

# Serena M Best

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

63

papers

1,908

citations

21

h-index

43

g-index

65

ext. papers

2,257

ext. citations

6.4

avg, IF

5.08

L-index

#	Paper	IF	Citations
63	Avoiding artefacts in MicroCT imaging of collagen scaffolds: Effect of phosphotungstic acid (PTA)-staining and crosslink density. <i>Bioactive Materials</i> , <b>2022</b> , 8, 210-219	16.7	1
62	Feature importance in multi-dimensional tissue-engineering datasets: Random forest assisted optimization of experimental variables for collagen scaffolds. <i>Applied Physics Reviews</i> , <b>2021</b> , 8, 041403	17.3	1
61	Collagen Film Activation with Nanoscale IKVAV-Capped Dendrimers for Selective Neural Cell Response. <i>Nanomaterials</i> , <b>2021</b> , 11,	5.4	2
60	The 3D Printing of Freestanding PLLA Thin Layers and Improving First Layer Consistency through the Introduction of Sacrificial PVA. <i>Applied Sciences (Switzerland)</i> , <b>2021</b> , 11, 6320	2.6	2
59	Modulating hESC-derived cardiomyocyte and endothelial cell function with triple-helical peptides for heart tissue engineering. <i>Biomaterials</i> , <b>2021</b> , 269, 120612	15.6	2
58	The effects of despeckling filters on pore size measurements in collagen scaffold micro-CT data. <i>Journal of Microscopy</i> , <b>2021</b> , 284, 142-156	1.9	
57	Tailoring the biofunctionality of collagen biomaterials via tropoelastin incorporation and EDC-crosslinking. <i>Acta Biomaterialia</i> , <b>2021</b> , 135, 150-163	10.8	2
56	A technique for improving dispersion within polymer-glass composites using polymer precipitation. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2021</b> , 123, 104767	4.1	1
55	Poly-L-Lactic Acid Nanotubes as Soft Piezoelectric Interfaces for Biology: Controlling Cell Attachment Polymer Crystallinity. <i>ACS Applied Bio Materials</i> , <b>2020</b> , 3, 2140-2149	4.1	14
54	Generation of a three-dimensional collagen scaffold-based model of the human endometrium. <i>Interface Focus</i> , <b>2020</b> , 10, 20190079	3.9	43
53	Tunable bioactivity and mechanics of collagen-based tissue engineering constructs: A comparison of EDC-NHS, genipin and TG2 crosslinkers. <i>Biomaterials</i> , <b>2020</b> , 254, 120109	15.6	34
52	Collagen scaffolds functionalized with triple-helical peptides support 3D HUVEC culture. <i>International Journal of Energy Production and Management</i> , <b>2020</b> , 7, 471-482	5.3	6
51	Natural Biomaterials for Cardiac Tissue Engineering: A Highly Biocompatible Solution. <i>Frontiers in Cardiovascular Medicine</i> , <b>2020</b> , 7, 554597	5.4	31
50	MicroCT analysis of connectivity in porous structures: optimizing data acquisition and analytical methods in the context of tissue engineering. <i>Journal of the Royal Society Interface</i> , <b>2020</b> , 17, 20190833	4.1	6
49	Crosslinking Collagen Constructs: Achieving Cellular Selectivity Through Modifications of Physical and Chemical Properties. <i>Applied Sciences (Switzerland)</i> , <b>2020</b> , 10, 6911	2.6	14
48	Bioactive conformable hydrogel-carbonated hydroxyapatite nanocomposite coatings on Ti-6Al-4V substrates. <i>Materials Technology</i> , <b>2020</b> , 35, 727-733	2.1	3
47	Impact of UV- and carbodiimide-based crosslinking on the integrin-binding properties of collagen-based materials. <i>Acta Biomaterialia</i> , <b>2019</b> , 100, 280-291	10.8	18

