Gary L Bowlin

List of Publications by Year
in descending order

68 papers	4,250 citations	201385 27 h-index	110170 64 g-index
68 all docs	68 docs citations	68 times ranked	6094 citing authors

#	Article	IF	Citations
1	Electrospinning of Nanofiber Fibrinogen Structures. Nano Letters, 2003, 3, 213-216.	4.5	515
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	TAILORING TISSUE ENGINEERING SCAFFOLDS USING ELECTROSTATIC PROCESSING TECHNIQUES: A STUDY OF POLY(GLYCOLIC ACID) ELECTROSPINNING. Journal of Macromolecular Science - Pure and Applied Chemistry, 2001, 38, 1231-1243.	1.2	395
4	An overview of the role of neutrophils in innate immunity, inflammation and host-biomaterial integration. International Journal of Energy Production and Management, 2017, 4, 55-68.	1.9	364
5	Characterization of Polydioxanone in Near-Field Electrospinning. Polymers, 2020, 12, 1.	2.0	276
6	Electrospinning polydioxanone for biomedical applications. Acta Biomaterialia, 2005, 1, 115-123.	4.1	267
7	Patients with COVID-19: in the dark-NETs of neutrophils. Cell Death and Differentiation, 2021, 28, 3125-3139.	5.0	189
8	Extracellular matrix regenerated: tissue engineering via electrospun biomimetic nanofibers. Polymer International, 2007, 56, 1349-1360.	1.6	187
9	Two pole air gap electrospinning: Fabrication of highly aligned, three-dimensional scaffolds for nerve reconstruction. Acta Biomaterialia, 2011, 7, 203-215.	4.1	136
10	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
11	Honey-Based Templates in Wound Healing and Tissue Engineering. Bioengineering, 2018, 5, 46.	1.6	104
12	Incorporating Platelet-Rich Plasma into Electrospun Scaffolds for Tissue Engineering Applications. Tissue Engineering - Part A, 2011, 17, 2723-2737.	1.6	94
13	An assessment of biopolymerâ€•and synthetic polymerâ€based scaffolds for bone and vascular tissue engineering. Polymer International, 2013, 62, 523-533.	1.6	85
14	Platelet-Rich Plasma in Bone Regeneration: Engineering the Delivery for Improved Clinical Efficacy. BioMed Research International, 2014, 2014, 1-15.	0.9	83
15	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
16	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
17	Thermal and Mechanical Characterization of Electrospun Blends of Poly(lactic acid) and Poly(glycolic acid). Polymer Journal, 2006, 38, 1137-1145.	1.3	52
18	Preparation of chitin nanofibril/polycaprolactone nanocomposite from a nonaqueous medium suspension. Carbohydrate Polymers, 2012, 87, 2313-2319.	5.1	51

