Gordana Vunjak-Novakovic

List of Publications by Year
in descending order

413 papers	42,945 citations	1027 117 h-index	3171 192 g-index
435 all docs	435 docs citations	435 times ranked	34464 citing authors

#	Article	IF	Citations
1	Cross-Circulation for Extracorporeal Liver Support in a Swine Model. ASAIO Journal, 2022, 68, 561-570.	0.9	3
2	A framework for developing sex-specific engineered heart models. Nature Reviews Materials, 2022, 7, 295-313.	23.3	22
3	RNA and Protein Delivery by Cellâ€Secreted and Bioengineered Extracellular Vesicles. Advanced Healthcare Materials, 2022, 11, e2101557.	3.9	5
4	Bioengineering Human Cartilageâ€“Bone Tissues for Modeling of Osteoarthritis. Stem Cells and Development, 2022, 31, 399-405.	1.1	3
5	Imaging-guided bioreactor for de-epithelialization and long-term cultivation of <i>ex vivo</i> rat trachea. Lab on A Chip, 2022, 22, 1018-1031.	3.1	6
6	Emerging Trajectories for Next Generation Tissue Engineers. ACS Biomaterials Science and Engineering, 2022, 8, 4598-4604.	2.6	5
7	A Micropatterning Assay for Measuring Cell Chirality. Journal of Visualized Experiments, 2022, , .	0.2	0
8	Progress in multicellular human cardiac organoids for clinical applications. Cell Stem Cell, 2022, 29, 503-514.	5.2	39
9	Imaging-Guided Bioreactor for Generating Bioengineered Airway Tissue. Journal of Visualized Experiments, 2022, , .	0.2	0
10	Changes in extracellular matrix in failing human non-ischemic and ischemic hearts with mechanical unloading. Journal of Molecular and Cellular Cardiology, 2022, 166, 137-151.	0.9	4
11	Engineering complexity in human tissue models of cancer. Advanced Drug Delivery Reviews, 2022, 184, 114181.	6.6	10
12	Homogeneous Distribution of Exogenous Cells onto De-epithelialized Rat Trachea via Instillation of Cell-Loaded Hydrogel. ACS Biomaterials Science and Engineering, 2022, 8, 82-88.	2.6	5
13	Engineering and Characterization of an Optogenetic Model of the Human Neuromuscular Junction. Journal of Visualized Experiments, 2022, , .	0.2	0
14	Opportunities and challenges in cardiac tissue engineering from an analysis of two decades of advances. Nature Biomedical Engineering, 2022, 6, 327-338.	11.6	25
15	A multi-organ chip with matured tissue niches linked by vascular flow. Nature Biomedical Engineering, 2022, 6, 351-371.	11.6	162
16	A guide to the organ-on-a-chip. Nature Reviews Methods Primers, 2022, 2, .	11.8	247
17	Pathological remodeling of distal lung matrix in end-stage cystic fibrosis patients. Journal of Cystic Fibrosis, 2022, 21, 1027-1035.	0.3	4
18	Extracellular Vesicles in Cardiac Regeneration: Potential Applications for Tissues-on-a-Chip. Trends in Biotechnology, 2021, 39, 755-773.	4.9	18

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19	Gut bioengineering strategies for regenerative medicine. American Journal of Physiology - Renal Physiology, 2021, 320, G1-G11.	1.6	4
20	Cell typeâ€“specific microRNA therapies for myocardial infarction. Science Translational Medicine, 2021, 13, .	5.8	23
21	Engineered Vascularized Flaps, Composed of Polymeric Soft Tissue and Live Bone, Repair Complex Tibial Defects. Advanced Functional Materials, 2021, 31, 2008687.	7.8	19
22	Engineered models of tumor metastasis with immune cell contributions. IScience, 2021, 24, 102179.	1.9	13
23	Sustained Delivery of SB-431542, a Type I Transforming Growth Factor Beta-1 Receptor Inhibitor, to Prevent Arthrofibrosis. Tissue Engineering - Part A, 2021, 27, 1411-1421.	1.6	9
24	Emerging technologies provide insights on cancer extracellular matrix biology and therapeutics. IScience, 2021, 24, 102475.	1.9	9