46	Targeted protein delivery: carbodiimide crosslinking influences protein release from microparticles incorporated within collagen scaffolds. <i>International Journal of Energy Production and Management</i> , <b>2019</b> , 6, 279-287	5.3	3
45	Self-assembly of collagen bundles and enhanced piezoelectricity induced by chemical crosslinking. <i>Nanoscale</i> , <b>2019</b> , 11, 15120-15130	7.7	12
44	Cellular response to collagen-elastin composite materials. <i>Acta Biomaterialia</i> , <b>2019</b> , 86, 158-170	10.8	12
43	Engineering vasculature: Architectural effects on microcapillary-like structure self-assembly. <i>PLoS ONE</i> , <b>2019</b> , 14, e0210390	3.7	6
42	Editorial. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2018</b> , 29, 16	4.5	1
41	Near-Field Electrospinning Patterning Polycaprolactone and Polycaprolactone/Collagen Interconnected Fiber Membrane. <i>Macromolecular Materials and Engineering</i> , <b>2018</b> , 303, 1700463	3.9	14
40	Macromol. Mater. Eng. 2/2018. <i>Macromolecular Materials and Engineering</i> , <b>2018</b> , 303, 1870009	3.9	
39	Selecting the correct cellular model for assessing of the biological response of collagen-based biomaterials. <i>Acta Biomaterialia</i> , <b>2018</b> , 65, 88-101	10.8	19
38	Coupling of a specific photoreactive triple-helical peptide to crosslinked collagen films restores binding and activation of DDR2 and VWF. <i>Biomaterials</i> , <b>2018</b> , 182, 21-34	15.6	14
37	Structurally graduated collagen scaffolds applied to the ex vivo generation of platelets from human pluripotent stem cell-derived megakaryocytes: Enhancing production and purity. <i>Biomaterials</i> , <b>2018</b> , 182, 135-144	15.6	28
36	3D imaging of cells in scaffolds: direct labelling for micro CT. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2018</b> , 29, 86	4.5	10
35	Towards Cellular Sieving: Exploring the Limits of Scaffold Accessibility for Cell Type Specific Invasion. <i>Advanced Biology</i> , <b>2018</b> , 2, 1700257	3.5	5
34	In situ ESEM imaging of the vapor-pressure-dependent sublimation-induced morphology of ice. <i>Physical Review Materials</i> , <b>2018</b> , 2,	3.2	4
33	Optimising collagen scaffold architecture for enhanced periodontal ligament fibroblast migration. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2018</b> , 29, 166	4.5	22
32	The apatite forming ability of micro- and nanocomposites of $\beta$ -tricalcium phosphate/poly (D,L-lactide-co-glycolide). <i>Materials Technology</i> , <b>2018</b> , 33, 803-809	2.1	1
31	Fundamental insight into the effect of carbodiimide crosslinking on cellular recognition of collagen-based scaffolds. <i>Acta Biomaterialia</i> , <b>2017</b> , 49, 218-234	10.8	82
30	Nanocomposites for Bone Repair <b>2017</b> , 239-298		
29	The effect of cationically-modified phosphorylcholine polymers on human osteoblasts in vitro and their effect on bone formation in vivo. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2017</b> , 28, 144	4.5	3

