomedical Materials Research - Part A</i> , 2018, 106, 1987-1996.	4.0	37
4	$\alpha_3\beta_1$ and $\alpha_5\beta_1$ integrin-specific ligands: From tumor angiogenesis inhibitors to vascularization promoters in regenerative medicine?. <i>Biotechnology Advances</i> , 2018, 36, 208-227.	11.7	51
5	The Role of Biomaterials as Angiogenic Modulators of Spinal Cord Injury: Mimetics of the Spinal Cord, Cell and Angiogenic Factor Delivery Agents. <i>Frontiers in Pharmacology</i> , 2018, 9, 164.	3.5	34
6	Silk-based anisotropic 3D biotextiles for bone regeneration. <i>Biomaterials</i> , 2017, 123, 92-106.	11.4	48
7	Modulating cell adhesion to polybutylene succinate biotextile constructs for tissue engineering applications. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2017, 11, 2853-2863.	2.7	13
8	Influence of different surface modification treatments on silk biotextiles for tissue engineering applications. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2016, 104, 496-507.	3.4	19
9	Tumor Growth Suppression Induced by Biomimetic Silk Fibroin Hydrogels. <i>Scientific Reports</i> , 2016, 6, 31037.	3.3	62
10	Hierarchical scaffolds enhance osteogenic differentiation of human Wharton's jelly derived stem cells. <i>Biofabrication</i> , 2015, 7, 035009.	7.1	17
11	Poly(ester-urethane) scaffolds: effect of structure on properties and osteogenic activity of stem cells. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2015, 9, 930-942.	2.7	15
12	Bilayered silk/silk-nanoCaP scaffolds for osteochondral tissue engineering: In vitro and in vivo assessment of biological performance. <i>Acta Biomaterialia</i> , 2015, 12, 227-241.	8.3	140
13	Human adipose-derived cells can serve as a single-cell source for the <i>in vitro</i> cultivation of vascularized bone grafts. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2014, 8, 629-639.	2.7	23
14	Engineering cell-adhesive gellan gum spongy-like hydrogels for regenerative medicine purposes. <i>Acta Biomaterialia</i> , 2014, 10, 4787-4797.	8.3	81
15	Synthesis and characterization of sensitive hydrogels based on semi-interpenetrated networks of poly[2-(ethyl-2-pyrrolidone) methacrylate] and hyaluronic acid. <i>Journal of Biomedical Materials Research - Part A</i> , 2013, 101A, 157-166.	4.0	12
16	Benefits of Spine Stabilization with Biodegradable Scaffolds in Spinal Cord Injured Rats. <i>Tissue Engineering - Part C: Methods</i> , 2013, 19, 101-108.	2.1	20
17	Sequential Application of Steady and Pulsatile Medium Perfusion Enhanced the Formation of Engineered Bone. <i>Tissue Engineering - Part A</i> , 2013, 19, 1244-1254.	3.1	13
18	A practical perspective on ulvan extracted from green algae. <i>Journal of Applied Phycology</i> , 2013, 25, 407-424.	2.8	156

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19	Bioactive macro/micro porous silk fibroin/nano-sized calcium phosphate scaffolds with potential for bone-tissue-engineering applications. <i>Nanomedicine</i> , 2013, 8, 359-378.	3.3	60
20	New biotextiles for tissue engineering: Development, characterization and in vitro cellular viability. <i>Acta Biomaterialia</i> , 2013, 9, 8167-8181.	8.3	65
21	Unleashing the potential of supercritical fluids for polymer processing in tissue engineering and regenerative medicine. <i>Journal of Supercritical Fluids</i> , 2013, 79, 177-185.	3.2	48
22	Processing of degradable ulvan 3D porous structures for biomedical applications. <i>Journal of Biomedical Materials Research - Part A</i> , 2013, 101A, 998-1006.	4.0	51
23	<i>In Vitro</i> Cytotoxicity Assessment of Ulvan, a Polysaccharide Extracted from Green Algae. <i>Phytotherapy Research</i> , 2013, 27, 1143-1148.	5.8	58
24	Dynamic Culturing of Cartilage Tissue: The Significance of Hydrostatic Pressure. <i>Tissue Engineering - Part A</i> , 2012, 18, 1979-1991.	3.1	79
25	Development of silk-based scaffolds for tissue engineering of bone from human adipose-derived stem cells. <i>Acta Biomaterialia</i> , 2012, 8, 2483-2492.	8.3	210
26	Marine algae sulfated polysaccharides for tissue engineering and drug delivery approaches. <i>Biomatter</i> , 2012, 2, 278-289.	2.6	151
27	Characterization of ulvan extracts to assess the effect of different steps in the extraction procedure. <i>Carbohydrate Polymers</i> , 2012, 88, 537-546.	10.2	81