25	Machine Learning Techniques to Classify Healthy and Diseased Cardiomyocytes by Contractility Profile. ACS Biomaterials Science and Engineering, 2021, 7, 3043-3052.	2.6	13
26	Harnessing organs-on-a-chip to model tissue regeneration. Cell Stem Cell, 2021, 28, 993-1015.	5.2	36
27	Human Serum Enhances Biomimicry of Engineered Tissue Models of Bone and Cancer. Frontiers in Bioengineering and Biotechnology, 2021, 9, 658472.	2.0	5
28	Lessons from Biology: Engineering Design Considerations for Modeling Human Hematopoiesis. Current Stem Cell Reports, 2021, 7, 174-184.	0.7	3
29	Bioengineered optogenetic model of human neuromuscular junction. Biomaterials, 2021, 276, 121033.	5.7	20
30	Organs-on-a-chip models for biological research. Cell, 2021, 184, 4597-4611.	13.5	96
31	Non-destructive vacuum-assisted measurement of lung elastic modulus. Acta Biomaterialia, 2021, 131, 370-380.	4.1	5
32	Horizontal transfer of the stemness-related markers EZH2 and GLI1 by neuroblastoma-derived extracellular vesicles in stromal cells. Translational Research, 2021, 237, 82-97.	2.2	8
33	Engineered Vascularized Flaps, Composed of Polymeric Soft Tissue and Live Bone, Repair Complex Tibial Defects (Adv. Funct. Mater. 44/2021). Advanced Functional Materials, 2021, 31, 2170325.	7.8	0
34	milliPillar: A Platform for the Generation and Real-Time Assessment of Human Engineered Cardiac Tissues. ACS Biomaterials Science and Engineering, 2021, 7, 5215-5229.	2.6	14
35	Tissue-Engineered Bone Tumor as a Reproducible Human <i>in Vitro</i> Model for Studies of Anticancer Drugs. Toxicological Sciences, 2020, 173, 65-76.	1.4	8
36	Heart regeneration in mouse and human: a bioengineering perspective. Current Opinion in Physiology, 2020, 14, 56-63.	0.9	1

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37	In vitro models of neuromuscular junctions and their potential for novel drug discovery and development. Expert Opinion on Drug Discovery, 2020, 15, 307-317.	2.5	12
38	Multiday maintenance of extracorporeal lungs using cross-circulation with conscious swine. Journal of Thoracic and Cardiovascular Surgery, 2020, 159, 1640-1653.e18.	0.4	38
39	Tissue engineered autologous cartilage-bone grafts for temporomandibular joint regeneration. Science Translational Medicine, 2020, 12, .	5.8	37
40	Xenogeneic cross-circulation for extracorporeal recovery of injured human lungs. Nature Medicine, 2020, 26, 1102-1113.	15.2	56
41	Integrated human organ-on-a-chip model for predictive studies of anti-tumor drug efficacy and cardiac safety. Lab on A Chip, 2020, 20, 4357-4372.	3.1	69
42	Dynamic Hydrogels for Investigating Vascularization. Cell Stem Cell, 2020, 27, 697-698.	5.2	4
43	Bioengineering of Pulmonary Epithelium With Preservation of the Vascular Niche. Frontiers in Bioengineering and Biotechnology, 2020, 8, 269.	2.0	6
44	From Arteries to Capillaries: Approaches to Engineering Human Vasculature. Advanced Functional Materials, 2020, 30, 1910811.	7.8	74
45	Pulsed electromagnetic fields promote repair of focal articular cartilage defects with engineered osteochondral constructs. Biotechnology and Bioengineering, 2020, 117, 1584-1596.	1.7	16
46	Embryonic stem cells as a cell source for tissue engineering. , 2020, , 467-490.		8
47	Cardiac tissue engineering. , 2020, , 593-616.		2
48	The Cellular and Physiological Basis for Lung Repair and Regeneration: Past, Present, and Future. Cell Stem Cell, 2020, 26, 482-502.	5.2	230
49	Bioreactors in Regenerative Medicine. , 2019, , 787-803.		2