28	The effect of the type of HA on the degradation of PLGA/HA composites. <i>Materials Science and Engineering C</i> , <b>2017</b> , 70, 824-831	8.3	16
27	Collagen-Fibrinogen Lyophilised Scaffolds for Soft Tissue Regeneration. <i>Materials</i> , <b>2017</b> , 10,	3.5	10
26	Orthopedic Applications: Bioceramic and Biopolymer Nanocomposite Materials <b>2017</b> , 1276-1288		
25	Parameterizing the Transport Pathways for Cell Invasion in Complex Scaffold Architectures. <i>Tissue Engineering - Part C: Methods</i> , <b>2016</b> , 22, 409-17	2.9	15
24	The synthesis and coupling of photoreactive collagen-based peptides to restore integrin reactivity to an inert substrate, chemically-crosslinked collagen. <i>Biomaterials</i> , <b>2016</b> , 85, 65-77	15.6	34
23	Optimisation of UV irradiation as a binding site conserving method for crosslinking collagen-based scaffolds. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2016</b> , 27, 14	4.5	51
22	Evaluation of cell binding to collagen and gelatin: a study of the effect of 2D and 3D architecture and surface chemistry. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2016</b> , 27, 148	4.5	206
21	The influence of silanisation on the mechanical and degradation behaviour of PLGA/HA composites. <i>Materials Science and Engineering C</i> , <b>2015</b> , 48, 642-50	8.3	17
20	In vitro osteoclast formation and resorption of silicon-substituted hydroxyapatite ceramics. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2015</b> , 103, 3312-22	5.4	19
19	Probing carbonate in bone forming minerals on the nanometre scale. <i>Acta Biomaterialia</i> , <b>2015</b> , 20, 129-139.8	39.8	22
18	Electrospinning of Bioinspired Polymer Scaffolds. <i>Advances in Experimental Medicine and Biology</i> , <b>2015</b> , 881, 33-53	3.6	11
17	Synthesis, characterization and modelling of zinc and silicate co-substituted hydroxyapatite. <i>Journal of the Royal Society Interface</i> , <b>2015</b> , 12, 20150190	4.1	34
16	Stress-relaxation and fatigue behaviour of synthetic brow-suspension materials. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2015</b> , 42, 116-28	4.1	2
15	Cell Invasion in Collagen Scaffold Architectures Characterized by Percolation Theory. <i>Advanced Healthcare Materials</i> , <b>2015</b> , 4, 1317-21	10.1	43
14	Effect of Ceramic Scaffold Architectural Parameters on Biological Response. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2015</b> , 3, 151	5.8	63
13	Effect of 1-ethyl-3-(3-dimethylaminopropyl) carbodiimide and N-hydroxysuccinimide concentrations on the mechanical and biological characteristics of cross-linked collagen fibres for tendon repair. <i>International Journal of Energy Production and Management</i> , <b>2015</b> , 2, 77-85	5.3	38
12	Microstructure and mechanical properties of synthetic brow-suspension materials. <i>Materials Science and Engineering C</i> , <b>2014</b> , 35, 220-30	8.3	15
11	Investigating the morphological, mechanical and degradation properties of scaffolds comprising collagen, gelatin and elastin for use in soft tissue engineering. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2012</b> , 10, 62-74	4.1	160

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|----|--|------|-----|
| 10 | Bioactive ceramics: processing, structures and properties. <i>Journal of Materials Science</i> , <b>2012</b> , 47, 610-624.  | 4.3  | 88  |
| 9  | Crosslinking and composition influence the surface properties, mechanical stiffness and cell reactivity of collagen-based films. <i>Acta Biomaterialia</i> , <b>2012</b> , 8, 3080-90    | 10.8 | 143 |
| 8  | The interplay between physical and chemical properties of protein films affects their bioactivity. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2012</b> , 100, 2401-11 | 5.4  | 10  |
| 7  | Hydrothermal Synthesis of Bioinert Oxide Film on Pure Ti: In Vitro and In Vivo Studies. <i>Materials Research Society Symposia Proceedings</i> , <b>2012</b> , 1418, 133                 |      |     |
| 6  | Preparation of novel bioactive nano-calcium phosphate-hydrogel composites. <i>Science and Technology of Advanced Materials</i> , <b>2010</b> , 11, 014103                                | 7.1  | 32  |
| 5  | Design of a multiphase osteochondral scaffold. I. Control of chemical composition. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2010</b> , 92, 1057-65                  | 5.4  | 38  |
| 4  | Hydroxyapatite/Carbon Nanotube Composites for Biomedical Applications: A Review. <i>International Journal of Applied Ceramic Technology</i> , <b>2007</b> , 4, 1-13                      | 2    | 303 |
| 3  | Effect of Silicon Substitution on the Sintering and Microstructure of Hydroxyapatite. <i>Journal of the American Ceramic Society</i> , <b>2004</b> , 85, 2771-2777                       | 3.8  | 113 |
| 2  | Osteoblast-like Cell Response to Apatite-Wollastonite/Polyethylene Bone Replacement Composites. <i>Materials Research Society Symposia Proceedings</i> , <b>2003</b> , 774, 7371         |      |     |
| 1  | Composition and Surface Topography Effects on Apatite-Forming Ability of Ceramic-Polymer Composites. <i>Materials Research Society Symposia Proceedings</i> , <b>2003</b> , 774, 7261    |      |     |