Rainer Detsch

List of Publications by Year
in descending order

160	6,325	53789 45	88628 70
papers	citations	h-index	g-index
167	167	167	8201
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Fabrication of alginateâ€“gelatin crosslinked hydrogel microcapsules and evaluation of the microstructure and physico-chemical properties. Journal of Materials Chemistry B, 2014, 2, 1470.	5.8	336
2	A novel antibacterial titania coating: Metal ion toxicity and in vitro surface colonization. Journal of Materials Science: Materials in Medicine, 2005, 16, 883-888.	3.6	265
3	Evaluation of Fibroblasts Adhesion and Proliferation on Alginate-Gelatin Crosslinked Hydrogel. PLoS ONE, 2014, 9, e107952.	2.5	201
4	Formation of osteoclast-like cells on HA and TCP ceramics. Acta Biomaterialia, 2008, 4, 139-148.	8.3	162
5	Evaluation of an alginateâ€“gelatine crosslinked hydrogel for bioplotting. Biofabrication, 2015, 7, 025001.	7.1	133
6	<i>In vitro</i>-Osteoclastic Activity Studies on Surfaces of 3D Printed Calcium Phosphate Scaffolds. Journal of Biomaterials Applications, 2011, 26, 359-380.	2.4	128
7	The chemical composition of synthetic bone substitutes influences tissue reactions<i>in vivo</i>: histological and histomorphometrical analysis of the cellular inflammatory response to hydroxyapatite, beta-tricalcium phosphate and biphasic calcium phosphate ceramics. Biomedical Materials (Bristol), 2012, 7, 015005.	3.3	119
8	Alginate-based hydrogels with improved adhesive properties for cell encapsulation. International Journal of Biological Macromolecules, 2015, 78, 72-78.	7.5	118
9	The role of osteoclasts in bone tissue engineering. Journal of Tissue Engineering and Regenerative Medicine, 2015, 9, 1133-1149.	2.7	108
10	In vitro and in vivo Biocompatibility of Alginate Dialdehyde/Gelatin Hydrogels with and without Nanoscaled Bioactive Glass for Bone Tissue Engineering Applications. Materials, 2014, 7, 1957-1974.	2.9	107
11	Designing Porous Bone Tissue Engineering Scaffolds with Enhanced Mechanical Properties from Composite Hydrogels Composed of Modified Alginate, Gelatin, and Bioactive Glass. ACS Biomaterials Science and Engineering, 2016, 2, 2240-2254.	5.2	100
12	Behavior of Encapsulated MG-63 Cells in RGD and Gelatine-Modified Alginate Hydrogels. Tissue Engineering - Part A, 2014, 20, 2140-2150.	3.1	98
13	Recycling of pre-stabilized municipal waste incinerator fly ash and soda-lime glass into sintered glass-ceramics. Journal of Cleaner Production, 2015, 89, 224-230.	9.3	97
14	The resorption of nanocrystalline calcium phosphates by osteoclast-like cells. Acta Biomaterialia, 2010, 6, 3223-3233.	8.3	87
15	Evaluation of Electrospun Poly(Îµ-Caprolactone)/Gelatin Nanofiber Mats Containing Clove Essential Oil for Antibacterial Wound Dressing. Pharmaceutics, 2019, 11, 570.	4.5	85
16	Indirect rapid prototyping of biphasic calcium phosphate scaffolds as bone substitutes: influence of phase composition, macroporosity and pore geometry on mechanical properties. Journal of Materials Science: Materials in Medicine, 2010, 21, 3119-3127.	3.6	81
17	Hyaluronic Acidâ€Based Bioink Composition Enabling 3D Bioprinting and Improving Quality of Deposited Cartilaginous Extracellular Matrix. Advanced Healthcare Materials, 2020, 9, e2000737.	7.6	81
18	3D printed oxidized alginate-gelatin bioink provides guidance for C2C12 muscle precursor cell orientation and differentiation via shear stress during bioprinting. Biofabrication, 2020, 12, 045005.	7.1	81