50	Engineering of human cardiac muscle electromechanically matured to an adult-like phenotype. Nature Protocols, 2019, 14, 2781-2817.	5.5	101
51	A Platform for Generation of Chamber-Specific Cardiac Tissues and Disease Modeling. Cell, 2019, 176, 913-927.e18.	13.5	398
52	Regeneration of severely damaged lungs using an interventional cross-circulation platform. Nature Communications, 2019, 10, 1985.	5.8	42
53	Tissue engineered models of healthy and malignant human bone marrow. Advanced Drug Delivery Reviews, 2019, 140, 78-92.	6.6	18
54	Bioengineering approaches to organ preservation <i>ex vivo</i>. Experimental Biology and Medicine, 2019, 244, 630-645.	1.1	23

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55	Rapid Wire Casting: A Multimaterial Microphysiological Platform Enabled by Rapid Casting of Elastic Microwires (Adv. Healthcare Mater. 5/2019). Advanced Healthcare Materials, 2019, 8, 1970019.	3.9	1
56	Quantification of human neuromuscular function through optogenetics. Theranostics, 2019, 9, 1232-1246.	4.6	44
57	A Multimaterial Microphysiological Platform Enabled by Rapid Casting of Elastic Microwires. Advanced Healthcare Materials, 2019, 8, e1801187.	3.9	26
58	Cell replacement in human lung bioengineering. Journal of Heart and Lung Transplantation, 2019, 38, 215-224.	0.3	28
59	Human Tissue-Engineered Model of Myocardial Ischemiaâ€"Reperfusion Injury. Tissue Engineering - Part A, 2019, 25, 711-724.	1.6	42
60	Organs-on-a-Chip: A Fast Track for Engineered Human Tissues in Drug Development. Cell Stem Cell, 2018, 22, 310-324.	5.2	479
61	Cardiac recovery via extended cell-free delivery of extracellular vesicles secreted by cardiomyocytes derived from induced pluripotent stem cells. Nature Biomedical Engineering, 2018, 2, 293-303.	11.6	249
62	Advanced maturation of human cardiac tissue grown from pluripotent stem cells. Nature, 2018, 556, 239-243.	13.7	921
63	Perfusion Enhances Hypertrophic Chondrocyte Matrix Deposition, But Not the Bone Formation. Tissue Engineering - Part A, 2018, 24, 1022-1033.	1.6	8
64	Human bone perivascular niche-on-a-chip for studying metastatic colonization. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1256-1261.	3.3	163
65	Chondrogenic properties of collagen type XI, a component of cartilage extracellular matrix. Biomaterials, 2018, 173, 47-57.	5.7	51
66	Dual IFN-Î³/hypoxia priming enhances immunosuppression of mesenchymal stromal cells through regulatory proteins and metabolic mechanisms. Journal of Immunology and Regenerative Medicine, 2018, 1, 45-56.	0.2	39
67	Testing the potency of antiâ€TNFâ€Î± and antiâ€ILâ€1Î² drugs using spheroid cultures of human osteoarthritic chondrocytes and donorâ€matched chondrogenically differentiated mesenchymal stem cells. Biotechnology Progress, 2018, 34, 1045-1058.	1.3	13
68	The influence of hypoxia and IFN-Î³ on the proteome and metabolome of therapeutic mesenchymal stem cells. Biomaterials, 2018, 167, 226-234.	5.7	74
69	Ectopic implantation of juvenile osteochondral tissues recapitulates endochondral ossification. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, 468-478.	1.3	6
70	Paracrine Effects of Mesenchymal Stromal Cells Cultured in Three-Dimensional Settings on Tissue Repair. ACS Biomaterials Science and Engineering, 2018, 4, 1162-1175.	2.6	28
71	Left-Ventricular Assist Device Impact on Aortic Valve Mechanics, Proteomics and Ultrastructure. Annals of Thoracic Surgery, 2018, 105, 572-580.	0.7	17
