Clemens A Van Blitterswijk

List of Publications by Year
in descending order

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193
papers

18,373
citations

13865

67
h-index

13771

129
g-index

200
all docs

200
docs citations

200
times ranked

18215
citing authors

#	Article	IF	Citations
1	Engineering vascularized skeletal muscle tissue. Nature Biotechnology, 2005, 23, 879-884.	17.5	1,153
2	Vascularization in tissue engineering. Trends in Biotechnology, 2008, 26, 434-441.	9.3	1,032
3	Osteoinductive ceramics as a synthetic alternative to autologous bone grafting. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 13614-13619.	7.1	618
4	3D microenvironment as essential element for osteoinduction by biomaterials. Biomaterials, 2005, 26, 3565-3575.	11.4	542
5	Enzyme-catalyzed crosslinkable hydrogels: Emerging strategies for tissue engineering. Biomaterials, 2012, 33, 1281-1290.	11.4	488
6	Biomimetic Hydroxyapatite Coating on Metal Implants. Journal of the American Ceramic Society, 2002, 85, 517-522.	3.8	447
7	Osteoinductive biomaterials: current knowledge of properties, experimental models and biological mechanisms. , 2011, 21, 407-429.		415
8	Blastocyst-like structures generated solely from stem cells. Nature, 2018, 557, 106-111.	27.8	366
9	A calcium-induced signaling cascade leading to osteogenic differentiation of human bone marrow-derived mesenchymal stromal cells. Biomaterials, 2012, 33, 3205-3215.	11.4	363
10	An algorithm-based topographical biomaterials library to instruct cell fate. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 16565-16570.	7.1	355
11	Bone ingrowth in porous titanium implants produced by 3D fiber deposition. Biomaterials, 2007, 28, 2810-2820.	11.4	349
12	Effects of the architecture of tissue engineering scaffolds on cell seeding and culturing. Acta Biomaterialia, 2010, 6, 4208-4217.	8.3	339
13	Osteoconduction and osteoinduction of low-temperature 3D printed bioceramic implants. Biomaterials, 2008, 29, 944-953.	11.4	311
14	Endothelial Cells Assemble into a 3-Dimensional Prevascular Network in a Bone Tissue Engineering Construct. Tissue Engineering, 2006, 12, 2685-2693.	4.6	302
15	Bone regeneration: molecular and cellular interactions with calcium phosphate ceramics. International Journal of Nanomedicine, 2006, 1, 317-32.	6.7	276
16	Osteoinduction by biomaterialsâ€”Physicochemical and structural influences. Journal of Biomedical Materials Research - Part A, 2006, 77A, 747-762.	4.0	264
17	Cell-Based Bone Tissue Engineering. PLoS Medicine, 2007, 4, e9.	8.4	263
18	Trophic Effects of Mesenchymal Stem Cells Increase Chondrocyte Proliferation and Matrix Formation. Tissue Engineering - Part A, 2011, 17, 1425-1436.	3.1	259