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19	Improving alginate printability for biofabrication: establishment of a universal and homogeneous pre-crosslinking technique. Biofabrication, 2020, 12, 045004.	7.1	81
20	Bone formation and degradation of a highly porous biphasic calcium phosphate ceramic in presence of BMP-7, VEGF and mesenchymal stem cells in an ectopic mouse model. Journal of Cranio-Maxillo-Facial Surgery, 2010, 38, 423-430.	1.7	79
21	Development of biocompatible and fully bioabsorbable PLA/Mg films for tissue regeneration applications. Acta Biomaterialia, 2019, 98, 114-124.	8.3	78
22	Polymer-Bioactive Glass Composite Filaments for 3D Scaffold Manufacturing by Fused Deposition Modeling: Fabrication and Characterization. Frontiers in Bioengineering and Biotechnology, 2020, 8, 552.	4.1	78
23	Evaluation of Angiogenesis of Bioactive Glass in the Arteriovenous Loop Model. Tissue Engineering - Part C: Methods, 2013, 19, 479-486.	2.1	77
24	3D Printing of Piezoelectric Barium Titanate-Hydroxyapatite Scaffolds with Interconnected Porosity for Bone Tissue Engineering. Materials, 2020, 13, 1773.	2.9	77
25	Increase in VEGF secretion from human fibroblast cells by bioactive glass S53P4 to stimulate angiogenesis in bone. Journal of Biomedical Materials Research - Part A, 2014, 102, 4055-4061.	4.0	73
26	Electrically Conductive and 3Dâ€Printable Oxidized Alginateâ€Gelatin Polypyrrole:PSS Hydrogels for Tissue Engineering. Advanced Healthcare Materials, 2021, 10, e2001876.	7.6	70
27	Different Calcium Phosphate Granules for 3â€D Printing of Bone Tissue Engineering Scaffolds. Advanced Engineering Materials, 2009, 11, B41.	3.5	69
28	3D-Cultivation of bone marrow stromal cells on hydroxyapatite scaffolds fabricated by dispense-plotting and negative mould technique. Journal of Materials Science: Materials in Medicine, 2008, 19, 1491-1496.	3.6	67
29	Engineering of Metabolic Pathways by Artificial Enzyme Channels. Frontiers in Bioengineering and Biotechnology, 2015, 3, 168.	4.1	67
30	Taking a deep look: modern microscopy technologies to optimize the design and functionality of biocompatible scaffolds for tissue engineering in regenerative medicine. Journal of the Royal Society Interface, 2013, 10, 20130263.	3.4	63
31	Oxidized Alginate-Gelatin Hydrogel: A Favorable Matrix for Growth and Osteogenic Differentiation of Adipose-Derived Stem Cells in 3D. ACS Biomaterials Science and Engineering, 2017, 3, 1730-1737.	5.2	62
32	Hybrid hydrogels based on keratin and alginate for tissue engineering. Journal of Materials Chemistry B, 2014, 2, 5441-5451.	5.8	60
33	Ionically and Enzymatically Dual Cross-Linked Oxidized Alginate Gelatin Hydrogels with Tunable Stiffness and Degradation Behavior for Tissue Engineering. ACS Biomaterials Science and Engineering, 2020, 6, 3899-3914.	5.2	59
34	Antibacterial 45S5 BioglassÂ®-based scaffolds reinforced with genipin cross-linked gelatin for bone tissue engineering. Journal of Materials Chemistry B, 2015, 3, 3367-3378.	5.8	57
35	3D printing and characterization of human nasoseptal chondrocytes laden dual crosslinked oxidized alginate-gelatin hydrogels for cartilage repair approaches. Materials Science and Engineering C, 2020, 116, 111189.	7.3	57
36	Injectable self-gelling composites for bone tissue engineering based on gellan gum hydrogel enriched with different bioglasses. Biomedical Materials (Bristol), 2014, 9, 045014.	3.3	56

#	Article	IF	Citations
37	Osteoblast and osteoclast responses to A/B type carbonate-substituted hydroxyapatite ceramics for bone regeneration. Biomedical Materials (Bristol), 2017, 12, 035008.	3.3	55
