jake e Barralet

List of Publications by Year
in descending order

179 papers	11,462 citations	20815 60 h-index	32838 100 g-index
181 all docs	181 docs citations	181 times ranked	10987 citing authors

#	Article	IF	Citations
1	Technological issues for the development of more efficient calcium phosphate bone cements: A critical assessment. Biomaterials, 2005, 26, 6423-6429.	11.4	376
2	Bioinorganics and biomaterials: Bone repair. Acta Biomaterialia, 2011, 7, 3013-3026.	8.3	364
3	Dicalcium phosphate cements: Brushite and monetite. Acta Biomaterialia, 2012, 8, 474-487.	8.3	352
4	Genipin-crosslinked catechol-chitosan mucoadhesive hydrogels for buccal drug delivery. Biomaterials, 2015, 37, 395-404.	11.4	334
5	Evaluation of sodium alginate for bone marrow cell tissue engineering. Biomaterials, 2003, 24, 3475-3481.	11.4	315
6	Osteoconduction and osteoinduction of low-temperature 3D printed bioceramic implants. Biomaterials, 2008, 29, 944-953.	11.4	311
7	The stimulation of angiogenesis and collagen deposition by copper. Biomaterials, 2010, 31, 824-831.	11.4	304
8	Precipitation casting of polycaprolactone for applications in tissue engineering and drug delivery. Biomaterials, 2004, 25, 315-325.	11.4	303
9	Carbonate substitution in precipitated hydroxyapatite: An investigation into the effects of reaction temperature and bicarbonate ion concentration. , 1998, 41, 79-86.		229
10	Resorbable Dicalcium Phosphate Bone Substitutes Prepared by 3D Powder Printing. Advanced Functional Materials, 2007, 17, 3940-3945.	14.9	218
11	Angiogenesis in Calcium Phosphate Scaffolds by Inorganic Copper Ion Release. Tissue Engineering - Part A, 2009, 15, 1601-1609.	3.1	204
12	Preparation of macroporous calcium phosphate cement tissue engineering scaffold. Biomaterials, 2002, 23, 3063-3072.	11.4	195
13	Ionic modification of calcium phosphate cement viscosity. Part I: hypodermic injection and strength improvement of apatite cement. Biomaterials, 2004, 25, 2187-2195.	11.4	195
14	Low temperature direct 3D printed bioceramics and biocomposites as drug release matrices. Journal of Controlled Release, 2007, 122, 173-180.	9.9	185
15	Accelerated mineralization of dense collagen-nano bioactive glass hybrid gels increases scaffold stiffness and regulates osteoblastic function. Biomaterials, 2011, 32, 8915-8926.	11.4	176
16	Mechanical activation and cement formation of Î²-tricalcium phosphate. Biomaterials, 2003, 24, 4123-4131.	11.4	165
17	Silver-doped calcium phosphate cements with antimicrobial activity. Acta Biomaterialia, 2011, 7, 4064-4070.	8.3	162
18	Ionic modification of calcium phosphate cement viscosity. Part II: hypodermic injection and strength improvement of brushite cement. Biomaterials, 2004, 25, 2197-2203.	11.4	155

#	ARTICLE	IF	CITATIONS
19	3D Powder Printing of Î²â€Tricalcium Phosphate Ceramics Using Different Strategies. Advanced Engineering Materials, 2008, 10, B67.	3.5	152
20	Biocompatibility of magnesium phosphate minerals and their stability under physiological conditions. Acta Biomaterialia, 2011, 7, 2678-2685.	8.3	145
21	Three-Dimensional Mineralization of Dense Nanofibrillar Collagenâ˜Bioglass Hybrid Scaffolds. Biomacromolecules, 2010, 11, 1470-1479.	5.4	142
22	In vitro ageing of brushite calcium phosphate cement. Biomaterials, 2003, 24, 4133-4141.	11.4	139
23	High-strength resorbable brushite bone cement with controlled drug-releasing capabilities. Acta Biomaterialia, 2009, 5, 43-49.	8.3	137
24	Interferon-Î³ plays a role in bone formation in vivo and rescues osteoporosis in ovariectomized mice. Journal of Bone and Mineral Research, 2011, 26, 1472-1483.	2.8	133
25	Direct Printing of Bioceramic Implants with Spatially Localized Angiogenic Factors. Advanced Materials, 2007, 19, 795-800.	21.0	132
26	Mucoadhesive chitosan hydrogels as rectal drug delivery vessels to treat ulcerative colitis. Acta Biomaterialia, 2017, 48, 247-257.	8.3	129
