Jonathan James Blaker

List of Publications by Year
in descending order

79 papers	8,826 citations	70961 41 h-index	66788 78 g-index
84 all docs	84 docs citations	84 times ranked	11211 citing authors

#	Article	IF	Citations
1	Biodegradable and bioactive porous polymer/inorganic composite scaffolds for bone tissue engineering. Biomaterials, 2006, 27, 3413-3431.	5.7	3,317
2	Structure, morphology and thermal characteristics of banana nano fibers obtained by steam explosion. Bioresource Technology, 2011, 102, 1988-1997.	4.8	472
3	Development and characterisation of silver-doped bioactive glass-coated sutures for tissue engineering and wound healing applications. Biomaterials, 2004, 25, 1319-1329.	5.7	292
4	Bioactive composite materials for tissue engineering scaffolds. Expert Review of Medical Devices, 2005, 2, 303-317.	1.4	275
5	PDLLA/BioglassÂ® composites for soft-tissue and hard-tissue engineering: an in vitro cell biology assessment. Biomaterials, 2004, 25, 3013-3021.	5.7	273
6	Piezoelectric materials as stimulatory biomedical materials and scaffolds for bone repair. Acta Biomaterialia, 2018, 73, 1-20.	4.1	239
7	Enhancing the Hydrophilicity and Cell Attachment of 3D Printed PCL/Graphene Scaffolds for Bone Tissue Engineering. Materials, 2016, 9, 992.	1.3	230
8	Mechanical properties of highly porous PDLLA/BioglassÂ® composite foams as scaffolds for bone tissue engineering. Acta Biomaterialia, 2005, 1, 643-652.	4.1	210
9	Surface functionalisation of bacterial cellulose as the route to produce green polylactide nanocomposites with improved properties. Composites Science and Technology, 2009, 69, 2724-2733.	3.8	189
10	Surface only modification of bacterial cellulose nanofibres with organic acids. Cellulose, 2011, 18, 595-605.	2.4	177
11	An elastomeric patch derived from poly(glycerol sebacate) for delivery of embryonic stem cells to the heart. Biomaterials, 2010, 31, 3885-3893.	5.7	168
12	Preparation and characterisation of poly(lactide-co-glycolide) (PLGA) and PLGA/BioglassÂ® composite tubular foam scaffolds for tissue engineering applications. Materials Science and Engineering C, 2005, 25, 23-31.	3.8	128
13	Effect of iron on the surface, degradation and ion release properties of phosphate-based glass fibres. Acta Biomaterialia, 2005, 1, 553-563.	4.1	125
14	Polymer-Ceramic Composite Scaffolds: The Effect of Hydroxyapatite and Î²-tri-Calcium Phosphate. Materials, 2018, 11, 129.	1.3	121
15	Electroactive biomaterials: Vehicles for controlled delivery of therapeutic agents for drug delivery and tissue regeneration. Advanced Drug Delivery Reviews, 2018, 129, 148-168.	6.6	119
16	Novel fabrication techniques to produce microspheres by thermally induced phase separation for tissue engineering and drug delivery. Acta Biomaterialia, 2008, 4, 264-272.	4.1	114
17	Renewable nanocomposite polymer foams synthesized from Pickering emulsion templates. Green Chemistry, 2009, 11, 1321.	4.6	110
18	Bioactive Silkâ€Based Nerve Guidance Conduits for Augmenting Peripheral Nerve Repair. Advanced Healthcare Materials, 2018, 7, e1800308.	3.9	98