38	Accelerated Degradation Behavior and Cytocompatibility of Pure Iron Treated with Sandblasting. ACS Applied Materials & Interfaces, 2016, 8, 26482-26492.	8.0	54
39	Biofabrication of 3D Alginate-Based Hydrogel for Cancer Research: Comparison of Cell Spreading, Viability, and Adhesion Characteristics of Colorectal HCT116 Tumor Cells. Tissue Engineering - Part C: Methods, 2016, 22, 708-715.	2.1	54
40	Electrophoretic deposition of tetracycline hydrochloride loaded halloysite nanotubes chitosan/bioactive glass composite coatings for orthopedic implants. Surface and Coatings Technology, 2017, 327, 146-157.	4.8	52
41	PDLLA scaffolds with Cuâ€and Znâ€doped bioactive glasses having multifunctional properties for bone regeneration. Journal of Biomedical Materials Research - Part A, 2017, 105, 746-756.	4.0	52
42	Effects of Cuâ€doped 45S5 bioactive glass on the lipid peroxidationâ€associated growth of human osteoblastâ€like cells <i>in vitro</i>. Journal of Biomedical Materials Research - Part A, 2014, 102, 3556-3561.	4.0	51
43	In vitro reactivity of Sr-containing bioactive glass (type 1393) nanoparticles. Journal of Non-Crystalline Solids, 2014, 387, 41-46.	3.1	50
44	Static and dynamic cultivation of bone marrow stromal cells on biphasic calcium phosphate scaffolds derived from an indirect rapid prototyping technique. Journal of Materials Science: Materials in Medicine, 2010, 21, 3039-3048.	3.6	48
45	Ion Release, Hydroxyapatite Conversion, and Cytotoxicity of Boronâ€Containing Bioactive Glass Scaffolds. International Journal of Applied Glass Science, 2016, 7, 206-215.	2.0	48
46	Cancer research by means of tissue engineering â€“ is there a rationale?. Journal of Cellular and Molecular Medicine, 2013, 17, 1197-1206.	3.6	47
47	Generation of composites for bone tissue-engineering applications consisting of gellan gum hydrogels mineralized with calcium and magnesium phosphate phases by enzymatic means. Journal of Tissue Engineering and Regenerative Medicine, 2016, 10, 938-954.	2.7	47
48	Hydrogel matrices based on elastin and alginate for tissue engineering applications. International Journal of Biological Macromolecules, 2018, 114, 614-625.	7.5	45
49	How Degradation of Calcium Phosphate Bone Substitute Materials is influenced by Phase Composition and Porosity. Advanced Engineering Materials, 2011, 13, 342-350.	3.5	44
50	Vascular Tissue Engineering: Effects of Integrating Collagen into a PCL Based Nanofiber Material. BioMed Research International, 2017, 2017, 1-11.	1.9	44
51	Development and characterization of multi-element doped hydroxyapatite bioceramic coatings on metallic implants for orthopedic applications. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2018, 57, 55-65.	1.9	44
52	Phase-specific bioactivity and altered Ostwald ripening pathways of calcium carbonate polymorphs in simulated body fluid. RSC Advances, 2019, 9, 18232-18244.	3.6	44
53	Influence of zinc ions on structure, bioactivity, biocompatibility and antibacterial potential of melt-derived and gel-derived glasses from CaO-SiO2 system. Journal of Non-Crystalline Solids, 2019, 511, 86-99.	3.1	44
54	Cu-releasing bioactive glass/polycaprolactone coating on Mg with antibacterial and anticorrosive properties for bone tissue engineering. Biomedical Materials (Bristol), 2018, 13, 015001.	3.3	43

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55	45S5 bioactive glass-based scaffolds coated with cellulose nanowhiskers for bone tissue engineering. RSC Advances, 2014, 4, 56156-56164.	3.6	39
56	Bioactive coating of zirconia toughened alumina ceramic implants improves cancellous osseointegration. Scientific Reports, 2019, 9, 16692.	3.3	38
