Scott A Sell

List of Publications by Year
in descending order

96 papers	5,301 citations	117571 34 h-index	85498 71 g-index
96 all docs	96 docs citations	96 times ranked	6978 citing authors

#	Article	IF	Citations
1	Nanofiber technology: Designing the next generation of tissue engineering scaffolds. Advanced Drug Delivery Reviews, 2007, 59, 1413-1433.	6.6	1,005
2	The Use of Natural Polymers in Tissue Engineering: A Focus on Electrospun Extracellular Matrix Analogues. Polymers, 2010, 2, 522-553.	2.0	459
3	Electrospinning of collagen/biopolymers for regenerative medicine and cardiovascular tissue engineering. Advanced Drug Delivery Reviews, 2009, 61, 1007-1019.	6.6	417
4	A three-layered electrospun matrix to mimic native arterial architecture using polycaprolactone, elastin, and collagen: A preliminary study. Acta Biomaterialia, 2010, 6, 2422-2433.	4.1	245
5	Electrospun polydioxanoneâ€“elastin blends: potential for bioresorbable vascular grafts. Biomedical Materials (Bristol), 2006, 1, 72-80.	1.7	206
6	A comprehensive review of cryogels and their roles in tissue engineering applications. Acta Biomaterialia, 2017, 62, 29-41.	4.1	198
7	Extracellular matrix regenerated: tissue engineering via electrospun biomimetic nanofibers. Polymer International, 2007, 56, 1349-1360.	1.6	187
8	Two pole air gap electrospinning: Fabrication of highly aligned, three-dimensional scaffolds for nerve reconstruction. Acta Biomaterialia, 2011, 7, 203-215.	4.1	136
9	Suture-reinforced electrospun polydioxanoneâ€“elastin small-diameter tubes for use in vascular tissue engineering: A feasibility study. Acta Biomaterialia, 2008, 4, 58-66.	4.1	115
10	Electrospinning-aligned and random polydioxanoneâ€“polycaprolactoneâ€“silk fibroin-blended scaffolds: geometry for a vascular matrix. Biomedical Materials (Bristol), 2009, 4, 055010.	1.7	95
11	Incorporating Platelet-Rich Plasma into Electrospun Scaffolds for Tissue Engineering Applications. Tissue Engineering - Part A, 2011, 17, 2723-2737.	1.6	94
12	Cross-linking methods of electrospun fibrinogen scaffolds for tissue engineering applications. Biomedical Materials (Bristol), 2008, 3, 045001.	1.7	91
13	Platelet-Rich Plasma in Bone Regeneration: Engineering the Delivery for Improved Clinical Efficacy. BioMed Research International, 2014, 2014, 1-15.	0.9	83
14	Nanotechnology in the design of soft tissue scaffolds: innovations in structure and function. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2010, 2, 20-34.	3.3	77
15	Electrospun nanofibre fibrinogen for urinary tract tissue reconstruction. Biomedical Materials (Bristol), 2007, 2, 257-262.	1.7	75
16	A Preliminary Study on the Potential of Manuka Honey and Platelet-Rich Plasma in Wound Healing. International Journal of Biomaterials, 2012, 2012, 1-14.	1.1	68
17	The use of air-flow impedance to control fiber deposition patterns during electrospinning. Biomaterials, 2012, 33, 771-779.	5.7	68
18	Scaffold permeability as a means to determine fiber diameter and pore size of electrospun fibrinogen. Journal of Biomedical Materials Research - Part A, 2008, 85A, 115-126.	2.1	67