27	Ion adsorption behaviour of hydroxyapatite with different crystallinities. Colloids and Surfaces B: Biointerfaces, 2009, 74, 91-95.	5.0	128
28	Craniofacial vertical bone augmentation: A comparison between 3D printed monolithic monetite blocks and autologous onlay grafts in the rabbit. Biomaterials, 2009, 30, 6318-6326.	11.4	128
29	Influence of calcium phosphate crystal assemblies on the proliferation and osteogenic gene expression of rat bone marrow stromal cells. Biomaterials, 2007, 28, 1393-1403.	11.4	119
30	Silk fibroin derived polypeptide-induced biomineralization of collagen. Biomaterials, 2012, 33, 102-108.	11.4	118
31	Resorption of monetite granules in alveolar bone defects in human patients. Biomaterials, 2010, 31, 2762-2769.	11.4	111
32	The effect of autoclaving on the physical and biological properties of dicalcium phosphate dihydrate bioceramics: Brushite vs. monetite. Acta Biomaterialia, 2012, 8, 3161-3169.	8.3	109
33	Passive and Active In Vitro Resorption of Calcium and Magnesium Phosphate Cements by Osteoclastic Cells. Tissue Engineering - Part A, 2010, 16, 3687-3695.	3.1	108
34	Comparison of bone marrow cell growth on 2D and 3D alginate hydrogels. Journal of Materials Science: Materials in Medicine, 2005, 16, 515-519.	3.6	104
35	Thermal decomposition of synthesised carbonate hydroxyapatite. Journal of Materials Science: Materials in Medicine, 2002, 13, 529-533.	3.6	98
36	In vitro biodegradation of three brushite calcium phosphate cements by a macrophage cell-line. Biomaterials, 2006, 27, 4557-4565.	11.4	94

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37	Brushiteâ€“collagen composites for bone regeneration. Acta Biomaterialia, 2008, 4, 1315-1321.	8.3	94
38	High-Strength Apatitic Cement by Modification withÎ±-Hydroxy Acid Salts. Advanced Materials, 2003, 15, 2091-2094.	21.0	93
39	Bone marrow cell gene expression and tissue construct assembly using octacalcium phosphate microscaffolds. Biomaterials, 2006, 27, 2874-2881.	11.4	93
40	Osseointegration of dental implants in 3D-printed synthetic onlay grafts customized according to bone metabolic activity in recipient site. Biomaterials, 2014, 35, 5436-5445.	11.4	92
41	Simultaneous Immobilization of Bioactives During 3D Powder Printing of Bioceramic Drugâ€Release Matrices. Advanced Functional Materials, 2010, 20, 1585-1591.	14.9	89
42	Mollusk Glue Inspired Mucoadhesives for Biomedical Applications. Langmuir, 2012, 28, 14010-14017.	3.5	84
43	The importance of particle size and DNA condensation salt for calcium phosphate nanoparticle transfection. Biomaterials, 2008, 29, 3384-3392.	11.4	82
44	Biologically mediated resorption of brushite cement in vitro. Biomaterials, 2006, 27, 2178-2185.	11.4	81
45	Phase composition, mechanical performance and in vitro biocompatibility of hydraulic setting calcium magnesium phosphate cement. Acta Biomaterialia, 2010, 6, 1529-1535.	8.3	80
46	Bioinorganics and Wound Healing. Advanced Healthcare Materials, 2019, 8, e1900764.	7.6	80
47	Preparation of tricalcium phosphate/calcium pyrophosphate structures via rapid prototyping. Journal of Materials Science: Materials in Medicine, 2008, 19, 1559-1563.	3.6	79
48	Influence of powder/liquid mixing ratio on the performance of a restorative glass-ionomer dental cement. Biomaterials, 2003, 24, 4173-4179.	11.4	78
49	Modification of Calcium Phosphate Cement with Î±-Hydroxy Acids and Their Salts. Chemistry of Materials, 2005, 17, 1313-1319.	6.7	77
50	The effect of amorphous pyrophosphate on calcium phosphate cement resorption and bone generation. Biomaterials, 2013, 34, 6631-6637.	11.4	77
51	Strontium modified biocements with zero order release kinetics. Biomaterials, 2008, 29, 4691-4697.	11.4	76