57	Bioactive glass based scaffolds incorporating gelatin/manganese doped mesoporous bioactive glass nanoparticle coating. Ceramics International, 2019, 45, 14608-14613.	4.8	37
58	Fabrication and cytotoxicity assessment of novel polysiloxane/bioactive glass films for biomedical applications. Ceramics International, 2016, 42, 15442-15448.	4.8	36
59	Complex mechanical behavior of human articular cartilage and hydrogels for cartilage repair. Acta Biomaterialia, 2020, 118, 113-128.	8.3	36
60	Soft-matrices based on silk fibroin and alginate for tissue engineering. International Journal of Biological Macromolecules, 2016, 93, 1420-1431.	7.5	35
61	Ga and Ce ion-doped phosphate glass fibres with antibacterial properties and their composite for wound healing applications. Journal of Materials Chemistry B, 2019, 7, 6981-6993.	5.8	35
62	Biofabrication of a co-culture system in an osteoid-like hydrogel matrix. Biofabrication, 2017, 9, 025016.	7.1	34
63	Macromolecular interactions in alginateâ€“gelatin hydrogels regulate the behavior of human fibroblasts. Journal of Bioactive and Compatible Polymers, 2017, 32, 309-324.	2.1	34
64	Micropatterned Downâ€Converting Coating for White Bioâ€Hybrid Lightâ€Emitting Diodes. Advanced Functional Materials, 2017, 27, 1601792.	14.9	33
65	Development and characterization of niobium-releasing silicate bioactive glasses for tissue engineering applications. Journal of the European Ceramic Society, 2018, 38, 871-876.	5.7	33
66	Osteogenic differentiation of umbilical cord and adipose derived stem cells onto highly porous 45S5 Bioglass^{Â®}â€based scaffolds. Journal of Biomedical Materials Research - Part A, 2015, 103, 1029-1037.	4.0	32
67	Synthesis and In Vitro Activity Assessment of Novel Silicon Oxycarbide-Based Bioactive Glasses. Materials, 2016, 9, 959.	2.9	31
68	Studies on Cell Compatibility, Antibacterial Behavior, and Zeta Potential of Ag-Containing Polydopamine-Coated Bioactive Glass-Ceramic. Materials, 2019, 12, 500.	2.9	31
69	Bioactive layers based on black glasses on titanium substrates. Journal of the American Ceramic Society, 2018, 101, 590-601.	3.8	30
70	45S5 BioglassÂ®-derived scaffolds coated with organicâ€“inorganic hybrids containing graphene. Materials Science and Engineering C, 2013, 33, 3592-3600.	7.3	29
71	Cell adhesion evaluation of laser-sintered HAp and 45S5 bioactive glass coatings on micro-textured zirconia surfaces using MC3T3-E1 osteoblast-like cells. Materials Science and Engineering C, 2020, 109, 110492.	7.3	29
72	Biodegradable nanostructures: Degradation process and biocompatibility of iron oxide nanostructured arrays. Materials Science and Engineering C, 2018, 85, 203-213.	7.3	28

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73	Galliumâ€•and Ceriumâ€Doped Phosphate Glasses with Antibacterial Properties for Medical Applications. Advanced Engineering Materials, 2020, 22, 1901577.	3.5	28
74	Sterilization effects on the physical properties and cytotoxicity of poly(glycerol sebacate). Materials Letters, 2013, 105, 32-35.	2.6	27
75	Fabrication of Cell-Loaded Two-Phase 3D Constructs for Tissue Engineering. Materials, 2016, 9, 887.	2.9	27
76	Evaluation of in vitro properties of 3D micro-macro porous zirconia scaffolds coated with 58S bioactive glass using MG-63 osteoblast-like cells. Journal of the European Ceramic Society, 2019, 39, 2545-2558.	5.7	27
77	45S5 BioglassÂ®â€“MWCNT composite: processing and bioactivity. Journal of Materials Science: Materials in Medicine, 2015, 26, 199.	3.6	26