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19	Characterization of slow-gelling alginate hydrogels for intervertebral disc tissue-engineering applications. Materials Science and Engineering C, 2016, 63, 198-210.	3.8	67
20	Design of electrohydrodynamic sprayed polyethylene glycol hydrogel microspheres for cell encapsulation. Biofabrication, 2017, 9, 025019.	3.7	67
21	Electrospun Collagen: A Tissue Engineering Scaffold with Unique Functional Properties in a Wide Variety of Applications. Journal of Nanomaterials, 2011, 2011, 1-15.	1.5	65
22	Control of gelation, degradation and physical properties of polyethylene glycol hydrogels through the chemical and physical identity of the crosslinker. Journal of Materials Chemistry B, 2017, 5, 2679-2691.	2.9	57
23	A review of electrospinning manipulation techniques to direct fiber deposition and maximize pore size. Electrospinning, 2017, 2, 46-61.	1.6	54
24	Aligned nanofibers of decellularized muscle ECM support myogenic activity in primary satellite cells <i>in vitro</i>. Biomedical Materials (Bristol), 2019, 14, 035010.	1.7	54
25	Lactic Acid Suppresses IL-33â€“Mediated Mast Cell Inflammatory Responses via Hypoxia-Inducible Factor-1Î±â€“Dependent miR-155 Suppression. Journal of Immunology, 2016, 197, 2909-2917.	0.4	52
26	Electrospun core-sheath poly(vinyl alcohol)/silk fibroin nanofibers with Rosuvastatin release functionality for enhancing osteogenesis of human adipose-derived stem cells. Materials Science and Engineering C, 2019, 99, 129-139.	3.8	45
27	Electrospinning adipose tissueâ€derived extracellular matrix for adipose stem cell culture. Journal of Biomedical Materials Research - Part A, 2012, 100A, 1716-1724.	2.1	43
28	Angiogenic potential of human macrophages on electrospun bioresorbable vascular grafts. Biomedical Materials (Bristol), 2009, 4, 031001.	1.7	40
29	Insert-based microfluidics for 3D cell culture with analysis. Analytical and Bioanalytical Chemistry, 2018, 410, 3025-3035.	1.9	40
30	A Comparison of Tissue Engineering Scaffolds Incorporated with Manuka Honey of Varying UMF. BioMed Research International, 2017, 2017, 1-12.	0.9	39
31	A case report on the use of sustained release platelet-rich plasma for the treatment of chronic pressure ulcers. Journal of Spinal Cord Medicine, 2011, 34, 122-127.	0.7	38
32	A Critical Review and Perspective of Honey in Tissue Engineering and Clinical Wound Healing. Advances in Wound Care, 2019, 8, 403-415.	2.6	38
33	Creating small diameter bioresorbable vascular grafts through electrospinning. Journal of Materials Chemistry, 2008, 18, 260-263.	6.7	36
34	Use of electrospinning and dynamic air focusing to create three-dimensional cell culture scaffolds in microfluidic devices. Analyst, The, 2016, 141, 5311-5320.	1.7	36
35	Cryogel scaffolds from patient-specific 3D-printed molds for personalized tissue-engineered bone regeneration in pediatric cleft-craniofacial defects. Journal of Biomaterials Applications, 2017, 32, 598-611.	1.2	36
36	Sustained release of multicomponent plateletâ€rich plasma proteins from hydrolytically degradable PEG hydrogels. Journal of Biomedical Materials Research - Part A, 2017, 105, 3304-3314.	2.1	35

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37	Reversible Hydrogel Photopatterning: Spatial and Temporal Control over Gel Mechanical Properties Using Visible Light Photoredox Catalysis. ACS Applied Materials & Interfaces, 2019, 11, 24627-24638.	4.0	35
38	A Preliminary Evaluation of Lyophilized Gelatin Sponges, Enhanced with Platelet-Rich Plasma, Hydroxyapatite and Chitin Whiskers for Bone Regeneration. Cells, 2013, 2, 244-265.	1.8	34
39	A preliminary <i>in vitro</i> evaluation of the bioactive potential of cryogel scaffolds incorporated with Manuka honey for the treatment of chronic bone infections. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 1918-1933.	1.6	34
40	Investigating Manuka Honey Antibacterial Properties When Incorporated into Cryogel, Hydrogel, and Electrospun Tissue Engineering Scaffolds. Gels, 2019, 5, 21.	2.1	34
41	Preliminary Investigation of Airgap Electrospun Silk-Fibroin-Based Structures for Ligament Analogue Engineering. Journal of Biomaterials Science, Polymer Edition, 2011, 22, 1253-1273.	1.9	32
42	The influence of platelet-rich plasma on myogenic differentiation. Journal of Tissue Engineering and Regenerative Medicine, 2016, 10, E239-E249.	1.3	32
43	The calcification potential of cryogel scaffolds incorporated with various forms of hydroxyapatite for bone regeneration. Biomedical Materials (Bristol), 2017, 12, 025005.	1.7	29
44	Fabrication of Polyethylene Glycolâ€Based Hydrogel Microspheres Through Electrospraying. Macromolecular Materials and Engineering, 2015, 300, 823-835.	1.7	28
45	Characterization and restoration of degenerated IVD function with an injectable, in situ gelling alginate hydrogel: An in vitro and ex vivo study. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 72, 229-240.	1.5	28
46	Decellularized extracellular matrices for tissue engineering applications. Electrospinning, 2017, 1, .	1.6	27
47	The Lipid Portion of Activated Platelet-Rich Plasma Significantly Contributes to Its Wound Healing Properties. Advances in Wound Care, 2015, 4, 100-109.	2.6	25
48	Diabetic Wounds Exhibit Decreased Ym1 and Arginase Expression with Increased Expression of IL-17 and IL-20. Advances in Wound Care, 2016, 5, 486-494.	2.6	25
49	Comparison of silk fibroin electrospun scaffolds with poloxamer and honey additives for burn wound applications. Journal of Bioactive and Compatible Polymers, 2018, 33, 79-94.	0.8	25
50	Natural and Synthetic Scaffolds. , 2011, , 41-67.		22
51	Mineralization Potential of Electrospun PDO-Hydroxyapatite-Fibrinogen Blended Scaffolds. International Journal of Biomaterials, 2012, 2012, 1-12.	1.1	21
52	Microchip-based 3D-cell culture using polymer nanofibers generated by solution blow spinning. Analytical Methods, 2017, 9, 3274-3283.	1.3	20
53	Randomized, Placeboâ€Controlled Analysis of the Knee Synovial Environment Following Plateletâ€Rich Plasma Treatment for Knee Osteoarthritis. PM and R, 2021, 13, 707-719.	0.9	20
54	Dynamic, multimodal hydrogel actuators using porphyrin-based visible light photoredox catalysis in a thermoresponsive polymer network. Chemical Science, 2020, 11, 10910-10920.	3.7	18