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19	The effect of calcium phosphate microstructure on bone-related cells in vitro. Biomaterials, 2008, 29, 3306-3316.	11.4	237
20	Endochondral bone tissue engineering using embryonic stem cells. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 6840-6845.	7.1	231
21	Fiber diameter and texture of electrospun PEOT/PBT scaffolds influence human mesenchymal stem cell proliferation and morphology, and the release of incorporated compounds. Biomaterials, 2006, 27, 4911-4922.	11.4	225
22	Osteogenecity of octacalcium phosphate coatings applied on porous metal implants. Journal of Biomedical Materials Research - Part A, 2003, 66A, 779-788.	4.0	210
23	Biological performance of uncoated and octacalcium phosphate-coated Ti6Al4V. Biomaterials, 2005, 26, 23-36.	11.4	205
24	Chitosan/Poly(É›-caprolactone) blend scaffolds for cartilage repair. Biomaterials, 2011, 32, 1068-1079.	11.4	204
25	Porous Ti6Al4V scaffold directly fabricating by rapid prototyping: Preparation and in vitro experiment. Biomaterials, 2006, 27, 1223-1235.	11.4	202
26	Bone induction by porous glass ceramic made from Bioglassï¿½ (45S5). Journal of Biomedical Materials Research Part B, 2001, 58, 270-276.	3.1	201
27	Comparative in vivo study of six hydroxyapatiteâ€based bone graft substitutes. Journal of Orthopaedic Research, 2008, 26, 1363-1370.	2.3	196
28	Cell based bone tissue engineering in jaw defects. Biomaterials, 2008, 29, 3053-3061.	11.4	191
29	Trophic Effects of Mesenchymal Stem Cells in Chondrocyte Co-Cultures are Independent of Culture Conditions and Cell Sources. Tissue Engineering - Part A, 2012, 18, 1542-1551.	3.1	186
30	Nano-scale study of the nucleation and growth of calcium phosphate coating on titanium implants. Biomaterials, 2004, 25, 2901-2910.	11.4	165
31	A perfusion bioreactor system capable of producing clinically relevant volumes of tissue-engineered bone: In vivo bone formation showing proof of concept. Biomaterials, 2006, 27, 315-323.	11.4	165
32	A Rapid and Efficient Method for Expansion of Human Mesenchymal Stem Cells. Tissue Engineering, 2007, 13, 3-9.	4.6	158
33	Cross-species Comparison of Ectopic Bone Formation in Biphasic Calcium Phosphate (BCP) and Hydroxyapatite (HA) Scaffolds. Tissue Engineering, 2006, 12, 1607-1615.	4.6	153
34	Relevance of Osteoinductive Biomaterials in Critical-Sized Orthotopic Defect. Journal of Orthopaedic Research, 2006, 24, 867-876.	2.3	152
35	Effects of scaffold composition and architecture on human nasal chondrocyte redifferentiation and cartilaginous matrix deposition. Biomaterials, 2005, 26, 2479-2489.	11.4	151
36	The effects of inorganic additives to calcium phosphate on in vitro behavior of osteoblasts and osteoclasts. Biomaterials, 2010, 31, 2976-2989.	11.4	150

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37	Supply of Nutrients to Cells in Engineered Tissues. Biotechnology and Genetic Engineering Reviews, 2009, 26, 163-178.	6.2	149
38	Chitosan Scaffolds Containing Hyaluronic Acid for Cartilage Tissue Engineering. Tissue Engineering - Part C: Methods, 2011, 17, 717-730.	2.1	149
39	Tissue deformation spatially modulates VEGF signaling and angiogenesis. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 6886-6891.	7.1	134
40	The size of surface microstructures as an osteogenic factor in calcium phosphate ceramics. Acta Biomaterialia, 2014, 10, 3254-3263.	8.3	133
41	Chondrogenesis in injectable enzymatically crosslinked heparin/dextran hydrogels. Journal of Controlled Release, 2011, 152, 186-195.	9.9	127
42	Co-culture in cartilage tissue engineering. Journal of Tissue Engineering and Regenerative Medicine, 2007, 1, 170-178.	2.7	126
43	Bone tissue engineering in a critical size defect compared to ectopic implantations in the goat. Journal of Orthopaedic Research, 2004, 22, 544-551.	2.3	123
44	Tissue assembly and organization: Developmental mechanisms in microfabricated tissues. Biomaterials, 2009, 30, 4851-4858.	11.4	122
45	Enzymatically Crosslinked Dextran-Tyramine Hydrogels as Injectable Scaffolds for Cartilage Tissue Engineering. Tissue Engineering - Part A, 2010, 16, 2429-2440.	3.1	122
46	Towards 4D printed scaffolds for tissue engineering: exploiting 3D shape memory polymers to deliver time-controlled stimulus on cultured cells. Biofabrication, 2017, 9, 031001.	7.1	121
47	Fabrication, Characterization and Cellular Compatibility of Poly(Hydroxy Alkanoate) Composite Nanofibrous Scaffolds for Nerve Tissue Engineering. PLoS ONE, 2013, 8, e57157.	2.5	113
48	Nanostructured 3D Constructs Based on Chitosan and Chondroitin Sulphate Multilayers for Cartilage Tissue Engineering. PLoS ONE, 2013, 8, e55451.	2.5	105
49	Metabolic programming of mesenchymal stromal cells by oxygen tension directs chondrogenic cell fate. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 13954-13959.	7.1	104
50	Bone tissue engineering on amorphous carbonated apatite and crystalline octacalcium phosphate-coated titanium discs. Biomaterials, 2005, 26, 5231-5239.	11.4	103
51	The Use of Endothelial Progenitor Cells for Prevascularized Bone Tissue Engineering. Tissue Engineering - Part A, 2009, 15, 2015-2027.	3.1	103
52	The homing of bone marrow MSCs to non-osseous sites for ectopic bone formation induced by osteoinductive calcium phosphate. Biomaterials, 2013, 34, 2167-2176.	11.4	102
53	Raman Imaging of PLGA Microsphere Degradation Inside Macrophages. Journal of the American Chemical Society, 2004, 126, 13226-13227.	13.7	99
54	Composite biomaterials with chemical bonding between hydroxyapatite filler particles and PEG/PBT copolymer matrix. , 1998, 40, 490-497.		97