78	Surface Modification of SPIONs in PHBV Microspheres for Biomedical Applications. Scientific Reports, 2018, 8, 7286.	3.3	26
79	Antibacterial activity and biocompatibility of zein scaffolds containing silver-doped bioactive glass. Biomedical Materials (Bristol), 2018, 13, 065006.	3.3	26
80	Initial Attachment of rMSC and MGâ€63 Cells on Patterned BioglassÂ® Substrates. Advanced Engineering Materials, 2012, 14, B38.	3.5	25
81	Formation and<i>in vitro</i>biocompatibility of biomimetic hydroxyapatite coatings on chemically treated carbon substrates. Journal of Biomedical Materials Research - Part A, 2014, 102, 193-203.	4.0	25
82	Evaluation of hydrogel matrices for vessel bioplotting: Vascular cell growth and viability. Journal of Biomedical Materials Research - Part A, 2016, 104, 577-585.	4.0	25
83	Neuronal Differentiation from Induced Pluripotent Stem Cell-Derived Neurospheres by the Application of Oxidized Alginate-Gelatin-Laminin Hydrogels. Biomedicines, 2021, 9, 261.	3.2	25
84	Encapsulation of Mesenchymal Stem Cells Improves Vascularization of Alginate-Based Scaffolds. Tissue Engineering - Part A, 2018, 24, 1320-1331.	3.1	23
85	Magnetic Glass Ceramics by Sintering of Borosilicate Glass and Inorganic Waste. Materials, 2014, 7, 5565-5580.	2.9	22
86	Towards the synthesis of an Mg-containing silicate glassâ€“ceramic to be used as a scaffold for cementum/alveolar bone regeneration. Ceramics International, 2014, 40, 16287-16298.	4.8	22
87	Bioglass^{Â®}/chitosan-polycaprolactone bilayered composite scaffolds intended for osteochondral tissue engineering. Journal of Biomedical Materials Research - Part A, 2014, 102, n/a-n/a.	4.0	22
88	Development of 3D Biofabricated Cell Laden Hydrogel Vessels and a Lowâ€Cost Desktop Printed Perfusion Chamber for In Vitro Vessel Maturation. Macromolecular Bioscience, 2019, 19, e1900245.	4.1	22
89	Comparison of Hydrogels for the Development of Well-Defined 3D Cancer Models of Breast Cancer and Melanoma. Cancers, 2020, 12, 2320.	3.7	22
90	In-vitro mechanical and biological evaluation of novel zirconia reinforced bioglass scaffolds for bone repair. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 114, 104164.	3.1	22

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91	Fabrication of Tailored Hydroxyapatite Scaffolds: Comparison between a Direct and an Indirect Rapid Prototyping Technique. Key Engineering Materials, 2007, 361-363, 915-918.	0.4	21
92	Hydrogel films and microcapsules based on soy protein isolate combined with alginate. Journal of Applied Polymer Science, 2017, 134, .	2.6	20
93	In-vitro study of the bioactivity and cytotoxicity response of Ti surfaces modified by Nb and Mo diffusion treatments. Surface and Coatings Technology, 2018, 335, 148-158.	4.8	20
94	In Vitro Osteocompatibility and Enhanced Biocorrosion Resistance of Diammonium Hydrogen Phosphate-Pretreated/Poly(ether imide) Coatings on Magnesium for Orthopedic Application. ACS Applied Materials & Interfaces, 2019, 11, 29667-29680.	8.0	20
95	Mechanical properties of cell- and microgel bead-laden oxidized alginate-gelatin hydrogels. Biomaterials Science, 2021, 9, 3051-3068.	5.4	20
96	Role of ZnO additions on the Î²/Î± phase relation in TCP based materials: Phase stability, properties, dissolution and biological response. Journal of the European Ceramic Society, 2014, 34, 1375-1385.	5.7	19
97	Amorphous Carbon Coatings for Total Knee Replacementsâ€"Part I: Deposition, Cytocompatibility, Chemical and Mechanical Properties. Polymers, 2021, 13, 1952.	4.5	19
