Lisa E. Freed

List of Publications by Year
in descending order

65 papers	10,529 citations	66315 42 h-index	168321 53 g-index
68 all docs	68 docs citations	68 times ranked	8707 citing authors

#	Article	IF	Citations
1	Biodegradable Polymer Scaffolds for Tissue Engineering. Nature Biotechnology, 1994, 12, 689-693.	9.4	921
2	Functional assembly of engineered myocardium by electrical stimulation of cardiac myocytes cultured on scaffolds. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 18129-18134.	3.3	831
3	Accordion-like honeycombs for tissue engineering of cardiac anisotropy. Nature Materials, 2008, 7, 1003-1010.	13.3	760
4	A biomimetic three-dimensional woven composite scaffold for functional tissue engineering of cartilage. Nature Materials, 2007, 6, 162-167.	13.3	672
5	Dynamic Cell Seeding of Polymer Scaffolds for Cartilage Tissue Engineering. Biotechnology Progress, 1998, 14, 193-202.	1.3	490
6	Cardiac tissue engineering: Cell seeding, cultivation parameters, and tissue construct characterization. Biotechnology and Bioengineering, 1999, 64, 580-589.	1.7	473
7	Wetting of poly(l-lactic acid) and poly(dl-lactic-co-glycolic acid) foams for tissue culture. Biomaterials, 1994, 15, 55-58.	5.7	385
8	Perfusion Improves Tissue Architecture of Engineered Cardiac Muscle. Tissue Engineering, 2002, 8, 175-188.	4.9	308
9	Medium perfusion enables engineering of compact and contractile cardiac tissue. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 286, H507-H516.	1.5	296
10	Biomimetic Approach to Cardiac Tissue Engineering: Oxygen Carriers and Channeled Scaffolds. Tissue Engineering, 2006, 12, 2077-2091.	4.9	296
11	Tissue-engineered composites for the repair of large osteochondral defects. Arthritis and Rheumatism, 2002, 46, 2524-2534.	6.7	295
12	High-density seeding of myocyte cells for cardiac tissue engineering. Biotechnology and Bioengineering, 2003, 82, 403-414.	1.7	268
13	Advanced Tools for Tissue Engineering: Scaffolds, Bioreactors, and Signaling. Tissue Engineering, 2006, 12, 3285-3305.	4.9	255
14	Culture of organized cell communities. Advanced Drug Delivery Reviews, 1998, 33, 15-30.	6.6	236
15	Bioreactors mediate the effectiveness of tissue engineering scaffolds. FASEB Journal, 2002, 16, 1691-1694.	0.2	207
16	Gas exchange is essential for bioreactor cultivation of tissue engineered cartilage. , 1999, 63, 197-205.		202
17	Differential Effects of Growth Factors on Tissue-Engineered Cartilage. Tissue Engineering, 2002, 8, 73-84.	4.9	190
18	Advanced Material Strategies for Tissue Engineering Scaffolds. Advanced Materials, 2009, 21, 3410-3418.	11.1	187

#	Article	IF	Citations
19	Microgravity tissue engineering. In Vitro Cellular and Developmental Biology - Animal, 1997, 33, 381-385.	0.7	181
20	Bone and cartilage tissue constructs grown using human bone marrow stromal cells, silk scaffolds and rotating bioreactors. Biomaterials, 2006, 27, 6138-6149.	5.7	171
21	Preâ€treatment of synthetic elastomeric scaffolds by cardiac fibroblasts improves engineered heart tissue. Journal of Biomedical Materials Research - Part A, 2008, 86A, 713-724.	2.1	166
22	Method for Quantitative Analysis of Glycosaminoglycan Distribution in Cultured Natural and Engineered Cartilage. Annals of Biomedical Engineering, 1999, 27, 656-662.	1.3	151
23	In vitro differentiation of chick embryo bone marrow stromal cells into cartilaginous and bone-like tissues. Journal of Orthopaedic Research, 1998, 16, 181-189.	1.2	142
24	Selective differentiation of mammalian bone marrow stromal cells cultured on three-dimensional polymer foams. Journal of Biomedical Materials Research Part B, 2001, 55, 229-235.	3.0	139
25	Tissue Engineering: Biomedical Applications. Tissue Engineering, 1995, 1, 151-161.	4.9	135
26	Frontiers in Tissue Engineering. Clinical Orthopaedics and Related Research, 1999, 367, S46-S58.	0.7	131
27	Effects of oxygen on engineered cardiac muscle. Biotechnology and Bioengineering, 2002, 78, 617-625.	1.7	130
28	Mechanical Properties and Remodeling of Hybrid Cardiac Constructs Made from Heart Cells, Fibrin, and Biodegradable, Elastomeric Knitted Fabric. Tissue Engineering, 2005, 11, 1122-1132.	4.9	120
29	In vitro generation of mechanically functional cartilage grafts based on adult human stem cells and 3D-woven poly(É›-caprolactone) scaffolds. Biomaterials, 2010, 31, 2193-2200.	5.7	107
30	Cultivation in Rotating Bioreactors Promotes Maintenance of Cardiac Myocyte Electrophysiology and Molecular Properties. Tissue Engineering, 2003, 9, 1243-1253.	4.9	96
31	TISSUE ENGINEERING BIOREACTORS. , 2000, , 143-156.		95
32	3D Structural Patterns in Scalable, Elastomeric Scaffolds Guide Engineered Tissue Architecture. Advanced Materials, 2013, 25, 4459-4465.	11.1	93
33	Gene Transfer of a Human Insulin-Like Growth Factor I cDNA Enhances Tissue Engineering of Cartilage. Human Gene Therapy, 2002, 13, 1621-1630.	1.4	86
34	Chondrogenesis and Mineralization During<i>In Vitro</i>Culture of Human Mesenchymal Stem Cells on Three-Dimensional Woven Scaffolds. Tissue Engineering - Part A, 2010, 16, 3709-3718.	1.6	79
35	The significance of pore microarchitecture in a multi-layered elastomeric scaffold for contractile cardiac muscle constructs. Biomaterials, 2011, 32, 1856-1864.	5.7	74
36	Combined Technologies for Microfabricating Elastomeric Cardiac Tissue Engineering Scaffolds. Macromolecular Bioscience, 2010, 10, 1330-1337.	2.1	66