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55	Development and analysis of multi-layer scaffolds for tissue engineering. Biomaterials, 2009, 30, 6228-6239.	11.4	97
56	In vitro and in vivo bioactivity assessment of a polylactic acid/hydroxyapatite composite for bone regeneration. Biomatter, 2014, 4, e27664.	2.6	89
57	Oxygen and nutrient delivery in tissue engineering: Approaches to graft vascularization. Journal of Tissue Engineering and Regenerative Medicine, 2019, 13, 1815-1829.	2.7	87
58	Critical Size Defect in the Goat's Os Ilium. Clinical Orthopaedics and Related Research, 1999, 364, 231-239.	1.5	83
59	Bone Induction by Implants Coated with Cultured Osteogenic Bone Marrow Cells. Advances in Dental Research, 1999, 13, 74-81.	3.6	82
60	Synthetic scaffold morphology controls human dermal connective tissue formation. Journal of Biomedical Materials Research - Part A, 2005, 74A, 523-532.	4.0	79
61	Analysis of ectopic and orthotopic bone formation in cell-based tissue-engineered constructs in goats. Biomaterials, 2007, 28, 1798-1805.	11.4	79
62	A Wnt/Î²â€•catenin negative feedback loop inhibits interleukinâ€•1â€“induced matrix metalloproteinase expression in human articular chondrocytes. Arthritis and Rheumatism, 2012, 64, 2589-2600.	6.7	79
63	Self-attaching and cell-attracting in-situ forming dextran-tyramine conjugates hydrogels for arthroscopic cartilage repair. Biomaterials, 2012, 33, 3164-3174.	11.4	79
64	The regulation of expanded human nasal chondrocyte re-differentiation capacity by substrate composition and gas plasma surface modification. Biomaterials, 2006, 27, 1043-1053.	11.4	78
65	Ultraviolet light crosslinking of poly(trimethylene carbonate) for elastomeric tissue engineering scaffolds. Biomaterials, 2010, 31, 8696-8705.	11.4	78
66	Polymer hollow fiber three-dimensional matrices with controllable cavity and shell thickness. Biomaterials, 2006, 27, 5918-5926.	11.4	77
67	The effect of platelet lysate supplementation of a dextran-based hydrogel on cartilage formation. Biomaterials, 2012, 33, 3651-3661.	11.4	76
68	GREM1, FRZB and DKK1 mRNA levels correlate with osteoarthritis and are regulated by osteoarthritis-associated factors. Arthritis Research and Therapy, 2013, 15, R126.	3.5	74
69	The effect of cell-based bone tissue engineering in a goat transverse process model. Biomaterials, 2006, 27, 5099-5106.	11.4	67
70	The effect of bone marrow aspiration strategy on the yield and quality of human mesenchymal stem cells. Monthly Notices of the Royal Astronomical Society: Letters, 2009, 80, 618-621.	3.3	66
71	Cell Sources for Articular Cartilage Repair Strategies: Shifting from Monocultures to Cocultures. Tissue Engineering - Part B: Reviews, 2013, 19, 31-40.	4.8	65
72	Scalable topographies to support proliferation and Oct4 expression by human induced pluripotent stem cells. Scientific Reports, 2016, 6, 18948.	3.3	65