98	Processing, physico-chemical characterisation and in vitro evaluation of silicon containing Î²-tricalcium phosphate ceramics. Materials Science and Engineering C, 2011, 31, 531-539.	7.3	18
99	Cytotoxicity, chemical stability, and surface properties of ferroelectric ceramics for biomaterials. Journal of the American Ceramic Society, 2018, 101, 440-449.	3.8	18
100	Encapsulation of Rat Bone Marrow Derived Mesenchymal Stem Cells in Alginate Dialdehyde/Gelatin Microbeads with and without Nanoscaled Bioactive Glass for In Vivo Bone Tissue Engineering. Materials, 2018, 11, 1880.	2.9	18
101	Advanced alginate-based hydrogels. Materials Today, 2015, 18, 590-591.	14.2	17
102	Highâ€resolution synchrotron <scp>X</scp>â€ray analysis of bioglassâ€enriched hydrogels. Journal of Biomedical Materials Research - Part A, 2016, 104, 1194-1201.	4.0	17
103	Structural characterization and evaluation of antibacterial and angiogenic potential of gallium-containing melt-derived and gel-derived glasses from CaO-SiO2 system. Ceramics International, 2018, 44, 22698-22709.	4.8	17
104	Biomimetic Calcium Phosphate Coatings for Bioactivation of Titanium Implant Surfaces: Methodological Approach and In Vitro Evaluation of Biocompatibility. Materials, 2021, 14, 3516.	2.9	17
105	A New Printable Alginate/Hyaluronic Acid/Gelatin Hydrogel Suitable for Biofabrication of In Vitro and In Vivo Metastatic Melanoma Models. Advanced Functional Materials, 2022, 32, 2107993.	14.9	17
106	Novel porous Al₂O₃-SiO₂-TiO₂ bone grafting materials: Formation and characterization. Journal of Biomaterials Applications, 2014, 28, 813-824.	2.4	16
107	Biofabrication of vessel grafts based on natural hydrogels. Current Opinion in Biomedical Engineering, 2017, 2, 83-89.	3.4	16
108	Cell laden alginate-keratin based composite microcapsules containing bioactive glass for tissue engineering applications. Journal of Materials Science: Materials in Medicine, 2018, 29, 185.	3.6	16

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109	Cellular Response to Solâ€"Gel Hybrid Materials Releasing Boron and Calcium Ions. ACS Biomaterials Science and Engineering, 2021, 7, 491-506.	5.2	16
110	An Inverse Thermogelling Bioink Based on an ABA-Type Poly(2-oxazoline) Amphiphile. Biomacromolecules, 2021, 22, 3017-3027.	5.4	16
111	Nanoscale bioactive glass activates osteoclastic differentiation of RAW 264.7 cells. Nanomedicine, 2016, 11, 1093-1105.	3.3	15
112	Synthesis, Characterization, Antibacterial Properties, and In Vitro Studies of Selenium and Strontium Co-Substituted Hydroxyapatite. International Journal of Molecular Sciences, 2021, 22, 4246.	4.1	15
113	Biocompatibility of submicron Bioglass^{Â®} powders obtained by a topâ€down approach. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2014, 102, 952-961.	3.4	14
114	Bottom-Up Assembly of Silica and Bioactive Glass Supraparticles with Tunable Hierarchical Porosity. Langmuir, 2018, 34, 2063-2072.	3.5	14
115	Hybrid particles derived from alendronate and bioactive glass for treatment of osteoporotic bone defects. Journal of Materials Chemistry B, 2019, 7, 796-808.	5.8	14
116	Induction of VEGF secretion from bone marrow stromal cell line (ST-2) by the dissolution products of mesoporous silica glass particles containing CuO and SrO. Journal of Non-Crystalline Solids, 2018, 500, 217-224.	3.1	13
117	Advanced ADA-GEL bioink for bioprinted artificial cancer models. Bioprinting, 2021, 23, e00145.	5.8	13
118	A novel method for producing electron transparent films of interfaces between cells and biomaterials. Journal of Materials Science: Materials in Medicine, 2008, 19, 467-470.	3.6	12