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37	Three-Dimensional Elastomeric Scaffolds Designed with Cardiac-Mimetic Structural and Mechanical Features. Tissue Engineering - Part A, 2013, 19, 793-807.	1.6	59
38	Effects of chondrogenic and osteogenic regulatory factors on composite constructs grown using human mesenchymal stem cells, silk scaffolds and bioreactors. Journal of the Royal Society Interface, 2008, 5, 929-939.	1.5	57
39	A biodegradable microvessel scaffold as a framework to enable vascular support of engineered tissues. Biomaterials, 2013, 34, 10007-10015.	5.7	57
40	Microgravity Studies of Cells and Tissues. Annals of the New York Academy of Sciences, 2002, 974, 504-517.	1.8	51
41	Insulin-like Growth Factor-I and Slow, Bi-directional Perfusion Enhance the Formation of Tissue-Engineered Cardiac Grafts. Tissue Engineering - Part A, 2009, 15, 645-653.	1.6	48
42	Spaceflight bioreactor studies of cells and tissues. Advances in Space Biology and Medicine, 2002, 8, 177-195.	0.5	45
43	Co-culture induces alignment in engineered cardiac constructs via MMP-2 expression. Biochemical and Biophysical Research Communications, 2008, 373, 360-365.	1.0	43
44	Biomimetic scaffold combined with electrical stimulation and growth factor promotes tissue engineered cardiac development. Experimental Cell Research, 2014, 321, 297-306.	1.2	39
45	Development and remodeling of engineered cartilage-explant composites in vitro and in vivo. Osteoarthritis and Cartilage, 2005, 13, 896-905.	0.6	35
46	Multiâ€Material Tissue Engineering Scaffold with Hierarchical Pore Architecture. Advanced Functional Materials, 2016, 26, 5873-5883.	7.8	33
47	Scalable Units for Building Cardiac Tissue. Advanced Materials, 2014, 26, 7202-7208.	11.1	31
48	Effects of Regulatory Factors on Engineered Cardiac Tissue <i>In Vitro</i>. Tissue Engineering, 2007, 13, 2709-2719.	4.9	26
49	Chondrogenic, hypertrophic, and osteochondral differentiation of human mesenchymal stem cells on threeâ€dimensionally woven scaffolds. Journal of Tissue Engineering and Regenerative Medicine, 2019, 13, 1453-1465.	1.3	21
50	A heat-stable microparticle platform for oral micronutrient delivery. Science Translational Medicine, 2019, 11, .	5.8	20
51	Selective differentiation of mammalian bone marrow stromal cells cultured on three-dimensional polymer foams. , 2001, 55, 229.		20
52	Poly(Limonene Thioether) Scaffold for Tissue Engineering. Advanced Healthcare Materials, 2016, 5, 813-821.	3.9	17
53	Neural interfacing architecture enables enhanced motor control and residual limb functionality postamputation. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	13
54	Flexible Dry Electrodes for EMG Acquisition within Lower Extremity Prosthetic Sockets. , 2020, 2020, 1088-1095.		12

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55	Mechanical Forces And Growth Factors Utilized In Tissue Engineering. , 1998, , 61-82.		11
56	Engineering Functional Tissues. , 2007, , 137-153.		10
57	Acquisition of Surface EMG Using Flexible and Low-Profile Electrodes for Lower Extremity Neuroprosthetic Control. IEEE Transactions on Medical Robotics and Bionics, 2021, 3, 563-572.	2.1	10
58	Engineering Functional Tissues. , 2014, , 237-259.		4
59	Culture Environments. , 2002, , 97-111.		4
60	Engineering Functional Cartilage and Cardiac Tissue: In vitro Culture Parameters. , 2003, , 360-376.		2
61	Microgravity studies on cells and tissues: From Mir to the ISS. , 1999, , .		1
62	Encapsulated Pheochromocytoma Cells Secrete Potent Noncatecholamine Factors. Tissue Engineering - Part A, 2009, 15, 1719-1728.	1.6	0
63	Scaffolds: 3D Structural Patterns in Scalable, Elastomeric Scaffolds Guide Engineered Tissue Architecture (Adv. Mater. 32/2013). Advanced Materials, 2013, 25, 4378-4378.	11.1	0
64	Tissue: Scalable Units for Building Cardiac Tissue (Adv. Mater. 42/2014). Advanced Materials, 2014, 26, 7134-7134.	11.1	0
65	Biomimetic Approach to Cardiac Tissue Engineering: Oxygen Carriers and Channeled Scaffolds. Tissue Engineering, 2006, .	4.9	0