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73	Ectopic bone formation by aggregated mesenchymal stem cells from bone marrow and adipose tissue: A comparative study. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, e150-e158.	2.7	65
74	The Components of Bone and What They Can Teach Us about Regeneration. Materials, 2018, 11, 14.	2.9	65
75	Fibroblast Growth Factor-1 Is a Mesenchymal Stromal Cell-Secreted Factor Stimulating Proliferation of Osteoarthritic Chondrocytes in Co-Culture. Stem Cells and Development, 2013, 22, 2356-2367.	2.1	64
76	Sonic Hedgehog-activated engineered blood vessels enhance bone tissue formation. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 4413-4418.	7.1	62
77	Flexible Yttrium-Stabilized Zirconia Nanofibers Offer Bioactive Cues for Osteogenic Differentiation of Human Mesenchymal Stromal Cells. ACS Nano, 2016, 10, 5789-5799.	14.6	62
78	Adhesion-mediated signal transduction in human articular chondrocytes: the influence of biomaterial chemistry and tenascin-C. Experimental Cell Research, 2004, 301, 179-188.	2.6	60
79	Hybrid Polycaprolactone/Alginate Scaffolds Functionalized with VEGF to Promote de Novo Vessel Formation for the Transplantation of Islets of Langerhans. Advanced Healthcare Materials, 2016, 5, 1606-1616.	7.6	60
80	Bilayered biodegradable poly(ethylene glycol)/poly(butylene terephthalate) copolymer (Polyactive?) as substrate for human fibroblasts and keratinocytes. Journal of Biomedical Materials Research Part B, 1999, 47, 292-300.	3.1	59
81	Peptide functionalized polyhydroxyalkanoate nanofibrous scaffolds enhance Schwann cells activity. Nanomedicine: Nanotechnology, Biology, and Medicine, 2014, 10, 1559-1569.	3.3	59
82	T Cell Factor 4 Is a Pro-catabolic and Apoptotic Factor in Human Articular Chondrocytes by Potentiating Nuclear Factor ÎºB Signaling. Journal of Biological Chemistry, 2013, 288, 17552-17558.	3.4	58
83	A Newly Developed Chemically Crosslinked Dextranâ€"Poly(Ethylene Glycol) Hydrogel for Cartilage Tissue Engineering. Tissue Engineering - Part A, 2010, 16, 565-573.	3.1	56
84	Microwell Scaffolds for the Extrahepatic Transplantation of Islets of Langerhans. PLoS ONE, 2013, 8, e64772.	2.5	56
85	Elucidating the individual effects of calcium and phosphate ions on hMSCs by using composite materials. Acta Biomaterialia, 2015, 17, 1-15.	8.3	56
86	Dermal regeneration in full-thickness wounds in Yucatan miniature pigs using a biodegradable copolymer. Wound Repair and Regeneration, 1998, 6, 556-568.	3.0	55
87	Critical Steps toward a Tissue-Engineered Cartilage Implant Using Embryonic Stem Cells. Tissue Engineering - Part A, 2008, 14, 135-147.	3.1	54
88	Microporous calcium phosphate ceramics driving osteogenesis through surface architecture. Journal of Biomedical Materials Research - Part A, 2015, 103, 1188-1199.	4.0	54
89	Culture and Characterization of Rat Middle-ear Epithelium. Acta Oto-Laryngologica, 1986, 101, 453-466.	0.9	53
90	Comparison of two carbonated apatite ceramics in vivo. Acta Biomaterialia, 2010, 6, 2219-2226.	8.3	53