72	Tissue Engineered Bone Differentiated From Human Adipose Derived Stem Cells Inhibit Posterolateral Fusion in an Athymic Rat Model. Spine, 2018, 43, 533-541.	1.0	2

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73	Live imaging of stem cells in the germarium of the Drosophila ovary using a reusable gas-permeable imaging chamber. Nature Protocols, 2018, 13, 2601-2614.	5.5	12
74	In Vitro Models of Ischemia-Reperfusion Injury. Regenerative Engineering and Translational Medicine, 2018, 4, 142-153.	1.6	48
75	Can We Engineer a Human Cardiac Patch for Therapy?. Circulation Research, 2018, 123, 244-265.	2.0	121
76	Shortcomings of Animal Models and the Rise of Engineered Human Cardiac Tissue. ACS Biomaterials Science and Engineering, 2017, 3, 1884-1897.	2.6	26
77	Tissue-Engineered Model of Human Osteolytic Bone Tumor. Tissue Engineering - Part C: Methods, 2017, 23, 98-107.	1.1	21
78	Recapitulation of physiological spatiotemporal signals promotes in vitro formation of phenotypically stable human articular cartilage. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2556-2561.	3.3	43
79	<sup />Constrained Cage Culture Improves Engineered Cartilage Functional Properties by Enhancing Collagen Network Stability. Tissue Engineering - Part A, 2017, 23, 847-858.	1.6	11
80	Cross-circulation for extracorporeal support and recovery of the lung. Nature Biomedical Engineering, 2017, 1, .	11.6	39
81	Stem cell delivery in tissue-specific hydrogel enabled meniscal repair in an orthotopic rat model. Biomaterials, 2017, 132, 59-71.	5.7	79
82	Alternative direct stem cell derivatives defined by stem cell location and graded Wnt signalling. Nature Cell Biology, 2017, 19, 433-444.	4.6	58
83	Tissue-engineered hypertrophic chondrocyte grafts enhanced long bone repair. Biomaterials, 2017, 139, 202-212.	5.7	58
84	Biomimetic Approaches for Bone Tissue Engineering. Tissue Engineering - Part B: Reviews, 2017, 23, 480-493.	2.5	69
85	Controlled delivery and minimally invasive imaging of stem cells in the lung. Scientific Reports, 2017, 7, 13082.	1.6	34
86	Functional vascularized lung grafts for lung bioengineering. Science Advances, 2017, 3, e1700521.	4.7	72
87	Extracellular Vesicles and their Versatile Roles in Tissue Engineering. Tissue Engineering - Part A, 2017, , .	1.6	0
88	A microfluidic platform for the high-throughput study of pathological cardiac hypertrophy. Lab on A Chip, 2017, 17, 3264-3271.	3.1	39
89	Bioreactor model of neuromuscular junction with electrical stimulation for pharmacological potency testing. Integrative Biology (United Kingdom), 2017, 9, 956-967.	0.6	14
90	<sup />Emerging Impact of Extracellular Vesicles on Tissue Engineering and Regeneration. Tissue Engineering - Part A, 2017, 23, 1210-1211.	1.6	5

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91	Tissue engineering of the heart: An evolving paradigm. Journal of Thoracic and Cardiovascular Surgery, 2017, 153, 593-595.	0.4	11
92	Electromechanical Conditioning of Adult Progenitor Cells Improves Recovery of Cardiac Function After Myocardial Infarction. Stem Cells Translational Medicine, 2017, 6, 970-981.	1.6	26
93	Engineering Vascular Niche for Bone Tissue Regeneration. , 2017, , 517-529.		0
94	Minimally Invasive In Situ Imaging of Intra-tracheally Administered Therapeutic Stem Cells in the Lung. , 2017, , .		0
95	Abstract 20932: Dynamic Regulation of Myocardial Long Noncoding RNAs in Human Heart Failure and Reverse Remodeling With Left Ventricular Assist Device Support. Circulation, 2017, 136, .	1.6	0
96	Recapitulating the Size and Cargo of Tumor Exosomes in a Tissue-Engineered Model. Theranostics, 2016, 6, 1119-1130.	4.6	68