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19	Phase Behavior of Medium and High Internal Phase Water-in-Oil Emulsions Stabilized Solely by Hydrophobized Bacterial Cellulose Nanofibrils. Langmuir, 2014, 30, 452-460.	1.6	95
20	In Vitro Attachment of Staphylococcus Epidermidis to Surgical Sutures with and without Ag-Containing Bioactive Glass Coating. Journal of Biomaterials Applications, 2004, 19, 47-57.	1.2	90
21	Fabrication and characterisation of 3D printed MWCNT composite porous scaffolds for bone regeneration. Materials Science and Engineering C, 2019, 98, 266-278.	3.8	89
22	Evaluation of human bone marrow stromal cell growth on biodegradable polymer/BioglassÂ® composites. Biochemical and Biophysical Research Communications, 2006, 342, 1098-1107.	1.0	76
23	Hierarchical Composites Made Entirely from Renewable Resources. Journal of Biobased Materials and Bioenergy, 2011, 5, 1-16.	0.1	74
24	Long-term in vitro degradation of PDLLA/BioglassÂ® bone scaffolds in acellular simulated body fluid. Acta Biomaterialia, 2011, 7, 829-840.	4.1	73
25	Three-dimensional culture of annulus fibrosus cells within PDLLA/BioglassÂ® composite foam scaffolds: Assessment of cell attachment, proliferation and extracellular matrix production. Biomaterials, 2007, 28, 2010-2020.	5.7	72
26	Short sisal fibre reinforced bacterial cellulose polylactide nanocomposites using hairy sisal fibres as reinforcement. Composites Part A: Applied Science and Manufacturing, 2012, 43, 2065-2074.	3.8	70
27	Premature degradation of poly(Î±-hydroxyesters) during thermal processing of BioglassÂ®-containing composites. Acta Biomaterialia, 2010, 6, 756-762.	4.1	67
28	Graphene oxide and electroactive reduced graphene oxide-based composite fibrous scaffolds for engineering excitable nerve tissue. Materials Science and Engineering C, 2021, 119, 111632.	3.8	65
29	Porous, Aligned, and Biomimetic Fibers of Regenerated Silk Fibroin Produced by Solution Blow Spinning. Biomacromolecules, 2018, 19, 4542-4553.	2.6	61
30	Aligned unidirectional PLA/bacterial cellulose nanocomposite fibre reinforced PDLLA composites. Reactive and Functional Polymers, 2014, 85, 185-192.	2.0	60
31	Assessment of Polymer/Bioactive Glass-Composite Microporous Spheres for Tissue Regeneration Applications. Tissue Engineering - Part A, 2009, 15, 1451-1461.	1.6	55
32	Dicarboxylic acid-epoxy vitrimers: influence of the off-stoichiometric acid content on cure reactions and thermo-mechanical properties. Polymer Chemistry, 2020, 11, 5327-5338.	1.9	55
33	Poly(D,L-lactide) (PDLLA) foams with TiO2 nanoparticles and PDLLA/TiO2-BioglassÂ® foam composites for tissue engineering scaffolds. Journal of Materials Science, 2006, 41, 3999-4008.	1.7	54
34	Edible Scaffolds Based on Non-Mammalian Biopolymers for Myoblast Growth. Materials, 2017, 10, 1404.	1.3	54
35	Bio-based macroporous polymer nanocomposites made by mechanical frothing of acrylated epoxidised soybean oil. Green Chemistry, 2011, 13, 3117.	4.6	53
36	Green polyurethane nanocomposites from soy polyol and bacterial cellulose. Journal of Materials Science, 2013, 48, 2167-2175.	1.7	52

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37	Designing multigradient biomaterials for skin regeneration. Materials Today Advances, 2020, 5, 100051.	2.5	49
38	Bacterial cellulose as source for activated nanosized carbon for electric double layer capacitors. Journal of Materials Science, 2013, 48, 367-376.	1.7	48
39	Porous Bioactive Nanofibers via Cryogenic Solution Blow Spinning and Their Formation into 3D Macroporous Scaffolds. ACS Biomaterials Science and Engineering, 2016, 2, 1442-1449.	2.6	48
40	Fabrication, characterisation and assessment of bioactivity of poly(d,l lactid acid) (PDLLA)/TiO2 nanocomposite films. Composites Part A: Applied Science and Manufacturing, 2005, 36, 721-727.	3.8	46
41	Rapid fabrication of reinforced and cell-laden vascular grafts structurally inspired by human coronary arteries. Nature Communications, 2019, 10, 3098.	5.8	46
42	Aqueous solution blow spinning of poly(vinyl alcohol) micro- and nanofibers. Materials Letters, 2016, 176, 122-126.	1.3	44
43	Morphological, mechanical and biological assessment of PCL/pristine graphene scaffolds for bone regeneration. International Journal of Bioprinting, 2016, 2, .	1.7	38
44	Modulation of Neuronal Cell Affinity on PEDOTâ€“PSS Nonwoven Silk Scaffolds for Neural Tissue Engineering. ACS Biomaterials Science and Engineering, 2020, 6, 6906-6916.	2.6	36
45	Recent Developments in Chitosan-Based Micro/Nanofibers for Sustainable Food Packaging, Smart Textiles, Cosmeceuticals, and Biomedical Applications. Molecules, 2021, 26, 2683.	1.7	36
46	Ice-microsphere templating to produce highly porous nanocomposite PLA matrix scaffolds with pores selectively lined by bacterial cellulose nano-whiskers. Composites Science and Technology, 2010, 70, 1879-1888.	3.8	33
47	3D-Printed Poly(É›-caprolactone)/Graphene Scaffolds Activated with P1-Latex Protein for Bone Regeneration. 3D Printing and Additive Manufacturing, 2018, 5, 127-137.	1.4	33
48	Fabrication and Characterisation of Stimuli Responsive Piezoelectric PVDF and Hydroxyapatite-Filled PVDF Fibrous Membranes. Molecules, 2019, 24, 1903.	1.7	31
49	A comparative study of the effects of different bioactive fillers in PLGA matrix composites and their suitability as bone substitute materials: A thermo-mechanical and in vitro investigation. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 50, 277-289.	1.5	29
50	Nacre-nanomimetics: Strong, Stiff, and Plastic. ACS Applied Materials & Interfaces, 2015, 7, 26783-26791.	4.0	28
51	Hybrid solâ€“gel inorganic/gelatin porous fibres via solution blow spinning. Journal of Materials Science, 2017, 52, 9066-9081.	1.7	27
52	Mechanical response of multi-layer bacterial cellulose nanopaper reinforced polylactide laminated composites. Composites Part A: Applied Science and Manufacturing, 2018, 107, 155-163.	3.8	26
53	Non-covalent protein-based adhesives for transparent substratesâ€”bovine serum albumin vs. recombinant spider silk. Materials Today Bio, 2020, 7, 100068.	2.6	24
54	Thermal Characterizations of Silver-containing Bioactive Glass-coated Sutures. Journal of Biomaterials Applications, 2005, 20, 81-98.	1.2	23