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91	Predicting the therapeutic efficacy of MSC in bone tissue engineering using the molecular marker CADM1. Biomaterials, 2013, 34, 4592-4601.	11.4	53
92	Reactions of cells at implant surfaces. Biomaterials, 1991, 12, 187-193.	11.4	52
93	Fabrication of Bioactive Composite Scaffolds by Electrospinning for Bone Regeneration. Macromolecular Bioscience, 2010, 10, 1365-1373.	4.1	52
94	Stimulation of Skin Repair Is Dependent on Fibroblast Source and Presence of Extracellular Matrix. Tissue Engineering, 2004, 10, 1054-1064.	4.6	50
95	Optimization of bone tissue engineering in goats: a peroperative seeding method using cryopreserved cells and localized bone formation in calcium phosphate scaffolds1. Transplantation, 2004, 77, 359-365.	1.0	49
96	Biological performance in goats of a porous titanium alloyâ€“biphasic calcium phosphate composite. Biomaterials, 2007, 28, 4209-4218.	11.4	48
97	Overcoming kidney organoid challenges for regenerative medicine. Npj Regenerative Medicine, 2020, 5, 8.	5.2	48
98	Covalent Binding of Bone Morphogenetic Proteinâ€2 and Transforming Growth Factorâ€Î²3 to 3D Plotted Scaffolds for Osteochondral Tissue Regeneration. Biotechnology Journal, 2017, 12, 1700072.	3.5	46
99	The different behaviors of skeletal muscle cells and chondrocytes on PEGT/PBT block copolymers are related to the surface properties of the substrate. Journal of Biomedical Materials Research Part B, 2001, 54, 47-58.	3.1	45
100	Optimization of bone-tissue engineering in goats. Journal of Biomedical Materials Research Part B, 2004, 69B, 113-120.	3.1	45
101	Skeletal tissue engineering using embryonic stem cells. Journal of Tissue Engineering and Regenerative Medicine, 2010, 4, 165-180.	2.7	45
102	Topography of calcium phosphate ceramics regulates primary cilia length and TGF receptor recruitment associated with osteogenesis. Acta Biomaterialia, 2017, 57, 487-497.	8.3	45
103	Influence of Additive Manufactured Scaffold Architecture on the Distribution of Surface Strains and Fluid Flow Shear Stresses and Expected Osteochondral Cell Differentiation. Frontiers in Bioengineering and Biotechnology, 2017, 5, 6.	4.1	45
104	A new in vivo screening model for posterior spinal bone formation: Comparison of ten calcium phosphate ceramic material treatments. Biomaterials, 2006, 27, 302-314.	11.4	44
105	Label-free Raman monitoring of extracellular matrix formation in three-dimensional polymeric scaffolds. Journal of the Royal Society Interface, 2013, 10, 20130464.	3.4	43
106	Creeping Proteins in Microporous Structures: Polymer Brushâ€Assisted Fabrication of 3D Gradients for Tissue Engineering. Advanced Healthcare Materials, 2015, 4, 1169-1174.	7.6	39
107	Primary chondrocytes enhance cartilage tissue formation upon co-culture with a range of cell types. Soft Matter, 2010, 6, 5080.	2.7	38
108	Recognizing different tissues in human fetal femur cartilage by label-free Raman microspectroscopy. Journal of Biomedical Optics, 2012, 17, 116012.	2.6	38

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109	Mimicking natural cell environments: design, fabrication and application of bio-chemical gradients on polymeric biomaterial substrates. Journal of Materials Chemistry B, 2016, 4, 4244-4257.	5.8	37
110	Hypoxia Inhibits Hypertrophic Differentiation and Endochondral Ossification in Explanted Tibiae. PLoS ONE, 2012, 7, e49896.	2.5	36
111	Stimulatory effect of cobalt ions incorporated into calcium phosphate coatings on neovascularization in an in vivo intramuscular model in goats. Acta Biomaterialia, 2016, 36, 267-276.	8.3	36
112	The Use of Finite Element Analyses to Design and Fabricate Three-Dimensional Scaffolds for Skeletal Tissue Engineering. Frontiers in Bioengineering and Biotechnology, 2017, 5, 30.	4.1	36
113	Redox regulation in regenerative medicine and tissue engineering: The paradox of oxygen. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, 2013-2020.	2.7	36
114	Anatomical 3D Fiber-Deposited Scaffolds for Tissue Engineering: Designing a Neotrachea. Tissue Engineering, 2007, 13, 2483-2493.	4.6	35
115	Regenerating Articular Tissue by Converging Technologies. PLoS ONE, 2008, 3, e3032.	2.5	35
116	Forskolin Enhances <i>In Vivo</i> Bone Formation by Human Mesenchymal Stromal Cells. Tissue Engineering - Part A, 2012, 18, 558-567.	3.1	34
117	Linking the Transcriptional Landscape of Bone Induction to Biomaterial Design Parameters. Advanced Materials, 2017, 29, 1603259.	21.0	34
118	IMPROVED ENZYMATIC ISOLATION OF FIBROBLASTS FOR THE CREATION OF AUTOLOGOUS SKIN SUBSTITUTES. In Vitro Cellular and Developmental Biology - Animal, 2004, 40, 268.	1.5	33
119	Pro-osteogenic trophic effects by PKA activation in human mesenchymal stromal cells. Biomaterials, 2011, 32, 6089-6098.	11.4	33
120	Patterns of Amino Acid Metabolism by Proliferating Human Mesenchymal Stem Cells. Tissue Engineering - Part A, 2012, 18, 654-664.	3.1	33
121	Combinatorial incorporation of fluoride and cobalt ions into calcium phosphates to stimulate osteogenesis and angiogenesis. Biomedical Materials (Bristol), 2016, 11, 015020.	3.3	33
122	Small molecule inhibitors of WNT/Î²-catenin signaling block IL-1Î²- and TNFÎ±-induced cartilage degradation. Arthritis Research and Therapy, 2013, 15, R93.	3.5	32
123	Monitoring nutrient transport in tissue-engineered grafts. Journal of Tissue Engineering and Regenerative Medicine, 2015, 9, 952-960.	2.7	32
124	A small molecule approach to engineering vascularized tissue. Biomaterials, 2013, 34, 3053-3063.	11.4	31
125	<i>In vivo</i>screening of extracellular matrix components produced under multiple experimental conditions implanted in one animal. Integrative Biology (United Kingdom), 2013, 5, 889-898.	1.3	31
126	Thin Polymer Brush Decouples Biomaterialâ€™s Micro-/Nanotopology and Stem Cell Adhesion. Langmuir, 2013, 29, 13843-13852.	3.5	31