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19	Imaging, spectroscopy, mechanical, alignment and biocompatibility studies of electrospun medical grade polyurethane (Carbothaneâ„¢ 3575A) nanofibers and composite nanofibers containing multiwalled carbon nanotubes. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 41, 189-198.	1.5	48
20	Mammary epithelial cell adhesion, viability, and infiltration on blended or coated silk fibroinâ€“collagen type I electrospun scaffolds. Materials Science and Engineering C, 2014, 43, 37-44.	3.8	44
21	Bioengineered silk scaffolds in 3D tissue modeling with focus on mammary tissues. Materials Science and Engineering C, 2016, 59, 1168-1180.	3.8	42
22	Creating small diameter bioresorbable vascular grafts through electrospinning. Journal of Materials Chemistry, 2008, 18, 260-263.	6.7	36
23	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
24	Electrospun Template Architecture and Composition Regulate Neutrophil NETosis <i>In Vitro</i> and <i>In Vivo</i><sup />. Tissue Engineering - Part A, 2017, 23, 1054-1063.	1.6	33
25	Fabrication of cell penetration enhanced poly (l-lactic acid-co-É›-caprolactone)/silk vascular scaffolds utilizing air-impedance electrospinning. Colloids and Surfaces B: Biointerfaces, 2014, 120, 47-54.	2.5	32
26	The influence of platelet-rich plasma on myogenic differentiation. Journal of Tissue Engineering and Regenerative Medicine, 2016, 10, E239-E249.	1.3	32
27	Manuka Honey Modulates the Inflammatory Behavior of a dHL-60 Neutrophil Model under the Cytotoxic Limit. International Journal of Biomaterials, 2019, 2019, 1-12.	1.1	28
28	Near-Field Electrospinning and Melt Electrowriting of Biomedical Polymersâ€"Progress and Limitations. Polymers, 2021, 13, 1097.	2.0	26
29	Design and Fabrication of a Biomimetic Vascular Scaffold Promoting in Situ Endothelialization and Tunica Media Regeneration. ACS Applied Bio Materials, 2018, 1, 833-844.	2.3	23
30	Mineralization Potential of Electrospun PDO-Hydroxyapatite-Fibrinogen Blended Scaffolds. International Journal of Biomaterials, 2012, 2012, 1-12.	1.1	21
31	Neutrophils in Biomaterial-Guided Tissue Regeneration: Matrix Reprogramming for Angiogenesis. Tissue Engineering - Part B: Reviews, 2021, 27, 95-106.	2.5	20
32	An atorvastatin calcium and poly(L-lactide-co-caprolactone) core-shell nanofiber-covered stent to treat aneurysms and promote reendothelialization. Acta Biomaterialia, 2020, 111, 102-117.	4.1	20
33	Electrospun silk fibroin/poly (L-lactide-Îµ-caplacton) graft with platelet-rich growth factor for inducing smooth muscle cell growth and infiltration. International Journal of Energy Production and Management, 2016, 3, 239-245.	1.9	19
34	Imaging, spectroscopic, mechanical and biocompatibility studies of electrospun TecoflexÂ® EG 80A nanofibers and composites thereof containing multiwalled carbon nanotubes. Applied Surface Science, 2014, 321, 205-213.	3.1	17
35	<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
36	Feasibility of Electrospinning the Globular Proteins Hemoglobin and Myoglobin. Journal of Engineered Fibers and Fabrics, 2006, 1, 155892500600100.	0.5	16

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37	Diblock Poly(ester)-Poly(ester-ether) Copolymers: I. Synthesis, Thermal Properties, and Degradation Kinetics. Industrial & Engineering Chemistry Research, 2012, 51, 12031-12040.	1.8	14
38	Electrospun gelatinâ€“arabinoxylan ferulate composite fibers for diabetic chronic wound dressing application. International Journal of Polymeric Materials and Polymeric Biomaterials, 2019, 68, 660-668.	1.8	14
39	Evaluation of biological activity of bone morphogenetic proteins on exposure to commonly used electrospinning solvents. Journal of Bioactive and Compatible Polymers, 2011, 26, 578-589.	0.8	13
40	Localized Delivery of Cl-Amidine From Electrospun Polydioxanone Templates to Regulate Acute Neutrophil NETosis: A Preliminary Evaluation of the PAD4 Inhibitor for Tissue Engineering. Frontiers in Pharmacology, 2018, 9, 289.	1.6	13
41	Surface Area to Volume Ratio of Electrospun Polydioxanone Templates Regulates the Adsorption of Soluble Proteins from Human Serum. Bioengineering, 2019, 6, 78.	1.6	13
42	Biomedical Nanoscience: Electrospinning Basic Concepts, Applications, and Classroom Demonstration. Materials Research Society Symposia Proceedings, 2004, 827, 171.	0.1	12
43	Fabrication, characterization, and <i>in vitro</i> evaluation of silverâ€containing arabinoxylan foams as antimicrobial wound dressing. Journal of Biomedical Materials Research - Part A, 2016, 104, 2456-2465.	2.1	12
44	Mineralization and Characterization of Composite Lyophilized Gelatin Sponges Intended for Early Bone Regeneration. Bioengineering, 2014, 1, 62-84.	1.6	10
45	Manuka Honey Reduces NETosis on an Electrospun Template Within a Therapeutic Window. Polymers, 2020, 12, 1430.	2.0	10
46	Manuka honey modulates the release profile of a dHL-60 neutrophil model under anti-inflammatory stimulation. Journal of Tissue Viability, 2020, 29, 91-99.	0.9	10
47	Compression of Multilayered Composite Electrospun Scaffolds: A Novel Strategy to Rapidly Enhance Mechanical Properties and Three Dimensionality of Bone Scaffolds. Advances in Materials Science and Engineering, 2013, 2013, 1-9.	1.0	9
48	Electrospinning of PEGylated polyamidoamine dendrimer fibers. Materials Science and Engineering C, 2015, 56, 189-194.	3.8	9
49	Neutrophil Extracellular Traps: Inflammation and Biomaterial Preconditioning for Tissue Engineering. Tissue Engineering - Part B: Reviews, 2022, 28, 437-450.	2.5	9
50	Electrospun Polydioxanone, Elastin, and Collagen Vascular Scaffolds: Uniaxial Cyclic Distension. Journal of Engineered Fibers and Fabrics, 2009, 4, 155892500900400.	0.5	8
51	Breast epithelial cell infiltration in enhanced electrospun silk scaffolds. Journal of Tissue Engineering and Regenerative Medicine, 2016, 10, E121-E131.	1.3	7
52	The Effect of Manuka Honey on dHL-60 Cytokine, Chemokine, and Matrix-Degrading Enzyme Release under Inflammatory Conditions. Med One, 2019, 4, .	1.5	7
53	Determination of the Prime Electrostatic Endothelial Cell Transplantation Procedure for e-PTFE Vascular Prostheses. Cell Transplantation, 2000, 9, 337-348.	1.2	6
54	Immune Response Testing of Electrospun Polymers: An Important Consideration in the Evaluation of Biomaterials. Journal of Engineered Fibers and Fabrics, 2007, 2, 155892500700200.	0.5	6