119	Additive manufacturing of cell-loaded alginate enriched with alkaline phosphatase for bone tissue engineering application. BioNanoMaterials, 2014, 15, .	1.4	12
120	Solâ€"gel processing of novel bioactive Mg-containing silicate scaffolds for alveolar bone regeneration. Journal of Biomaterials Applications, 2016, 30, 740-749.	2.4	12
121	Proangiogenic effects of tumor cells on endothelial progenitor cells vary with tumor type in an in <i>vitro</i> and in vivo rat model. FASEB Journal, 2018, 32, 5587-5601.	0.5	12
122	Iron surface functionalization system - Iron oxide nanostructured arrays with polycaprolactone coatings: Biodegradation, cytocompatibility, and drug release behavior. Applied Surface Science, 2019, 492, 669-682.	6.1	12
123	Differential Responses to Bioink-Induced Oxidative Stress in Endothelial Cells and Fibroblasts. International Journal of Molecular Sciences, 2021, 22, 2358.	4.1	12
124	3D printed poly(hydroxybutyrate-co-hydroxyvalerate)â€"45S5 bioactive glass composite resorbable scaffolds suitable for bone regeneration. Journal of Materials Research, 2021, 36, 4000-4012.	2.6	12
125	From Thermogelling Hydrogels toward Functional Bioinks: Controlled Modification and Cytocompatible Crosslinking. Macromolecular Bioscience, 2021, 21, e2100122.	4.1	12
126	Influence of Phase Composition on Degradation and Resorption of Biphasic Calcium Phosphate Ceramics. Key Engineering Materials, 2007, 361-363, 1043-1046.	0.4	11

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127	Pulse electrodeposition and characterization of non-continuous, multi-element-doped hydroxyapatite bioceramic coatings. Journal of Solid State Electrochemistry, 2018, 22, 555-566.	2.5	11
128	Influence of In-Situ Electrochemical Oxidation on Implant Surface and Colonizing Microorganisms Evaluated by Scanning Electron Microscopy. Materials, 2019, 12, 3977.	2.9	11
129	Modification of in vitro degradation behavior of pure iron with ultrasonication treatment: Comparison of two different pseudo-physiological solutions. Materials Science and Engineering C, 2019, 95, 275-285.	7.3	11
130	Top-down Processing of Submicron 45S5 BioglassÂ® for Enhanced in Vitro Bioactivity and Biocompatibility. Procedia Engineering, 2015, 102, 534-541.	1.2	10
131	Cell specificity of magnetic cell seeding approach to hydrogel colonization. Journal of Biomedical Materials Research - Part A, 2017, 105, 2948-2957.	4.0	10
132	Bioactive glass coating using aerosol deposition. Ceramics International, 2019, 45, 14728-14732.	4.8	10
133	Evaluation of in vivo angiogenetic effects of copper doped bioactive glass scaffolds in the AV loop model. Biomedical Glasses, 2016, 2, .	2.4	9
134	Biofunctionalization of dispenseâ€plotted hydroxyapatite scaffolds with peptides: Quantification and cellular response. Journal of Biomedical Materials Research - Part A, 2010, 92A, 493-503.	4.0	8
135	Quantifying migration and polarization of murine mesenchymal stem cells on different bone substitutes by confocal laser scanning microscopy. Journal of Cranio-Maxillo-Facial Surgery, 2010, 38, 580-588.	1.7	8
136	Evaluation of cell inkjet printing technique for biofabrication. BioNanoMaterials, 2016, 17, .	1.4	8
137	Degradable magnesium implants: improving bioactive and antibacterial performance by designed hybrid coatings. Journal of Materials Research, 2021, 36, 443-458.	2.6	8
138	Evaluation of mechanical properties, in vitro corrosion resistance and biocompatibility of Gum Metal in the context of implant applications. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 115, 104289.	3.1	8
139	Alginate and Gelatine Blending for Bone Cell Printing and Biofabrication. , 2013, , .		8