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127	Mesenchymal stromal cell-derived extracellular matrix influences gene expression of chondrocytes. Biofabrication, 2013, 5, 025003.	7.1	30
128	Trends in biomaterials research: An analysis of the scientific programme of the World Biomaterials Congress 2008. Biomaterials, 2008, 29, 3047-3052.	11.4	29
129	The role of three-dimensional polymeric scaffold configuration on the uniformity of connective tissue formation by adipose stromal cells. Biomaterials, 2010, 31, 4322-4329.	11.4	29
130	A Dual Flow Bioreactor with Controlled Mechanical Stimulation for Cartilage Tissue Engineering. Tissue Engineering - Part C: Methods, 2013, 19, 774-783.	2.1	29
131	The Effect of Perfluorocarbon-Based Artificial Oxygen Carriers on Tissue-Engineered Trachea. Tissue Engineering - Part A, 2009, 15, 2471-2480.	3.1	28
132	Inflammatory response and bone healing capacity of two porous calcium phosphate ceramics in critical size cortical bone defects. Journal of Biomedical Materials Research - Part A, 2014, 102, 1399-1407.	4.0	27
133	Engineering of a Dermal Equivalent: Seeding and Culturing Fibroblasts in PEGT/PBT Copolymer Scaffolds. Tissue Engineering, 2003, 9, 909-917.	4.6	26
134	Biomimetic calcium phosphate coatings on recombinant spider silk fibres. Biomedical Materials (Bristol), 2010, 5, 045002.	3.3	26
135	Chondrocytes Cocultured with Stromal Vascular Fraction of Adipose Tissue Present More Intense Chondrogenic Characteristics Than with Adipose Stem Cells. Tissue Engineering - Part A, 2016, 22, 336-348.	3.1	24
136	Suppression of the immune system as a critical step for bone formation from allogeneic osteoprogenitors implanted in rats. Journal of Cellular and Molecular Medicine, 2014, 18, 134-142.	3.6	23
137	Differential bone-forming capacity of osteogenic cells from either embryonic stem cells or bone marrow-derived mesenchymal stem cells. Journal of Tissue Engineering and Regenerative Medicine, 2011, 5, 180-190.	2.7	21
138	Plug and play: combining materials and technologies to improve bone regenerative strategies. Journal of Tissue Engineering and Regenerative Medicine, 2015, 9, 745-759.	2.7	21
139	Human mesenchymal stromal cells response to biomimetic octacalcium phosphate containing strontium. Journal of Biomedical Materials Research - Part A, 2016, 104, 1946-1960.	4.0	21
140	Primary Culture of Chinchilla Middle Ear Epithelium. Annals of Otology, Rhinology and Laryngology, 1991, 100, 774-782.	1.1	20
141	Modulation of Chondrocyte Phenotype for Tissue Engineering by Designing the Biologicâˆ’Polymer Carrier Interface. Biomacromolecules, 2006, 7, 3012-3018.	5.4	20
142	Cytokeratin Patterns of Tissues Related to Cholesteatoma Pathogenesis. Annals of Otology, Rhinology and Laryngology, 1989, 98, 635-640.	1.1	19
143	Methods of Monitoring Cell Fate and Tissue Growth in Three-Dimensional Scaffold-Based Strategies for<i>In Vitro</i>Tissue Engineering. Tissue Engineering - Part B: Reviews, 2016, 22, 265-283.	4.8	19
144	Distribution and Viability of Fetal and Adult Human Bone Marrow Stromal Cells in a Biaxial Rotating Vessel Bioreactor after Seeding on Polymeric 3D Additive Manufactured Scaffolds. Frontiers in Bioengineering and Biotechnology, 2015, 3, 169.	4.1	18

