Gary L Bowlin

List of Publications by Citations

68 papers	3,160 citations	24 h-index	56 g-index
68 ext. papers	3,577 ext. citations	4.7 avg, IF	5.36 L-index

#	Paper	IF	Citations
68	Electrospinning of Nanofiber Fibrinogen Structures. *Nano Letters*, **2003**, 3, 213-216	11.5	474
67	The Use of Natural Polymers in Tissue Engineering: A Focus on Electrospun Extracellular Matrix Analogues. *Polymers*, **2010**, 2, 522-553	4.5	372
66	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	2.2	336
65	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	5.3	238
64	Electrospinning polydioxanone for biomedical applications. *Acta Biomaterialia*, **2005**, 1, 115-23	10.8	225
63	Extracellular matrix regenerated: tissue engineering via electrospun biomimetic nanofibers. *Polymer International*, **2007**, 56, 1349-1360	3.3	164
62	Two pole air gap electrospinning: Fabrication of highly aligned, three-dimensional scaffolds for nerve reconstruction. *Acta Biomaterialia*, **2011**, 7, 203-15	10.8	124
61	Suture-reinforced electrospun polydioxanone-elastin small-diameter tubes for use in vascular tissue engineering: a feasibility study. *Acta Biomaterialia*, **2008**, 4, 58-66	10.8	106
60	Incorporating platelet-rich plasma into electrospun scaffolds for tissue engineering applications. *Tissue Engineering - Part A*, **2011**, 17, 2723-37	3.9	78
59	Honey-Based Templates in Wound Healing and Tissue Engineering. *Bioengineering*, **2018**, 5,	5.3	68
58	An assessment of biopolymer- and synthetic polymer-based scaffolds for bone and vascular tissue engineering. *Polymer International*, **2013**, 62, 523-533	3.3	67
57	Platelet-rich plasma in bone regeneration: engineering the delivery for improved clinical efficacy. *BioMed Research International*, **2014**, 2014, 392398	3	61
56	Patients with COVID-19: in the dark-NETs of neutrophils. *Cell Death and Differentiation*, **2021**, 28, 3125-3139	12.7	61
55	A preliminary study on the potential of manuka honey and platelet-rich plasma in wound healing. *International Journal of Biomaterials*, **2012**, 2012, 313781	3.2	56
54	Electrospun Collagen: A Tissue Engineering Scaffold with Unique Functional Properties in a Wide Variety of Applications. *Journal of Nanomaterials*, **2011**, 2011, 1-15	3.2	52
53	Preparation of chitin nanofibril/polycaprolactone nanocomposite from a nonaqueous medium suspension. *Carbohydrate Polymers*, **2012**, 87, 2313-2319	10.3	45
52	Thermal and Mechanical Characterization of Electrospun Blends of Poly(lactic acid) and Poly(glycolic acid). *Polymer Journal*, **2006**, 38, 1137-1145	2.7	45