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55	Assessment of antimicrobial microspheres as a prospective novel treatment targeted towards the repair of perianal fistulae. Alimentary Pharmacology and Therapeutics, 2008, 28, 614-622.	1.9	23
56	Improved mechanical performance of self-adhesive resin cement filled with hybrid nanofibers-embedded with niobium pentoxide. Dental Materials, 2019, 35, e272-e285.	1.6	23
57	Electroresponsive Silk-Based Biohybrid Composites for Electrochemically Controlled Growth Factor Delivery. Pharmaceutics, 2020, 12, 742.	2.0	23
58	pH-triggered phase inversion and separation of hydrophobised bacterial cellulose stabilised Pickering emulsions. Reactive and Functional Polymers, 2014, 85, 208-213.	2.0	22
59	Synergistic effects of crosslinking and chitosan molecular weight on the microstructure, molecular mobility, thermal and sorption properties of porous chitosan/gelatin/hyaluronic acid scaffolds. Journal of Applied Polymer Science, 2017, 134, .	1.3	22
60	The effect of terminal globular domains on the response of recombinant mini-spidroins to fiber spinning triggers. Scientific Reports, 2020, 10, 10671.	1.6	22
61	Synthetic biology for fibers, adhesives, and active camouflage materials in protection and aerospace. MRS Communications, 2019, 9, 486-504.	0.8	21
62	Cold-adaptation of a methacrylamide gelatin towards the expansion of the biomaterial toolbox for specialized functionalities in tissue engineering. Materials Science and Engineering C, 2019, 102, 373-390.	3.8	15
63	Exploiting Inherent Instability of 2D Black Phosphorus for Controlled Phosphate Release from Blow-Spun Poly(lactide-<i>co</i>-glycolide) Nanofibers. ACS Applied Nano Materials, 2018, 1, 4190-4197.	2.4	14
64	Solution blow spinning of highly deacetylated chitosan nanofiber scaffolds for dermal wound healing. , 2022, 137, 212871.		13
65	Blood, sweat, and tears: extraterrestrial regolith biocomposites with in vivo binders. Materials Today Bio, 2021, 12, 100136.	2.6	12
66	Wetting of bioactive glass surfaces by poly(Î±-hydroxyacid) melts: interaction between BioglassÂ® and biodegradable polymers. E-Polymers, 2005, 5, .	1.3	11
67	Biodegradable and Bioactive Polymer/BioglassÂ® Composite Foams for Tissue Engineering Scaffolds. Materials Science Forum, 2005, 494, 499-506.	0.3	10
68	Property and Shape Modulation of Carbon Fibers Using Lasers. ACS Applied Materials & Interfaces, 2016, 8, 16351-16358.	4.0	10
69	Synthesis and characterisation of fluorescent pyreneâ€endâ€capped polylactide fibres. Polymer International, 2019, 68, 360-368.	1.6	10
70	Development of novel composites through fibre and interface/interphase modification. IOP Conference Series: Materials Science and Engineering, 2016, 139, 012001.	0.3	9
71	Grapheneâ€“aramid nanocomposite fibres <i>via</i> superacid co-processing. Chemical Communications, 2019, 55, 11703-11706.	2.2	8
72	Novel Bioresorbable Poly(lactide-co-glycolide) (PLGA) and PLGA/Bioglass ^{Â®} Composite Tubular Foam Scaffolds for Tissue Engineering Applications. Materials Science Forum, 2004, 455-456, 415-419.	0.3	7

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73	Rigidisation of deployable space polymer membranes by heat-activated self-folding. Smart Materials and Structures, 2018, 27, 105037.	1.8	6
74	Lipase-Catalyzed Epoxyâ€“Acid Addition and Transesterification: from Model Molecule Studies to Network Build-Up. Biomacromolecules, 2021, 22, 4544-4551.	2.6	6
75	Characterisation of â€˜wetâ€™ polymer surfaces for tissue engineering applications: Are flat surfaces a suitable model for complex structures?. E-Polymers, 2005, 5, .	1.3	4
76	BioglassÂ® Coatings on Biodegradable Poly(3-hydroxybutyrate) (P3HB) Meshes for Tissue Engineering Scaffolds. Materialwissenschaft Und Werkstofftechnik, 2006, 37, 577-583.	0.5	4
77	Hierarchically Porous Silk/Activated-Carbon Composite Fibres for Adsorption and Repellence of Volatile Organic Compounds. Molecules, 2020, 25, 1207.	1.7	4
78	Patterned, morphing composites <i>via</i> maskless photo-click lithography. Soft Matter, 2020, 16, 1270-1278.	1.2	3
79	Biodegradable and Bioactive Polymer/BioglassÂ® Composite Foams for Tissue Engineering Scaffolds. Materials Science Forum, 0, , 499-506.	0.3	1