140	Nanotechnologies in tissue engineering. Nanotechnology Reviews, 2013, 2, 411-425.	5.8	7
141	BMP-7 Preserves Surface Integrity of Degradable-ceramic Cranioplasty in a GÃ¶ttingen Minipig Model. Plastic and Reconstructive Surgery - Global Open, 2017, 5, e1255.	0.6	7
142	Bone Morphogenetic Protein-7 Enhances Degradation of Osteoinductive Bioceramic Implants in an Ectopic Model. Plastic and Reconstructive Surgery - Global Open, 2017, 5, e1375.	0.6	7
143	Influence of dissolution products of a novel Ca-enriched silicate bioactive glass-ceramic on VEGF release from bone marrow stromal cells. Biomedical Glasses, 2017, 3, .	2.4	7
144	Highly Porous Polymer-Derived Bioceramics Based on a Complex Hardystonite Solid Solution. Materials, 2019, 12, 3970.	2.9	7

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145	Fabrication and characterization of Agâ€•and Gaâ€doped mesoporous glassâ€coated scaffolds based on natural marine sponges with improved mechanical properties. Journal of Biomedical Materials Research - Part A, 2021, 109, 1309-1327.	4.0	7
146	Preparation and Characterization of Electrospun Blend Fibrous Polyethylene Oxide:Polycaprolactone Scaffolds to Promote Cartilage Regeneration. Advanced Engineering Materials, 2020, 22, 2000131.	3.5	7
147	In-vitro bioactivity and cytotoxicity of polarized (Bi0.5Na0.5)TiO3 ceramics as a novel biomaterial for bone repair. Materials Letters, 2020, 275, 128078.	2.6	6
148	Cell Interactions with Size-Controlled Colloidal Monolayers: Toward Improved Coatings in Bone Tissue Engineering. Langmuir, 2020, 36, 1793-1803.	3.5	6
149	Targeted Printing of Cells: Evaluation of ADA-PEG Bioinks for Drop on Demand Approaches. Gels, 2022, 8, 206.	4.5	6
150	Improved 3D Printing and Cell Biology Characterization of Inorganic-Filler Containing Alginate-Based Composites for Bone Regeneration: Particle Shape and Effective Surface Area Are the Dominant Factors for Printing Performance. International Journal of Molecular Sciences, 2022, 23, 4750.	4.1	6
151	Structural and Biological Characterization of Scaffolds. , 2013, , 299-310.		5
152	Biodegradable Polylactide Supraparticle Powders with Functional Additives for Biomedical Additive Manufacturing. Advanced Functional Materials, 2022, 32, .	14.9	5
153	Is Hydroxyapatite Ceramic Included in the Bone Remodelling Proccess? An In Vitro Study of Resorption and Formation Processes. Key Engineering Materials, 2007, 361-363, 1123-1126.	0.4	4
154	In Vitro Studies of Cell Growth on Three Differently Fabricated Hydroxyapatite Ceramic Scaffolds for Bone Tissue Engineering. Key Engineering Materials, 2008, 361-363, 1181-1184.	0.4	4
155	Molecular Changes Induced in Melanoma by Cell Culturing in 3D Alginate Hydrogels. Cancers, 2021, 13, 4111.	3.7	4
156	In vitro study of bioactive glass coatings obtained by atmospheric plasma spraying. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2020, , .	1.9	1
157	Initial studies on the cytotoxicity of ceramics prepared from dry discharge incinerator bottom ash dust. Ceramics International, 2016, 42, 17924-17927.	4.8	0
158	Cover Image, Volume 10, Issue 11. Journal of Tissue Engineering and Regenerative Medicine, 2016, 10, i-i.	2.7	0
159	Light-Emitting Diodes: Micropatterned Down-Converting Coating for White Bio-Hybrid Light-Emitting Diodes (Adv. Funct. Mater. 1/2017). Advanced Functional Materials, 2017, 27, .	14.9	0
160	Reply to the comment to: Bioactive layers based on black glasses on titanium substrates. Journal of the American Ceramic Society, 2018, 101, 3245-3245.	3.8	0