51	Imaging, spectroscopy, mechanical, alignment and biocompatibility studies of electrospun medical grade polyurethane (Carbothane□3575A) nanofibers and composite nanofibers containing multiwalled carbon nanotubes. *Journal of the Mechanical Behavior of Biomedical Materials*, **2015**, 41, 189-98	4.1	41
50	Mammary epithelial cell adhesion, viability, and infiltration on blended or coated silk fibroin-collagen type I electrospun scaffolds. *Materials Science and Engineering C*, **2014**, 43, 37-44	8.3	38
49	Characterization of Polydioxanone in Near-Field Electrospinning. *Polymers*, **2019**, 12,	4.5	38
48	Creating small diameter bioresorbable vascular grafts through electrospinning. *Journal of Materials Chemistry*, **2008**, 18, 260-263		33
47	A preliminary evaluation of lyophilized gelatin sponges, enhanced with platelet-rich plasma, hydroxyapatite and chitin whiskers for bone regeneration. *Cells*, **2013**, 2, 244-65	7.9	31
46	Fabrication of cell penetration enhanced poly (l-lactic acid-co-e-caprolactone)/silk vascular scaffolds utilizing air-impedance electrospinning. *Colloids and Surfaces B: Biointerfaces*, **2014**, 120, 47-54	6	29
45	Bioengineered silk scaffolds in 3D tissue modeling with focus on mammary tissues. *Materials Science and Engineering C*, **2016**, 59, 1168-1180	8.3	28
44	The influence of platelet-rich plasma on myogenic differentiation. *Journal of Tissue Engineering and Regenerative Medicine*, **2016**, 10, E239-49	4.4	24
43	Electrospun Template Architecture and Composition Regulate Neutrophil NETosis In Vitro and In Vivo. *Tissue Engineering - Part A*, **2017**, 23, 1054-1063	3.9	23
42	Mineralization Potential of Electrospun PDO-Hydroxyapatite-Fibrinogen Blended Scaffolds. *International Journal of Biomaterials*, **2012**, 2012, 159484	3.2	19
41	Electrospun silk fibroin/poly (L-lactide-□caplacton) graft with platelet-rich growth factor for inducing smooth muscle cell growth and infiltration. *International Journal of Energy Production and Management*, **2016**, 3, 239-45	5.3	17
40	Imaging, Spectroscopic, Mechanical and Biocompatibility Studies of Electrospun Tecoflex EG 80A Nanofibers and Composites Thereof Containing Multiwalled Carbon Nanotubes. *Applied Surface Science*, **2014**, 321, 205-213	6.7	15
39	Feasibility of Electrospinning the Globular Proteins Hemoglobin and Myoglobin. *Journal of Engineered Fibers and Fabrics*, **2006**, 1, 155892500600100	0.9	15
38	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	10.8	14
37	Manuka Honey Modulates the Inflammatory Behavior of a dHL-60 Neutrophil Model under the Cytotoxic Limit. *International Journal of Biomaterials*, **2019**, 2019, 6132581	3.2	13
36	Diblock Poly(ester)-Poly(ester-ether) Copolymers: I. Synthesis, Thermal Properties, and Degradation Kinetics. *Industrial & Engineering Chemistry Research*, **2012**, 51, 12031-12040	3.9	13
35	Neutrophils in Biomaterial-Guided Tissue Regeneration: Matrix Reprogramming for Angiogenesis. *Tissue Engineering - Part B: Reviews*, **2021**, 27, 95-106	7.9	13
34	Design and Fabrication of a Biomimetic Vascular Scaffold Promoting in Situ Endothelialization and Tunica Media Regeneration.. *ACS Applied Bio Materials*, **2018**, 1, 833-844	4.1	13

33	Biomedical Nanoscience: Electrospinning Basic Concepts, Applications, and Classroom Demonstration. *Materials Research Society Symposia Proceedings*, **2004**, 827, 171		12
32	In vitro 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, 2011-9	5.4	12
31	Near-Field Electrospinning and Melt Electrowriting of Biomedical Polymers-Progress and Limitations. *Polymers*, **2021**, 13,	4.5	11
30	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	2	10
29	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	5.6	9
28	Electrospun gelatin–arabinoxylan ferulate composite fibers for diabetic chronic wound dressing application. *International Journal of Polymeric Materials and Polymeric Biomaterials*, **2019**, 68, 660-668	3	9
27	Mineralization and Characterization of Composite Lyophilized Gelatin Sponges Intended for Early Bone Regeneration. *Bioengineering*, **2014**, 1, 62-84	5.3	9
26	Fabrication, characterization, and in vitro evaluation of silver-containing arabinoxylan foams as antimicrobial wound dressing. *Journal of Biomedical Materials Research - Part A*, **2016**, 104, 2456-65	5.4	9
25	Electrospinning of PEGylated polyamidoamine dendrimer fibers. *Materials Science and Engineering C*, **2015**, 56, 189-94	8.3	8
24	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	1.5	7
23	Manuka Honey Reduces NETosis on an Electrospun Template Within a Therapeutic Window. *Polymers*, **2020**, 12,	4.5	7
22	The Effect of Manuka Honey on dHL-60 Cytokine, Chemokine, and Matrix-Degrading Enzyme Release under Inflammatory Conditions. *Med One*, **2019**, 4,	1.6	6
21	Surface Area to Volume Ratio of Electrospun Polydioxanone Templates Regulates the Adsorption of Soluble Proteins from Human Serum. *Bioengineering*, **2019**, 6,	5.3	5
20	Breast epithelial cell infiltration in enhanced electrospun silk scaffolds. *Journal of Tissue Engineering and Regenerative Medicine*, **2016**, 10, E121-31	4.4	5
19	Fabrication and characterization of air-impedance electrospun polydioxanone templates. *Electrospinning*, **2015**, 1,		5
18	Poly(ester-ether)s: I. Investigation of the Properties of Blend Films of Polydioxanone and Poly(methyl dioxanone). *International Journal of Polymeric Materials and Polymeric Biomaterials*, **2014**, 63, 527-537	3	5
17	Immune Response Testing of Electrospun Polymers: An Important Consideration in the Evaluation of Biomaterials. *Journal of Engineered Fibers and Fabrics*, **2007**, 2, 155892500700200	0.9	5
16	Determination of the prime electrostatic endothelial cell transplantation procedure for e-PTFE vascular prostheses. *Cell Transplantation*, **2000**, 9, 337-48	4	5