97	Microgravity and Microgravity Analogue Studies of Cartilage and Cardiac Tissue Engineering. , 2016, , 175-195.		0
98	Mesenchymal Stem Cells for Osteochondral Tissue Engineering. Methods in Molecular Biology, 2016, 1416, 35-54.	0.4	12
99	Protection of Organ Vasculature By Endothelial Overexpression of HLA-G. Biology of Blood and Marrow Transplantation, 2016, 22, S362.	2.0	0
100	Optimizing nutrient channel spacing and revisiting TGF-beta in large engineered cartilage constructs. Journal of Biomechanics, 2016, 49, 2089-2094.	0.9	8
101	Should we use cells, biomaterials, or tissue engineering for cartilage regeneration?. Stem Cell Research and Therapy, 2016, 7, 56.	2.4	142
102	Bioengineered Models of Solid Human Tumors for Cancer Research. Methods in Molecular Biology, 2016, 1502, 203-211.	0.4	14
103	High seeding density of human chondrocytes in agarose produces tissue-engineered cartilage approaching native mechanical and biochemical properties. Journal of Biomechanics, 2016, 49, 1909-1917.	0.9	49
104	Transcriptional patterns of reverse remodeling with left ventricular assist devices: a consistent signature. Expert Review of Medical Devices, 2016, 13, 1029-1034.	1.4	7
105	Nutrient Channels Aid the Growth of Articular Surface-Sized Engineered Cartilage Constructs. Tissue Engineering - Part A, 2016, 22, 1063-1074.	1.6	20
106	Distilling complexity to advance cardiac tissue engineering. Science Translational Medicine, 2016, 8, 342ps13.	5.8	138
107	Tissue-engineered autologous grafts for facial bone reconstruction. Science Translational Medicine, 2016, 8, 343ra83.	5.8	187
108	Extracellular matrix components and culture regimen selectively regulate cartilage formation by self-assembling human mesenchymal stem cells in vitro and in vivo. Stem Cell Research and Therapy, 2016, 7, 183.	2.4	25

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109	Modular Assembly Approach to Engineer Geometrically Precise Cardiovascular Tissue. Advanced Healthcare Materials, 2016, 5, 900-906.	3.9	19
110	Heterogeneous engineered cartilage growth results from gradients of media-supplemented active TGF-Î² and is ameliorated by the alternative supplementation of latent TGF-Î². Biomaterials, 2016, 77, 173-185.	5.7	62
111	Tissue-Engineering for the Study of Cardiac Biomechanics. Journal of Biomechanical Engineering, 2016, 138, 021010.	0.6	8
112	Autonomous beating rate adaptation in human stem cell-derived cardiomyocytes. Nature Communications, 2016, 7, 10312.	5.8	140
113	Modeling tumor microenvironments using custom-designed biomaterial scaffolds. Current Opinion in Chemical Engineering, 2016, 11, 94-105.	3.8	66
114	Tissue Engineering and Regenerative Medicine 2015: A Year in Review. Tissue Engineering - Part B: Reviews, 2016, 22, 101-113.	2.5	64
115	Differential gene expression in human, murine, and cell line-derived macrophages upon polarization. Experimental Cell Research, 2016, 347, 1-13.	1.2	131
116	Bioengineering methods for myocardial regeneration. Advanced Drug Delivery Reviews, 2016, 96, 195-202.	6.6	55
117	Rapid retraction of microvolume aqueous plugs traveling in a wettable capillary. Applied Physics Letters, 2015, 107, 144101.	1.5	6
118	Physiologic force-frequency response in engineered heart muscle by electromechanical stimulation. Biomaterials, 2015, 60, 82-91.	5.7	128
119	Bioengineered tumors. Bioengineered, 2015, 6, 73-76.	1.4	8
120	Synergistic Effects of Hypoxia and Morphogenetic Factors on Early Chondrogenic Commitment of Human Embryonic Stem Cells in Embryoid Body Culture. Stem Cell Reviews and Reports, 2015, 11, 228-241.	5.6	20