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145	Cells responding to surface structure of calcium phosphate ceramics for bone regeneration. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 3273-3283.	2.7	18
146	Building Complex Life Through Self-Organization. Tissue Engineering - Part A, 2019, 25, 1341-1346.	3.1	17
147	Tailorable Surface Morphology of 3D Scaffolds by Combining Additive Manufacturing with Thermally Induced Phase Separation. Macromolecular Rapid Communications, 2017, 38, 1700186.	3.9	15
148	Diverse Effects of Cyclic AMP Variants on Osteogenic and Adipogenic Differentiation of Human Mesenchymal Stromal Cells. Tissue Engineering - Part A, 2012, 18, 1431-1442.	3.1	14
149	Micro-Topographies Promote Late Chondrogenic Differentiation Markers in the ATDC5 Cell Line. Tissue Engineering - Part A, 2017, 23, 458-469.	3.1	14
150	Osteogenicity of autologous bone transplants in the goat. Transplantation, 2004, 77, 504-509.	1.0	13
151	Relating cell proliferation to <i>in vivo</i> bone formation in porous Ca/P scaffolds. Journal of Biomedical Materials Research - Part A, 2010, 92A, 303-310.	4.0	13
152	Cell culture dimensionality influences mesenchymal stem cell fate through cadherin-2 and cadherin-11. Biomaterials, 2020, 254, 120127.	11.4	13
153	Streamlining the generation of an osteogenic graft by 3D culture of unprocessed bone marrow on ceramic scaffolds. Journal of Tissue Engineering and Regenerative Medicine, 2012, 6, 103-112.	2.7	12
154	Engineering New Bone via a Minimally Invasive Route Using Human Bone Marrow-Derived Stromal Cell Aggregates, Microceramic Particles, and Human Platelet-Rich Plasma Gel. Tissue Engineering - Part A, 2013, 19, 340-349.	3.1	12
155	Exploring the Materialâ€Induced Transcriptional Landscape of Osteoblasts on Bone Graft Materials. Advanced Healthcare Materials, 2015, 4, 1691-1700.	7.6	12
156	Evaluation of chondrogenesis within PEGT: PBT scaffolds with high PEG content. Journal of Biomedical Materials Research - Part A, 2006, 79A, 216-222.	4.0	11
157	Intra-scaffold continuous medium flow combines chondrocyte seeding and culture systems for tissue engineered trachea construction. Interactive Cardiovascular and Thoracic Surgery, 2008, 8, 27-30.	1.1	11
158	Relevance of bone graft viability in a goat transverse process model. Journal of Orthopaedic Research, 2009, 27, 1055-1059.	2.3	11
159	Functional Tissue Engineering Through Biofunctional Macromolecules and Surface Design. MRS Bulletin, 2010, 35, 584-590.	3.5	11
160	Bioinformatics-based selection of a model cell type for inÂvitro biomaterial testing. Biomaterials, 2013, 34, 5552-5561.	11.4	11
161	Biological and Tribological Assessment of Poly(Ethylene Oxide Terephthalate)/Poly(Butylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Regeneration. Advanced Healthcare Materials, 2016, 5, 232-243.	7.6	11
162	Monolithic calcium phosphate/poly(lactic acid) composite versus calcium phosphate-coated poly(lactic acid) for support of osteogenic differentiation of human mesenchymal stromal cells. Journal of Materials Science: Materials in Medicine, 2016, 27, 54.	3.6	11