52	Effect of sintering parameters on the density and microstructure of carbonate hydroxyapatite. Journal of Materials Science: Materials in Medicine, 2000, 11, 719-724.	3.6	73
53	In vitro degradation and in vivo resorption of dicalcium phosphate cement based grafts. Acta Biomaterialia, 2015, 26, 338-346.	8.3	72
54	Factors influencing calcium phosphate cement shelf-life. Biomaterials, 2005, 26, 3691-3697.	11.4	71

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55	Modeling vancomycin release kinetics from microporous calcium phosphate ceramics comparing static and dynamic immersion conditions. Acta Biomaterialia, 2008, 4, 1480-1486.	8.3	71
56	FTIR-monitoring of a fast setting brushite bone cement: effect of intermediate phases. Journal of Materials Chemistry, 2006, 16, 3199.	6.7	70
57	Collagen Biomineralization In Vivo by Sustained Release of Inorganic Phosphate Ions. Advanced Materials, 2010, 22, 1858-1862.	21.0	70
58	Vertical bone augmentation with 3Dâ€synthetic monetite blocks in the rabbit calvaria. Journal of Clinical Periodontology, 2011, 38, 1147-1153.	4.9	68
59	Cement from magnesium substituted hydroxyapatite. Journal of Materials Science: Materials in Medicine, 2005, 16, 455-460.	3.6	66
60	Amorphous Î±â€Tricalcium Phosphate: Preparation and Aqueous Setting Reaction. Journal of the American Ceramic Society, 2004, 87, 1126-1132.	3.8	64
61	Whisker-Reinforced Calcium Phosphate Cements. Journal of the American Ceramic Society, 2007, 90, 3694-3697.	3.8	64
62	Minimally invasive maxillofacial vertical bone augmentation using brushite based cements. Biomaterials, 2009, 30, 208-216.	11.4	61
63	Two-Dimensional Magnesium Phosphate Nanosheets Form Highly Thixotropic Gels That Up-Regulate Bone Formation. Nano Letters, 2016, 16, 4779-4787.	9.1	60
64	Hypoxia signalling manipulation for bone regeneration. Expert Reviews in Molecular Medicine, 2015, 17, e6.	3.9	59
65	Hydrocaffeic acidâ€“chitosan nanoparticles with enhanced stability, mucoadhesion and permeation properties. European Journal of Pharmaceutics and Biopharmaceutics, 2014, 88, 1026-1037.	4.3	58
66	Pore network modeling of reaction-diffusion in hierarchical porous particles: The effects of microstructure. Chemical Engineering Journal, 2017, 330, 1002-1011.	12.7	58
67	Cements from nanocrystalline hydroxyapatite. Journal of Materials Science: Materials in Medicine, 2004, 15, 407-411.	3.6	57
68	Rheological enhancement of mechanically activated ?-tricalcium phosphate cements. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2005, 73B, 1-6.	3.4	56
69	Temperature dependent setting kinetics and mechanical properties of Î²-TCPâ€“pyrophosphoric acid bone cement. Journal of Materials Chemistry, 2005, 15, 4955.	6.7	56
70	Elucidating the individual effects of calcium and phosphate ions on hMSCs by using composite materials. Acta Biomaterialia, 2015, 17, 1-15.	8.3	56
71	Effects of fibre reinforcement on the mechanical properties of brushite cement. Acta Biomaterialia, 2006, 2, 95-102.	8.3	55
72	Characterization of chlorhexidine-releasing, fast-setting, brushite bone cements. Acta Biomaterialia, 2008, 4, 1081-1088.	8.3	51

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73	Antimicrobial potency of alkali ion substituted calcium phosphate cements. Biomaterials, 2005, 26, 6880-6886.	11.4	49
74	The use of RANKL-coated brushite cement to stimulate bone remodelling. Biomaterials, 2008, 29, 3253-3259.	11.4	48
75	Melatonin Dietary Supplement as an Anti-Aging Therapy for Age-Related Bone Loss. Rejuvenation Research, 2014, 17, 341-346.	1.8	47
76	Exploring the Impact of Electrode Microstructure on Redox Flow Battery Performance Using a Multiphysics Pore Network Model. Journal of the Electrochemical Society, 2019, 166, A2121-A2130.	2.9	44
77	Mechanical Activation of Tetracalcium Phosphate. Journal of the American Ceramic Society, 2004, 87, 311-313.	3.8	43