121	Tissue-engineered models of human tumors for cancer research. Expert Opinion on Drug Discovery, 2015, 10, 257-268.	2.5	76
122	Matrix Production in Large Engineered Cartilage Constructs Is Enhanced by Nutrient Channels and Excess Media Supply. Tissue Engineering - Part C: Methods, 2015, 21, 747-757.	1.1	32
123	Macrophages Modulate Engineered Human Tissues for Enhanced Vascularization and Healing. Annals of Biomedical Engineering, 2015, 43, 616-627.	1.3	64
124	Challenges in engineering osteochondral tissue grafts with hierarchical structures. Expert Opinion on Biological Therapy, 2015, 15, 1583-1599.	1.4	38
125	â€œThe state of the heartâ€: Recent advances in engineering human cardiac tissue from pluripotent stem cells. Experimental Biology and Medicine, 2015, 240, 1008-1018.	1.1	8
126	Advanced methods for tissue engineering and regenerative medicine. Methods, 2015, 84, 1-2.	1.9	2

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127	Seven Actionable Strategies for Advancing Women in Science, Engineering, and Medicine. Cell Stem Cell, 2015, 16, 221-224.	5.2	36
128	Immune modulation as a therapeutic strategy in bone regeneration. Journal of Experimental Orthopaedics, 2015, 2, 1.	0.8	82
129	Engineering physiologically stiff and stratified human cartilage by fusing condensed mesenchymal stem cells. Methods, 2015, 84, 109-114.	1.9	15
130	Bupivacaine Mandibular Nerve Block Affects Intraoperative Blood Pressure and Heart Rate in a Yucatan Miniature Swine Mandibular Condylectomy Model: A Pilot Study. Journal of Investigative Surgery, 2015, 28, 32-39.	0.6	2
131	Controlled release of cytokines using silk-biomaterials for macrophage polarization. Biomaterials, 2015, 73, 272-283.	5.7	110
132	A protein for healing infarcted hearts. Nature, 2015, 525, 461-462.	13.7	3
133	Targeted delivery of liquid microvolumes into the lung. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 11530-11535.	3.3	32
134	Endothelial Cells Enhance the Migration of Bovine Meniscus Cells. Arthritis and Rheumatology, 2015, 67, 182-192.	2.9	15
135	Passage-dependent relationship between mesenchymal stem cell mobilization and chondrogenic potential. Osteoarthritis and Cartilage, 2015, 23, 319-327.	0.6	27
136	Clinical translation of controlled protein delivery systems for tissue engineering. Drug Delivery and Translational Research, 2015, 5, 101-115.	3.0	36
137	Sequential delivery of immunomodulatory cytokines to facilitate the M1-to-M2 transition of macrophages and enhance vascularization of bone scaffolds. Biomaterials, 2015, 37, 194-207.	5.7	568
138	Silk microfiber-reinforced silk hydrogel composites for functional cartilage tissue repair. Acta Biomaterialia, 2015, 11, 27-36.	4.1	220
139	Nutrient channels and stirring enhanced the composition and stiffness of large cartilage constructs. Journal of Biomechanics, 2014, 47, 3847-3854.	0.9	27
140	Cardiac Tissue Engineering. , 2014, , 771-792.		5
141	Human adipose-derived cells can serve as a single-cell source for the<i>in vitro</i>cultivation of vascularized bone grafts. Journal of Tissue Engineering and Regenerative Medicine, 2014, 8, 629-639.	1.3	23
142	Galvanic microparticles increase migration of human dermal fibroblasts in a wound-healing model via reactive oxygen species pathway. Experimental Cell Research, 2014, 320, 79-91.	1.2	26
143	Bioengineered human tumor within a bone niche. Biomaterials, 2014, 35, 5785-5794.	5.7	67