28	Processing ulvan into 2D structures: Cross-linked ulvan membranes as new biomaterials for drug delivery applications. <i>International Journal of Pharmaceutics</i> , 2012, 426, 76-81.	5.2	80
29	PDLLA enriched with ulvan particles as a novel 3D porous scaffold targeted for bone engineering. <i>Journal of Supercritical Fluids</i> , 2012, 65, 32-38.	3.2	66
30	Interactions between Schwann and olfactory ensheathing cells with a starch/polycaprolactone scaffold aimed at spinal cord injury repair. <i>Journal of Biomedical Materials Research - Part A</i> , 2012, 100A, 470-476.	4.0	28
31	Development of Gellan Gum-Based Microparticles/Hydrogel Matrices for Application in the Intervertebral Disc Regeneration. <i>Tissue Engineering - Part C: Methods</i> , 2011, 17, 961-972.	2.1	87
32	In vivo study of dendronlike nanoparticles for stem cells "tune-up" from nano to tissues. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2011, 7, 914-924.	3.3	34
33	Three-dimensional plotted scaffolds with controlled pore size gradients: Effect of scaffold geometry on mechanical performance and cell seeding efficiency. <i>Acta Biomaterialia</i> , 2011, 7, 1009-1018.	8.3	487
34	In Vitro Model of Vascularized Bone: Synergizing Vascular Development and Osteogenesis. <i>PLoS ONE</i> , 2011, 6, e28352.	2.5	107
35	Extraction and physico-chemical characterization of a versatile biodegradable polysaccharide obtained from green algae. <i>Carbohydrate Research</i> , 2010, 345, 2194-2200.	2.3	106
36	Effect of scaffold architecture and BMP-2/BMP-7 delivery on in vitro bone regeneration. <i>Journal of Materials Science: Materials in Medicine</i> , 2010, 21, 2999-3008.	3.6	73

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37	Combination of enzymes and flow perfusion conditions improves osteogenic differentiation of bone marrow stromal cells cultured upon starch/poly( $\epsilon$ -caprolactone) fiber meshes. Journal of Biomedical Materials Research - Part A, 2010, 94A, 1061-1069.	4.0	7
38	Plasma-induced polymerization as a tool for surface functionalization of polymer scaffolds for bone tissue engineering: An in vitro study. Acta Biomaterialia, 2010, 6, 3704-3712.	8.3	51
39	Development and Characterization of a Novel Hybrid Tissue Engineering-Based Scaffold for Spinal Cord Injury Repair. Tissue Engineering - Part A, 2010, 16, 45-54.	3.1	103
40	The Role of Lipase and $\alpha$ -Amylase in the Degradation of Starch/Poly( $\epsilon$ -Caprolactone) Fiber Meshes and the Osteogenic Differentiation of Cultured Marrow Stromal Cells. Tissue Engineering - Part A, 2009, 15, 295-305.	3.1	58
41	Crosstalk between osteoblasts and endothelial cells co-cultured on a polycaprolactone-starch scaffold and the in vitro development of vascularization. Biomaterials, 2009, 30, 4407-4415.	11.4	193
42	Hierarchical starch-based fibrous scaffold for bone tissue engineering applications. Journal of Tissue Engineering and Regenerative Medicine, 2009, 3, 37-42.	2.7	191
43	The osteogenic differentiation of rat bone marrow stromal cells cultured with dexamethasone-loaded carboxymethylchitosan/poly(amidoamine) dendrimer nanoparticles. Biomaterials, 2009, 30, 804-813.	11.4	131
44	3D Plotted PCL Scaffolds for Stem Cell Based Bone Tissue Engineering. Macromolecular Symposia, 2008, 269, 92-99.	0.7	102
45	Bioinert, biodegradable and injectable polymeric matrix composites for hard tissue replacement: state of the art and recent developments. Composites Science and Technology, 2004, 64, 789-817.	7.8	374
46	Processing and properties of bone-analogue biodegradable and bioinert polymeric composites. Composites Science and Technology, 2003, 63, 389-402.	7.8	59
47	Structure development and interfacial interactions in high-density polyethylene/hydroxyapatite (HDPE/HA) composites molded with preferred orientation. Journal of Applied Polymer Science, 2002, 86, 2873-2886.	2.6	26
48	Injection molding of a starch/EVOH blend aimed as an alternative biomaterial for temporary applications. Journal of Applied Polymer Science, 2000, 77, 1303-1315.	2.6	48
49	The enhancement of the mechanical properties of a high-density polyethylene. Journal of Applied Polymer Science, 1999, 73, 2473-2483.	2.6	89
50	The enhancement of the mechanical properties of a high-density polyethylene. Journal of Applied Polymer Science, 1999, 73, 2473.	2.6	2