78	Surfactant vesicle-mediated delivery of DNA vaccines via the subcutaneous route. International Journal of Pharmaceutics, 2004, 284, 31-41.	5.2	42
79	Osteopontin functions as an opsonin and facilitates phagocytosis by macrophages of hydroxyapatite-coated microspheres: Implications for bone wound healing. Bone, 2008, 43, 708-716.	2.9	42
80	Regulation of Osteoclast Growth and Fusion by mTOR/raptor and mTOR/rictor/Akt. Frontiers in Cell and Developmental Biology, 2017, 5, 54.	3.7	42
81	Resveratrol As Anti-Aging Therapy for Age-Related Bone Loss. Rejuvenation Research, 2014, 17, 439-445.	1.8	41
82	Newly identified interfibrillar collagen crosslinking suppresses cell proliferation and remodelling. Biomaterials, 2015, 54, 126-135.	11.4	41
83	Tissue Engineering of Human Biliary Epithelial Cells on Polyglycolic Acid/Polycaprolactone Scaffolds Maintains Long-Term Phenotypic Stability. Tissue Engineering, 2003, 9, 1037-1045.	4.6	40
84	Fibril formation pH controls intrafibrillar collagen biomineralization inÂvitro and inÂvivo. Biomaterials, 2015, 37, 252-259.	11.4	40
85	Top-down bottom-up graphene synthesis. Nano Futures, 2019, 3, 042003.	2.2	39
86	Ascorbic acid accelerates osteoclast formation and death. Bone, 2010, 46, 1336-1343.	2.9	38
87	Cement from nanocrystalline hydroxyapatite: Effect of calcium phosphate ratio. Journal of Materials Science: Materials in Medicine, 2005, 16, 1185-1190.	3.6	37
88	Mimicking oxygen delivery and waste removal functions of blood. Advanced Drug Delivery Reviews, 2017, 122, 84-104.	13.7	37
89	Formation of translucent hydroxyapatite ceramics by sintering in carbon dioxide atmospheres. Journal of Materials Science, 2003, 38, 3979-3993.	3.7	36
90	Synthesis and Structure of a Calcium Polyphosphate with a Unique Criss-Cross Arrangement of Helical Phosphate Chains. Chemistry of Materials, 2005, 17, 4642-4646.	6.7	36

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91	Cement Formulations in the Calcium Phosphate H2O-H3PO4-H4P2O7 System. Journal of the American Ceramic Society, 2005, 88, 3096-3103.	3.8	35
92	Effect of processing conditions of dicalcium phosphate cements on graft resorption and bone formation. Acta Biomaterialia, 2017, 53, 526-535.	8.3	35
93	Alkali ion substituted calcium phosphate cement formation from mechanically activated reactants. Journal of Materials Science: Materials in Medicine, 2005, 16, 423-427.	3.6	34
94	Real-time monitoring of the setting reaction of brushite-forming cement using isothermal differential scanning calorimetry. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2006, 79B, 360-364.	3.4	34
95	Collagen gel fibrillar density dictates the extent of mineralization in vitro. Soft Matter, 2011, 7, 9898.	2.7	34
96	In vitro transfer of keratinocytes: Comparison of transfer from fibrin membrane and delivery by aerosol spray. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2005, 73B, 221-228.	3.4	33
97	Mesenchymal stem cellâ€seeded multilayered dense collagenâ€silk fibroin hybrid for tissue engineering applications. Biotechnology Journal, 2011, 6, 1198-1207.	3.5	33
98	In vitro behavior of albumin-loaded carbonate hydroxyapatite gel. Journal of Biomedical Materials Research Part B, 2002, 60, 360-367.	3.1	31
99	Nanocrystalline Tetracalcium Phosphate Cement. Journal of Dental Research, 2004, 83, 425-428.	5.2	31
100	Amphiphilic peptide-loaded nanofibrous calcium phosphate microspheres promote hemostasis in vivo. Acta Biomaterialia, 2013, 9, 9194-9200.	8.3	31
101	Biomaterialâ€Stabilized Soft Tissue Healing for Healing of Criticalâ€Sized Bone Defects: the Masquelet Technique. Advanced Healthcare Materials, 2016, 5, 630-640.	7.6	31
102	Improving peptide-based assays to differentiate between vaccination and Mycobacterium bovis infection in cattle using nanoparticle carriers for adsorbed antigens. Journal of Controlled Release, 2005, 102, 551-561.	9.9	30