144	The Current Status of iPS Cells in Cardiac Research and Their Potential for Tissue Engineering and Regenerative Medicine. Stem Cell Reviews and Reports, 2014, 10, 177-190.	5.6	53

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145	The role of macrophage phenotype in vascularization of tissue engineering scaffolds. Biomaterials, 2014, 35, 4477-4488.	5.7	728
146	Electrically Conductive Chitosan/Carbon Scaffolds for Cardiac Tissue Engineering. Biomacromolecules, 2014, 15, 635-643.	2.6	306
147	Biomimetic scaffold combined with electrical stimulation and growth factor promotes tissue engineered cardiac development. Experimental Cell Research, 2014, 321, 297-306.	1.2	39
148	Large, stratified, and mechanically functional human cartilage grown in vitro by mesenchymal condensation. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 6940-6945.	3.3	166
149	Efficient generation of lung and airway epithelial cells from human pluripotent stem cells. Nature Biotechnology, 2014, 32, 84-91.	9.4	497
150	Hierarchically Ordered Nanopatterns for Spatial Control of Biomolecules. ACS Nano, 2014, 8, 11846-11853.	7.3	23
151	Microscale technologies for regulating human stem cell differentiation. Experimental Biology and Medicine, 2014, 239, 1255-1263.	1.1	21
152	Embryonic Stem Cells as a Cell Source for Tissue Engineering. , 2014, , 609-638.		5
153	Principles of Bioreactor Design for Tissue Engineering. , 2014, , 261-278.		2
154	Delivering life's blood: emerging technologies, current opportunities and challenges. Current Opinion in Chemical Engineering, 2014, 3, v-vi.	3.8	1
155	Electrical stimulation enhances cell migration and integrative repair in the meniscus. Scientific Reports, 2014, 4, 3674.	1.6	82
156	Natural Cardiac Extracellular Matrix Hydrogels for Cultivation of Human Stem Cell-Derived Cardiomyocytes. Methods in Molecular Biology, 2014, 1181, 69-81.	0.4	31
157	In Vitro Mesenchymal Trilineage Differentiation and Extracellular Matrix Production by Adipose and Bone Marrow Derived Adult Equine Multipotent Stromal Cells on a Collagen Scaffold. Stem Cell Reviews and Reports, 2013, 9, 858-872.	5.6	57
158	Insulin, Ascorbate, and Glucose Have a Much Greater Influence Than Transferrin and Selenous Acid on the <i>In Vitro</i> Growth of Engineered Cartilage in Chondrogenic Media. Tissue Engineering - Part A, 2013, 19, 1941-1948.	1.6	42
159	Bioreactors for Tissue Engineering. , 2013, , 1178-1194.		2
160	Cardiac Muscle Tissue Engineering. , 2013, , 1262-1276.		1
161	The regulation of growth and metabolism of kidney stem cells with regional specificity using extracellular matrix derived from kidney. Biomaterials, 2013, 34, 9830-9841.	5.7	99
162	Patterning pluripotency in embryonic stem cells. Stem Cells, 2013, 31, 1806-1815.	1.4	15

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163	Bioengineering heart tissue for in vitro testing. Current Opinion in Biotechnology, 2013, 24, 926-932.	3.3	31
164	Physical influences on stem cells. Stem Cell Research and Therapy, 2013, 4, 153.	2.4	4
165	Principles of engineering tissue regeneration (Sun Valley 2012). IBMS BoneKEy, 2013, 10, .	0.1	3
166	Transient hypoxia improves matrix properties in tissue engineered cartilage. Journal of Orthopaedic Research, 2013, 31, 544-553.	1.2	16
167	Micropatterning of cells reveals chiral morphogenesis. Stem Cell Research and Therapy, 2013, 4, 24.	2.4	28
168	Supplementation of Exogenous Adenosine 5â€²-Triphosphate Enhances Mechanical Properties of 3D Cellâ€“Agarose Constructs for Cartilage Tissue Engineering. Tissue Engineering - Part A, 2013, 19, 2188-2200.	1.6	20
