Rainer Detsch

List of Publications by Year in Descending Order

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156 papers	4,503 citations	37 h-index	58 g-index
167 ext. papers	5,435 ext. citations	5.2 avg, IF	5.77 L-index

#	Paper	IF	Citations
156	Fabrication and characterization of Ag- and Ga-doped mesoporous glass-coated scaffolds based on natural marine sponges with improved mechanical properties. *Journal of Biomedical Materials Research - Part A*, **2021**, 109, 1309-1327	5.4	2
155	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	4.1	4
154	Electrically Conductive and 3D-Printable Oxidized Alginate-Gelatin Polypyrrole:PSS Hydrogels for Tissue Engineering. *Advanced Healthcare Materials*, **2021**, 10, e2001876	10.1	24
153	Neuronal Differentiation from Induced Pluripotent Stem Cell-Derived Neurospheres by the Application of Oxidized Alginate-Gelatin-Laminin Hydrogels. *Biomedicines*, **2021**, 9,	4.8	6
152	Synthesis, Characterization, Antibacterial Properties, and In Vitro Studies of Selenium and Strontium Co-Substituted Hydroxyapatite. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	4
151	An Inverse Thermogelling Bioink Based on an ABA-Type Poly(2-oxazoline) Amphiphile. *Biomacromolecules*, **2021**, 22, 3017-3027	6.9	5
150	Amorphous Carbon Coatings for Total Knee Replacements-Part I: Deposition, Cytocompatibility, Chemical and Mechanical Properties. *Polymers*, **2021**, 13,	4.5	5
149	3D printed poly(hydroxybutyrate-co-hydroxyvalerate)45S5 bioactive glass composite resorbable scaffolds suitable for bone regeneration. *Journal of Materials Research*, **2021**, 36, 4000	2.5	3
148	From Thermogelling Hydrogels toward Functional Bioinks: Controlled Modification and Cytocompatible Crosslinking. *Macromolecular Bioscience*, **2021**, 21, e2100122	5.5	0
147	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	4.1	12
146	Cellular Response to Sol-Gel Hybrid Materials Releasing Boron and Calcium Ions. *ACS Biomaterials Science and Engineering*, **2021**, 7, 491-506	5.5	3
145	Degradable magnesium implants: improving bioactive and antibacterial performance by designed hybrid coatings. *Journal of Materials Research*, **2021**, 36, 443-458	2.5	2
144	Mechanical properties of cell- and microgel bead-laden oxidized alginate-gelatin hydrogels. *Biomaterials Science*, **2021**, 9, 3051-3068	7.4	7
143	Differential Responses to Bioink-Induced Oxidative Stress in Endothelial Cells and Fibroblasts. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	4
142	Advanced ADA-GEL bioink for bioprinted artificial cancer models. *Bioprinting*, **2021**, 23, e00145	7	6
141	Molecular Changes Induced in Melanoma by Cell Culturing in 3D Alginate Hydrogels. *Cancers*, **2021**, 13,	6.6	2
140	Polymer-Bioactive Glass Composite Filaments for 3D Scaffold Manufacturing by Fused Deposition Modeling: Fabrication and Characterization. *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 552	5.8	27

139	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	10.5	35
138	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	8.3	24
137	In-vitro bioactivity and cytotoxicity of polarized (Bi0.5Na0.5)TiO3 ceramics as a novel biomaterial for bone repair. *Materials Letters*, **2020**, 275, 128078	3.3	3
136	Improving alginate printability for biofabrication: establishment of a universal and homogeneous pre-crosslinking technique. *Biofabrication*, **2020**, 12, 045004	10.5	38
135	Gallium- and Cerium-Doped Phosphate Glasses with Antibacterial Properties for Medical Applications. *Advanced Engineering Materials*, **2020**, 22, 1901577	3.5	13
134	Cell Interactions with Size-Controlled Colloidal Monolayers: Toward Improved Coatings in Bone Tissue Engineering. *Langmuir*, **2020**, 36, 1793-1803	4	5
133	Preparation and Characterization of Electrospun Blend Fibrous Polyethylene Oxide:Polycaprolactone Scaffolds to Promote Cartilage Regeneration. *Advanced Engineering Materials*, **2020**, 22, 2000131	3.5	3
132	CT-Based Non-Destructive Quantification of 3D-Printed Hydrogel Implants. *Informatik Aktuell*, **2020** , 119-124	0.3	
131	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	5.5	28
130	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	8.3	13
129	Complex mechanical behavior of human articular cartilage and hydrogels for cartilage repair. *Acta Biomaterialia*, **2020**, 118, 113-128	10.8	14
128	Hyaluronic Acid-Based Bioink Composition Enabling 3D Bioprinting and Improving Quality of Deposited Cartilaginous Extracellular Matrix. *Advanced Healthcare Materials*, **2020**, 9, e2000737	10.1	34
127	Comparison of Hydrogels for the Development of Well-Defined 3D Cancer Models of Breast Cancer and Melanoma. *Cancers*, **2020**, 12,	6.6	12
126	3D Printing of Piezoelectric Barium Titanate-Hydroxyapatite Scaffolds with Interconnected Porosity for Bone Tissue Engineering. *Materials*, **2020**, 13,	3.5	39
125	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	6	19
124	Hybrid particles derived from alendronate and bioactive glass for treatment of osteoporotic bone defects. *Journal of Materials Chemistry B*, **2019**, 7, 796-808	7.3	10
123	Iron surface functionalization system - Iron oxide nanostructured arrays with polycaprolactone coatings: Biodegradation, cytocompatibility, and drug release behavior. *Applied Surface Science*, **2019**, 492, 669-682	6.7	8
122	Phase-specific bioactivity and altered Ostwald ripening pathways of calcium carbonate polymorphs in simulated body fluid.. *RSC Advances*, **2019**, 9, 18232-18244	3.7	19