103	Magnesium-sputtered titanium for the formation of bioactive coatings. Acta Biomaterialia, 2009, 5, 2338-2347.	8.3	30
104	In vitro antibacterial efficacy of tetracycline hydrochloride adsorbed onto Bioâ€OssÂ® bone graft. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2010, 93B, 394-400.	3.4	30
105	An airway smooth muscle cell niche under physiological pulsatile flow culture using a tubular dense collagen construct. Biomaterials, 2013, 34, 1954-1966.	11.4	29
106	Electropolymerized Carbonic Anhydrase Immobilization for Carbon Dioxide Capture. Langmuir, 2014, 30, 6915-6919.	3.5	28
107	Electrocatalytic Oxygen Reduction Performance of Silver Nanoparticle Decorated Electrochemically Exfoliated Graphene. Langmuir, 2015, 31, 9718-9727.	3.5	27
108	Dual-setting brushiteâ€“silica gel cements. Acta Biomaterialia, 2015, 11, 467-476.	8.3	27

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109	Controlling Bone Graft Substitute Microstructure to Improve Bone Augmentation. Advanced Healthcare Materials, 2016, 5, 1646-1655.	7.6	27
110	The optimisation of the initial viscosity of an encapsulated glass-ionomer restorative following different mechanical mixing regimes. Journal of Dentistry, 2006, 34, 155-163.	4.1	26
111	Chelate Bonding Mechanism in a Novel Magnesium Phosphate Bone Cement. Journal of the American Ceramic Society, 2015, 98, 694-697.	3.8	26
112	<sup />Hypoxia Biomimicry to Enhance Monetite Bone Defect Repair. Tissue Engineering - Part A, 2017, 23, 1372-1381.	3.1	26
113	Stabilization of Amorphous Calcium Carbonate with Nanofibrillar Biopolymers. Advanced Functional Materials, 2012, 22, 3460-3469.	14.9	25
114	A pilot study: Alternative biomaterials in critical sized bone defect treatment. Injury, 2018, 49, 523-531.	1.7	25
115	Chemical characterization of a degradable polymeric bone adhesive containing hydrolysable fillers and interpretation of anomalous mechanical properties. Acta Biomaterialia, 2009, 5, 2072-2083.	8.3	24
116	Skeletal regeneration for segmental bone loss: Vascularised grafts, analogues and surrogates. Acta Biomaterialia, 2021, 136, 37-55.	8.3	24
117	Frozen delivery of brushite calcium phosphate cements. Acta Biomaterialia, 2008, 4, 1916-1923.	8.3	22
118	Phytic acid as alternative setting retarder enhanced biological performance of dicalcium phosphate cement in vitro. Scientific Reports, 2017, 7, 558.	3.3	22
119	Local delivery of iron chelators reduces in vivo remodeling of a calcium phosphate bone graft substitute. Acta Biomaterialia, 2016, 42, 411-419.	8.3	20
120	Perfluorodecalin and bone regeneration. , 2013, 25, 22-36.		20
121	Dynamic shrinkage behavior of hydroxyapatite and glass-reinforced hydroxyapatites. Journal of Materials Science, 2004, 39, 2205-2208.	3.7	19
122	Modified PMMA cements for a hydrolysis resistant metalâ€“polymer interface in orthopaedic applications. Acta Biomaterialia, 2005, 1, 671-676.	8.3	19
123	Aqueous decomposition behavior of solid peroxides: Effect of pH and buffer composition on oxygen and hydrogen peroxide formation. Acta Biomaterialia, 2022, 145, 390-402.	8.3	19
124	Antimicrobial properties of nanocrystalline tetracalcium phosphate cements. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2007, 83B, 132-137.	3.4	18
125	Reproducible quantification of osteoclastic activity: Characterization of a biomimetic calcium phosphate assay. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2014, 102, 903-912.	3.4	18
126	In vitro ion adsorption and cytocompatibility of dicalcium phosphate ceramics. Biomaterials Research, 2017, 21, 10.	6.9	18

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127	The Effects of Crystal Phase and Particle Morphology of Calcium Phosphates on Proliferation and Differentiation of Human Mesenchymal Stromal Cells. Advanced Healthcare Materials, 2016, 5, 1775-1785.	7.6	17