169	Microfluidic bioreactor for dynamic regulation of early mesodermal commitment in human pluripotent stem cells. Lab on A Chip, 2013, 13, 355-364.	3.1	51
170	Sequential Application of Steady and Pulsatile Medium Perfusion Enhanced the Formation of Engineered Bone. Tissue Engineering - Part A, 2013, 19, 1244-1254.	1.6	13
171	Macrophages modulate the viability and growth of human mesenchymal stem cells. Journal of Cellular Biochemistry, 2013, 114, 220-229.	1.2	211
172	Age-Related Carbonylation of Fibrocartilage Structural Proteins Drives Tissue Degenerative Modification. Chemistry and Biology, 2013, 20, 922-934.	6.2	50
173	Decellularization of Human and Porcine Lung Tissues for Pulmonary Tissue Engineering. Annals of Thoracic Surgery, 2013, 96, 1046-1056.	0.7	203
174	Bioreactor engineering of stem cell environments. Biotechnology Advances, 2013, 31, 1020-1031.	6.0	53
175	The effect of controlled expression of VEGF by transduced myoblasts in a cardiac patch on vascularization in a mouse model of myocardial infarction. Biomaterials, 2013, 34, 393-401.	5.7	71
176	Biomimetic electrical stimulation platform for neural differentiation of retinal progenitor cells. , 2013, 2013, 5666-9.		4
177	Assembly of complex cell microenvironments using geometrically docked hydrogel shapes. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 4551-4556.	3.3	76
178	Purinergic responses of chondrogenic stem cells to dynamic loading. Journal of the Serbian Chemical Society, 2013, 78, 1865-1874.	0.4	4
179	Cultivation of Human Bone-Like Tissue from Pluripotent Stem Cell-Derived Osteogenic Progenitors in Perfusion Bioreactors. Methods in Molecular Biology, 2013, 1202, 173-184.	0.4	14
180	Noninvasive Imaging of Myocyte Apoptosis Following Application of a Stem Cellâ€“Engineered Delivery Platform to Acutely Infarcted Myocardium. Journal of Nuclear Medicine, 2013, 54, 977-983.	2.8	19

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181	Electrical stimulation via a biocompatible conductive polymer directs retinal progenitor cell differentiation. , 2013, 2013, 1627-31.		10
182	Biomimetic Platforms for Tissue Engineering. Israel Journal of Chemistry, 2013, 53, 767-776.	1.0	1
183	Portable bioreactor for perfusion and electrical stimulation of engineered cardiac tissue. , 2013, 2013, 6219-23.		14
184	Engineering bone tissue substitutes from human induced pluripotent stem cells. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 8680-8685.	3.3	196
185	Bioreactor Cultivation of Anatomically Shaped Human Bone Grafts. Methods in Molecular Biology, 2013, 1202, 57-78.	0.4	17
186	HeLiVa platform: integrated heart-liver-vascular systems for drug testing in human health and disease. Stem Cell Research and Therapy, 2013, 4, S8.	2.4	67
187	Vascular Endothelial Growth Factor Secretion by Nonmyocytes Modulates Connexin-43 Levels in Cardiac Organoids. Tissue Engineering - Part A, 2012, 18, 1771-1783.	1.6	41
188	Engineering bone tissue from human embryonic stem cells. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 8705-8709.	3.3	153
189	Optimizing Dynamic Interactions between a Cardiac Patch and Inflammatory Host Cells. Cells Tissues Organs, 2012, 195, 171-182.	1.3	34
190	Biofabrication enables efficient interrogation and optimization of sequential culture of endothelial cells, fibroblasts and cardiomyocytes for formation of vascular cords in cardiac tissue engineering. Biofabrication, 2012, 4, 035002.	3.7	30
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