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163	Calcium phosphates and silicon: exploring methods of incorporation. Biomaterials Research, 2017, 21, 6.	6.9	11
164	Oxidative stress in pancreatic alpha and beta cells as a selection criterion for biocompatible biomaterials. Biomaterials, 2021, 267, 120449.	11.4	11
165	Culture of Middle Ear Epithelium: A review. Acta Oto-Laryngologica, 1993, 113, 75-79.	0.9	9
166	'Smart' biomaterials and osteoinductivity. Nature Reviews Rheumatology, 2011, 7, 1-1.	8.0	9
167	Potential of embryonic stem cells for <i>in vivo</i> bone regeneration. Regenerative Medicine, 2008, 3, 783-785.	1.7	8
168	The physics of tissue formation with mesenchymal stem cells. Trends in Biotechnology, 2012, 30, 583-590.	9.3	8
169	Fabrication of Porous Ti<sub>6</sub>Al<sub>4</sub>V with Designed Structure by Rapid Prototyping Technology. Key Engineering Materials, 2007, 330-332, 1293-1296.	0.4	7
170	Comparison of Porous Ti<sub>6</sub>Al<sub>4</sub>V Made by Sponge Replication and Directly 3D Fiber Deposition and Cancellous Bone. Key Engineering Materials, 0, 330-332, 999-1002.	0.4	7
171	Assessment of Cellâ€"Material Interactions in Three Dimensions through Dispersed Coaggregation of Microsized Biomaterials into Tissue Spheroids. Small, 2022, 18, .	10.0	7
172	An Open Source Image Processing Method to Quantitatively Assess Tissue Growth after Non-Invasive Magnetic Resonance Imaging in Human Bone Marrow Stromal Cell Seeded 3D Polymeric Scaffolds. PLoS ONE, 2014, 9, e115000.	2.5	6
173	Goat Bone Tissue Engineering: Comparing an Intramuscular with a Posterolateral Lumbar Spine Location. Tissue Engineering - Part A, 2010, 16, 685-693.	3.1	5
174	Adhesion and proliferation of cells and bacteria on microchip with different surfaces microstructures. Biomedizinische Technik, 2016, 61, 475-482.	0.8	5
175	An antibody based approach for multi-coloring osteogenic and chondrogenic proteins in tissue engineered constructs. Biomedical Materials (Bristol), 2018, 13, 044102.	3.3	4
176	The Role of Pancreatic Alpha Cells and Endothelial Cells in the Reduction of Oxidative Stress in Pseudoislets. Frontiers in Bioengineering and Biotechnology, 2021, 9, 729057.	4.1	4
177	Critical Steps toward a Tissue-Engineered Cartilage Implant Using Embryonic Stem Cells. Tissue Engineering, 2008, 14, 135-147.	4.6	4
178	Intracellular degradation of microspheres based on cross-linked dextran hydrogels or amphiphilic block copolymers: a comparative raman microscopy study. International Journal of Nanomedicine, 2007, 2, 241-52.	6.7	4
179	Effect of HA-1A Monoclonal IGM Antibody on Endotoxin-Induced Proliferation of Cultured Rat Middle Ear Epithelium. Annals of Otology, Rhinology and Laryngology, 1995, 104, 226-230.	1.1	3
180	The Role of Alpha Cells in the Self-Assembly of Bioengineered Islets. Tissue Engineering - Part A, 2020, 27, 1055-1063.	3.1	3

#	ARTICLE	IF	CITATIONS
181	Model to Design Multilayer Tissue Engineering Scaffolds. Macromolecular Symposia, 2011, 309-310, 84-92.	0.7	2
182	<i>O</i>-Phenanthroline as modulator of the hypoxic and catabolic response in cartilage tissue-engineering models. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 724-732.	2.7	2
183	The response of three-dimensional pancreatic alpha and beta cell co-cultures to oxidative stress. PLoS ONE, 2022, 17, e0257578.	2.5	2
184	Development of materials for regenerative medicine: from clinical need to clinical application. , 2013, , 155-176.		1
185	PEOT/PBT Polymeric Pastes to Fabricate Additive Manufactured Scaffolds for Tissue Engineering. Frontiers in Bioengineering and Biotechnology, 2021, 9, 704185.	4.1	1
186	Cross-species Comparison of Ectopic Bone Formation in Biphasic Calcium Phosphate (BCP) and Hydroxyapatite (HA) Scaffolds. Tissue Engineering, 2006, .	4.6	1
187	A Rapid and Efficient Method for Expansion of Human Mesenchymal Stem Cells. Tissue Engineering, 2006, .	4.6	1
188	High-content imaging. , 0, , 85-100.		0
189	Introducing materiomics. , 0, , 1-12.		0
190	Microfabrication techniques in materiomics. , 0, , 51-66.		0
191	Bioassay development. , 0, , 67-84.		0
192	Biphasic Polymeric Shell-Core 3D Fiber Deposited Scaffolds Enhance Chondrocyte Differentiation. Materials Research Society Symposia Proceedings, 2006, 925, 1.	0.1	0
193	Computational analysis of high-throughput material screens. , 0, , 101-132.		0