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15	Manuka honey modulates the release profile of a dHL-60 neutrophil model under anti-inflammatory stimulation. *Journal of Tissue Viability*, **2020**, 29, 91-99	3.2	5
14	A preliminary study on amelogenin-loaded electrospun scaffolds. *Journal of Bioactive and Compatible Polymers*, **2014**, 29, 32-49	2	4
13	The incorporation and controlled release of platelet-rich plasma-derived biomolecules from polymeric tissue engineering scaffolds. *Polymer International*, **2012**, 61, 1703-1709	3.3	4
12	Electrospun Polydioxanone, Elastin, and Collagen Vascular Scaffolds: Uniaxial Cyclic Distension. *Journal of Engineered Fibers and Fabrics*, **2009**, 4, 155892500900400	0.9	3
11	A Novel Electrospun Dendrimer-Gelatin Hybrid Nanofiber Scaffold for Tissue Regeneration and Drug Delivery. *Materials Research Society Symposia Proceedings*, **2008**, 1094, 1		3
10	37/67-laminin receptor facilitates neural crest cell migration during enteric nervous system development. *FASEB Journal*, **2020**, 34, 10931-10947	0.9	3
9	Electrospun Polydioxanone Loaded With Chloroquine Modulates Template-Induced NET Release and Inflammatory Responses From Human Neutrophils. *Frontiers in Bioengineering and Biotechnology*, **2021**, 9, 652055	5.8	3
8	Modeling early stage bone regeneration with biomimetic electrospun fibrinogen nanofibers and adipose-derived mesenchymal stem cells. *Electrospinning*, **2016**, 1,		3
7	Neutrophil Extracellular Traps: Inflammation and Biomaterial Preconditioning for Tissue Engineering. *Tissue Engineering - Part B: Reviews*, **2021**,	7.9	2
6	Feasibility of Electrospun Polydioxanone Monocyte Chemotactic Protein-1 (MCP-1) Hybrid Scaffolds as Potential Cellular Homing Devices. *Journal of Engineered Fibers and Fabrics*, **2010**, 5, 155892501000500	0.9	1
5	Mechanical characterization and neutrophil NETs response of a novel hybrid geometry polydioxanone near-field electrospun scaffold. *Biomedical Materials (Bristol)*, **2021**, 16,	3.5	1
4	Human neutrophil FcRIIIb regulates neutrophil extracellular trap release in response to electrospun polydioxanone biomaterials. *Acta Biomaterialia*, **2021**, 130, 281-290	10.8	0
3	Near-field electrospinning of polydioxanone small diameter vascular graft scaffolds.. *Journal of the Mechanical Behavior of Biomedical Materials*, **2022**, 130, 105207	4.1	0
2	Methods for Quantifying Neutrophil Extracellular Traps on Biomaterials.. *Methods in Molecular Biology*, **2022**, 2394, 727-742	1.4	
1	Electrospun Polydioxanone Templates Loaded with Chloroquine Modulate Template-Induced NET Release and the Inflammatory Response. *Proceedings (mdpi)*, **2021**, 78, 10	0.3	