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55	<i>In vitro</i>characterization of MG-63 osteoblast-like cells cultured on organic-inorganic lyophilized gelatin sponges for early bone healing. Journal of Biomedical Materials Research - Part A, 2016, 104, 2011-2019.	2.1	17
56	Biomimetic sponges for regeneration of skeletal muscle following trauma. Journal of Biomedical Materials Research - Part A, 2019, 107, 92-103.	2.1	17
57	Feasibility of Electrospinning the Globular Proteins Hemoglobin and Myoglobin. Journal of Engineered Fibers and Fabrics, 2006, 1, 155892500600100.	0.5	16
58	Tissue Engineering Scaffolds Fabricated in Dissolvable 3D-Printed Molds for Patient-Specific Craniofacial Bone Regeneration. Journal of Functional Biomaterials, 2018, 9, 46.	1.8	16
59	Plateletâ€Rich Plasma Released From Polyethylene Glycol Hydrogels Exerts Beneficial Effects on Human Chondrocytes. Journal of Orthopaedic Research, 2019, 37, 2401-2410.	1.2	15
60	Lactic acid suppresses IgE-mediated mast cell function in vitro and in vivo. Cellular Immunology, 2019, 341, 103918.	1.4	13
61	Bioâ€conjugation of plateletâ€rich plasma and alginate through carbodiimide chemistry for injectable hydrogel therapies. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2020, 108, 1972-1984.	1.6	13
62	Micro-Clotting of Platelet-Rich Plasma Upon Loading in Hydrogel Microspheres Leads to Prolonged Protein Release and Slower Microsphere Degradation. Polymers, 2020, 12, 1712.	2.0	13
63	Cross-linking Electrospun Polydioxanone-Soluble Elastin Blends: Material Characterization. Journal of Engineered Fibers and Fabrics, 2008, 3, 155892500800300.	0.5	12
64	The Creation of Electrospun Nanofibers from Platelet Rich Plasma. Journal of Tissue Science & Engineering, 2011, 02, .	0.2	12
65	Preliminary Investigation and Characterization of Electrospun Polycaprolactone and Manuka Honey Scaffolds for Dermal Repair. Journal of Engineered Fibers and Fabrics, 2015, 10, 155892501501000.	0.5	12
66	Evaluation of thrombogenic potential of electrospun bioresorbable vascular graft materials: Acute monocyte tissue factor expression. Journal of Biomedical Materials Research - Part A, 2010, 92A, 1321-1328.	2.1	11
67	Developing a Mechanical and Chemical Model of Degeneration in Young Bovine Lumbar Intervertebral Disks and Reversing Loss in Mechanical Function. Journal of Spinal Disorders and Techniques, 2014, 27, E168-E175.	1.8	10
68	Mineralization and Characterization of Composite Lyophilized Gelatin Sponges Intended for Early Bone Regeneration. Bioengineering, 2014, 1, 62-84.	1.6	10
69	The fabrication of cryogel scaffolds incorporated with poloxamer 407 for potential use in the regeneration of the nucleus pulposus. Journal of Materials Science: Materials in Medicine, 2017, 28, 36.	1.7	10
70	A study on the potential of doped electrospun polystyrene fibers in arsenic filtration. Journal of Environmental Chemical Engineering, 2017, 5, 232-239.	3.3	9
71	Preliminary investigation of honeyâ€doped electrospun scaffolds to delay wound closure. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2019, 107, 2620-2628.	1.6	9
72	Electrospun Polydioxanone, Elastin, and Collagen Vascular Scaffolds: Uniaxial Cyclic Distension. Journal of Engineered Fibers and Fabrics, 2009, 4, 155892500900400.	0.5	8