128	Development of Highly Functional Biomaterials by Decoupling and Recombining Material Properties. Advanced Materials, 2016, 28, 1803-1808.	21.0	17
129	Serum Protein Controlled Nanoparticle Synthesis. Advanced Functional Materials, 2011, 21, 2968-2977.	14.9	16
130	Moderate excess of pyruvate augments osteoclastogenesis. Biology Open, 2013, 2, 387-395.	1.2	16
131	Silk fibroin hydroxyapatite composite thermal stabilisation of carbonic anhydrase. Journal of Materials Chemistry A, 2015, 3, 19282-19287.	10.3	16
132	Materialâ€Induced Venosomeâ€Supported Bone Tubes. Advanced Science, 2019, 6, 1900844.	11.2	16
133	Dispersion modeling in pore networks: A comparison of common pore-scale models and alternative approaches. Journal of Contaminant Hydrology, 2020, 228, 103578.	3.3	16
134	Bioactivity of bone resorptive factor loaded on osteoconductive matrices: Stability post-dehydration. European Journal of Pharmaceutics and Biopharmaceutics, 2008, 70, 813-818.	4.3	15
135	Chelate setting of alkali ion substituted calcium phosphates. Ceramics International, 2015, 41, 10010-10017.	4.8	15
136	Tailoring Carbon Nanotube Microsphere Architectures with Controlled Porosity. Advanced Functional Materials, 2019, 29, 1903983.	14.9	15
137	Influence of calcium phosphate crystal morphology on the adhesion, spreading, and growth of bone derived cells. Journal of Biomedical Materials Research - Part A, 2009, 90A, 972-980.	4.0	14
138	Electrically Bloomed Platinum Nanoflowers on Exfoliated Graphene: An Efficient Alcohol Oxidation Catalyst. Journal of the Electrochemical Society, 2016, 163, D615-D621.	2.9	14
139	Composite Carbon Nanotube Microsphere Coatings for Use as Electrode Supports. Advanced Functional Materials, 2018, 28, 1803713.	14.9	14
140	Synthesis, characterization and properties of erbium-based nanofibres and nanorods. Nanotechnology, 2007, 18, 445606.	2.6	13
141	Brushite Cements from Polyphosphoric Acid, Calcium Phosphate Systems. Journal of the American Ceramic Society, 2007, 90, 1892-1898.	3.8	13
142	Intrinsic 3D Prestressing: A New Route for Increasing Strength and Improving Toughness of Hybrid Inorganic Biocements. Advanced Materials, 2017, 29, 1701035.	21.0	12
143	Ultrasonic Phosphate Bonding of Nanoparticles. Advanced Materials, 2013, 25, 5953-5958.	21.0	11
144	Electrically wired enzyme/TiO2 composite for glucose detection. Materials Science and Engineering C, 2017, 76, 991-996.	7.3	11

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145	Thermal Performance of Mechanically Activated Tetracalcium Phosphate. Journal of the American Ceramic Society, 2005, 88, 1327-1330.	3.8	10
146	Cortical bone screw fixation in ionically modified apatite cements. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2005, 73B, 238-243.	3.4	10
147	Graphene modified nanosized Ag electrocomposites. Materials Research Bulletin, 2017, 89, 42-50.	5.2	10
148	The Role of the Airâ^'Liquid Interface in Protein-Mediated Biomineralization of Calcium Carbonate. Crystal Growth and Design, 2011, 11, 803-810.	3.0	9
149	Low temperature fabrication of spherical brushite granules by cement paste emulsion. Journal of Materials Science: Materials in Medicine, 2012, 23, 2631-2637.	3.6	9
150	A new class of bioactive glasses: Calciumâ€“magnesium sulfophosphates. Journal of Biomedical Materials Research - Part A, 2014, 102, 2842-2848.	4.0	9
151	Intra-tumor delivery of zoledronate mitigates metastasis-induced osteolysis superior to systemic administration. Journal of Bone Oncology, 2017, 6, 8-15.	2.4	9
152	Cavitation Mediated 3D Microstructured Architectures from Nanocarbon. Advanced Functional Materials, 2018, 28, 1706832.	14.9	9
153	Preservation of Blood Vessels with an Oxygen Generating Composite. Advanced Healthcare Materials, 2018, 7, e1701338.	7.6	8