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55	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
56	Poly(ester-ether)s: I. Investigation of the Properties of Blend Films of Polydioxanone and Poly(methyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.8	6
57	Fabrication and characterization of air-impedance electrospun polydioxanone templates. Electrospinning, 2015, 1, .	1.6	6
58	37/67â€laminin receptor facilitates neural crest cell migration during enteric nervous system development. FASEB Journal, 2020, 34, 10931-10947.	0.2	6
59	Human neutrophil FcÎ³RIIIb regulates neutrophil extracellular trap release in response to electrospun polydioxanone biomaterials. Acta Biomaterialia, 2021, 130, 281-290.	4.1	6
60	A Novel Electrospun Dendrimer-Gelatin Hybrid Nanofiber Scaffold for Tissue Regeneration and Drug Delivery. Materials Research Society Symposia Proceedings, 2008, 1094, 1.	0.1	4
61	A preliminary study on amelogenin-loaded electrospun scaffolds. Journal of Bioactive and Compatible Polymers, 2014, 29, 32-49.	0.8	4
62	Electrospun Polydioxanone Loaded With Chloroquine Modulates Template-Induced NET Release and Inflammatory Responses From Human Neutrophils. Frontiers in Bioengineering and Biotechnology, 2021, 9, 652055.	2.0	4
63	Mechanical characterization and neutrophil NETs response of a novel hybrid geometry polydioxanone near-field electrospun scaffold. Biomedical Materials (Bristol), 2021, 16, 065002.	1.7	4
64	Feasibility of Electrospun Polydioxanone â€" Monocyte Chemotactic Protein-1 (MCP-1) Hybrid Scaffolds as Potential Cellular Homing Devices. Journal of Engineered Fibers and Fabrics, 2010, 5, 155892501000500.	0.5	3
65	Modeling early stage bone regeneration with biomimetic electrospun fibrinogen nanofibers and adipose-derived mesenchymal stem cells. Electrospinning, 2016, 1, .	1.6	3
66	Near-field electrospinning of polydioxanone small diameter vascular graft scaffolds. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 130, 105207.	1.5	3
67	Electrospun Polydioxanone Templates Loaded with Chloroquine Modulate Template-Induced NET Release and the Inflammatory Response. Proceedings (mdpi), 2020, 78, .	0.2	0
68	Methods for Quantifying Neutrophil Extracellular Traps on Biomaterials. Methods in Molecular Biology, 2022, 2394, 727-742.	0.4	0