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73	In Vitro Comparison of Two Different Mechanical Circulatory Support Devices Installed in Series and in Parallel. Artificial Organs, 2014, 38, n/a-n/a.	1.0	8
74	Mineralization and antibacterial potential of bioactive cryogel scaffolds <i>in vitro</i>. International Journal of Polymeric Materials and Polymeric Biomaterials, 2019, 68, 901-914.	1.8	7
75	The incorporation and controlled release ofâ€‰plateletâ€rich plasmaâ€derived biomolecules from polymeric tissue engineering scaffolds. Polymer International, 2012, 61, 1703-1709.	1.6	6
76	Using Electrospun Scaffolds to Promote Macrophage Phenotypic Modulation and Support Wound Healing. Electrospinning, 2017, 1, .	1.6	6
77	Storage stability of biodegradable polyethylene glycol microspheres. Materials Research Express, 2017, 4, 105403.	0.8	6
78	Electrospun Fibrinogen-Polydioxanone Composite Matrix: Potential for in Situ Urologic Tissue Engineering. Journal of Engineered Fibers and Fabrics, 2008, 3, 155892500800300.	0.5	5
79	Manipulating Air-Gap Electrospinning to Create Aligned Polymer Nanofiber-Wrapped Glass Microfibers for Cortical Bone Tissue Engineering. Bioengineering, 2020, 7, 165.	1.6	5
80	A preliminary study on amelogenin-loaded electrospun scaffolds. Journal of Bioactive and Compatible Polymers, 2014, 29, 32-49.	0.8	4
81	An <i>in vitro</i> analysis of injectable methacrylated alginate cryogels incorporated with PRP targeting minimally invasive treatment of bone nonunion. Biomedical Physics and Engineering Express, 2018, 4, 055001.	0.6	3
82	Electrospinning and its influence on the structure of polymeric nanofibers. , 2009, , 460-483.		2
83	Synthesis and Characterization of BaSO₄â€“CaCO₃â€“Alginate Nanocomposite Materials as Contrast Agents for Fine Vascular Imaging. ACS Materials Au, 2022, 2, 260-268.	2.6	2
84	Tri-layered Electrospinning to Mimic Native Arterial Architecture using Polycaprolactone, Elastin, and Collagen: A Preliminary Study. Journal of Visualized Experiments, 2011, , .	0.2	1
85	Scaffolds for cleft lip and cleft palate reconstruction. , 2019, , 421-435.		1
86	169: On the Road to in Situ Tissue Regeneration: A Tissue Engineered Nanofiber Fibrinogen-Polydioxanone Composite Matrix. Journal of Urology, 2007, 177, 57-57.	0.2	1
87	Multi Layered Polycaprolactone-Elastin-Collagen Small Diameter Conduits for Vascular Tissue Engineering. , 2008, , .		1
88	Inscribing the Blank Slate: The Growing Role of Modified Alginates in Tissue Engineering. Advances in Tissue Engineering & Regenerative Medicine Open Access, 2016, 1, .	0.1	1
89	Scaffolds for Use in Craniofacial Bone. Methods in Molecular Biology, 2022, 2403, 223-234.	0.4	1
90	Introduction to Entrepreneurial-minded Learning for Faculty of Foundational STEM Courses Using the KEEN Framework. , 0, , .		1

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91	A Three Layered Electrospun Matrix to Mimic Native Arterial Architecture Using Polycaprolactone, Elastin, and Collagen: A Preliminary Study. , 2010, , .		0
92	Injectable microgels development for sustained GALNS enzyme replacement therapy for Morquio syndrome type A. Molecular Genetics and Metabolism, 2017, 120, S70.	0.5	0
93	THE USE OF COMPUTATIONAL FLUID DYNAMICS IN THE OPTIMIZATION OF AIR-IMPEDANCE ELECTROSPUN STRUCTURES FOR TISSUE ENGINEERING. Journal of Mechanics in Medicine and Biology, 2018, 18, 1850009.	0.3	0
94	Quantified In Vitro Release of Interleukin-8 from Electrospun Bioresorbable Vascular Graft Materials. IFMBE Proceedings, 2009, , 359-362.	0.2	0
95	Optimizing a Three Layered Electrospun Matrix to Mimic Native Arterial Architecture: Cellular and Mechanical Analysis. , 2011, , .		0
96	Mechanical Strain of the Trilobed Transposition Flap in Artificial Skin Models: Pivotal Restraint Decreases With Decreasing Rotational Angles. Dermatologic Surgery, 2021, 47, 30-33.	0.4	0