154	Powerful amorphous mixed metal catalyst for efficient water-oxidation. Materials Today Energy, 2018, 9, 247-253.	4.7	8
155	The effect of hot pressing on the physical properties of glass reinforced hydroxyapatite. Journal of Materials Science: Materials in Medicine, 2004, 15, 705-710.	3.6	7
156	Hierarchical Stable Enzyme Microenvironments for Highâ€Temperature Stability in Amine Solvents. Particle and Particle Systems Characterization, 2014, 31, 1091-1096.	2.3	7
157	Biomaterialâ€Induction of a Transplantable Angiosome. Advanced Functional Materials, 2020, 30, 1905115.	14.9	6
158	Sustained steroid release in pulmonary inflammation model. Biomaterials, 2010, 31, 6050-6059.	11.4	5
159	Treatment of Criticalâ€Sized Calvarial Defects in Rats with Preimplanted Transplants. Advanced Healthcare Materials, 2019, 8, e1900722.	7.6	5
160	Best practices for enhancing surgical research: a perspective from the Canadian Association of Chairs of Surgical Research. Canadian Journal of Surgery, 2019, 62, 488-498.	1.2	5
161	2D hematene, a bioresorbable electrocatalytic support for glucose oxidation. 2D Materials, 2020, 7, 025044.	4.4	5
162	Characterization of biomimetic calcium phosphate labeled with fluorescent dextran for quantification of osteoclastic activity. Acta Biomaterialia, 2015, 20, 140-146.	8.3	4

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163	Effects of Oxygen and Glucose on Bone Marrow Mesenchymal Stem Cell Culture. Advanced Biology, 2020, 4, e2000094.	3.0	4
164	An approach to compare the quality of cancellous bone from the femoral necks of healthy and osteoporotic patients through compression testing and microcomputed tomography imaging. McGill Journal of Medicine, 2006, 9, 102-7.	0.1	4
165	Carvable calcium phosphate bone substitute material. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2007, 83B, 1-8.	3.4	3
166	Adhesion and Growth of Bone Marrow Stromal Cells on Modified Alginate Hydrogels. Tissue Engineering, 2004, 10, 1480-1491.	4.6	3
167	Self-assembled photoactive heterojunction phase gradient. Journal of Materials Chemistry A, 2014, 2, 8868-8874.	10.3	2
168	Powder Conductivity Assessment Using a Disposable 3D Printed Device. Electroanalysis, 2018, 30, 1897-1901.	2.9	2
169	Selective exposure of platinum catalyst embedded in protective oxide layer on conductive titanium carbide support. Materials Today Energy, 2019, 13, 353-361.	4.7	1
170	Self-oxygenating scaffolds for anoxic culture of adipose tissue. Frontiers in Bioengineering and Biotechnology, 0, 4, .	4.1	1
171	Bruschit-Knochenzemente aus biphasigen b-Tricalciumphosphat/ Calciumpyrophosphat Keramiken. BIOmaterialien: Offizielles Organ Der Deutschen Gesellschaft Fuer Biomaterialien, 2004, 5, .	0.1	0
172	Axial vascularization of engineered bone for maxillofacial defects. International Journal of Oral and Maxillofacial Surgery, 2015, 44, e108-e109.	1.5	0
173	Ideal Amphipathic Peptdes Coupled to Nanofibrous Micropheres Reduce Hemorrhage In Vivo. Blood, 2010, 116, 2204-2204.	1.4	0
174	The effect of Iron chelators on bioceramic bone graft remodelling.. Frontiers in Bioengineering and Biotechnology, 0, 4, .	4.1	0
175	Engineering mediatorless glucose oxidase microbioreactor. Frontiers in Bioengineering and Biotechnology, 0, 4, .	4.1	0
176	Injectable bone regeneration biomaterial with analgesic properties. Frontiers in Bioengineering and Biotechnology, 0, 4, .	4.1	0
177	Biodegradable spherical granules for bone healing of critical-size cranial defects in growing rabbits. Frontiers in Bioengineering and Biotechnology, 0, 4, .	4.1	0
178	Oxygen delivery augmented bone formation from transplanted bone marrow. Frontiers in Bioengineering and Biotechnology, 0, 4, .	4.1	0
179	Engineering the Masquelet technique. Frontiers in Bioengineering and Biotechnology, 0, 4, .	4.1	0