121	Development of biocompatible and fully bioabsorbable PLA/Mg films for tissue regeneration applications. *Acta Biomaterialia*, **2019**, 98, 114-124	10.8	37
120	Bioactive glass coating using aerosol deposition. *Ceramics International*, **2019**, 45, 14728-14732	5.1	5
119	Bioactive glass based scaffolds incorporating gelatin/manganese doped mesoporous bioactive glass nanoparticle coating. *Ceramics International*, **2019**, 45, 14608-14613	5.1	22
118	Studies on Cell Compatibility, Antibacterial Behavior, and Zeta Potential of Ag-Containing Polydopamine-Coated Bioactive Glass-Ceramic. *Materials*, **2019**, 12,	3.5	14
117	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	3.9	27
116	Development of 3D Biofabricated Cell Laden Hydrogel Vessels and a Low-Cost Desktop Printed Perfusion Chamber for In Vitro Vessel Maturation. *Macromolecular Bioscience*, **2019**, 19, e1900245	5.5	18
115	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	9.5	15
114	Bioactive coating of zirconia toughened alumina ceramic implants improves cancellous osseointegration. *Scientific Reports*, **2019**, 9, 16692	4.9	20
113	Evaluation of Electrospun Poly(□Caprolactone)/Gelatin Nanofiber Mats Containing Clove Essential Oil for Antibacterial Wound Dressing. *Pharmaceutics*, **2019**, 11,	6.4	45
112	Influence of In-Situ Electrochemical Oxidation on Implant Surface and Colonizing Microorganisms Evaluated by Scanning Electron Microscopy. *Materials*, **2019**, 12,	3.5	5
111	Highly Porous Polymer-Derived Bioceramics Based on a Complex Hardystonite Solid Solution. *Materials*, **2019**, 12,	3.5	6
110	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	7.3	23
109	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	8.3	9
108	Encapsulation of Mesenchymal Stem Cells Improves Vascularization of Alginate-Based Scaffolds. *Tissue Engineering - Part A*, **2018**, 24, 1320-1331	3.9	17
107	Biodegradable nanostructures: Degradation process and biocompatibility of iron oxide nanostructured arrays. *Materials Science and Engineering C*, **2018**, 85, 203-213	8.3	20
106	Bottom-Up Assembly of Silica and Bioactive Glass Supraparticles with Tunable Hierarchical Porosity. *Langmuir*, **2018**, 34, 2063-2072	4	9
105	Hydrogel matrices based on elastin and alginate for tissue engineering applications. *International Journal of Biological Macromolecules*, **2018**, 114, 614-625	7.9	33
104	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	

103	Development and characterization of niobium-releasing silicate bioactive glasses for tissue engineering applications. *Journal of the European Ceramic Society*, **2018**, 38, 871-876	6	24
102	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	24
101	Pulse electrodeposition and characterization of non-continuous, multi-element-doped hydroxyapatite bioceramic coatings. *Journal of Solid State Electrochemistry*, **2018**, 22, 555-566	2.6	7
100	Cytotoxicity, chemical stability, and surface properties of ferroelectric ceramics for biomaterials. *Journal of the American Ceramic Society*, **2018**, 101, 440-449	3.8	14
99	Bioactive layers based on black glasses on titanium substrates. *Journal of the American Ceramic Society*, **2018**, 101, 590-601	3.8	25
98	Proangiogenic effects of tumor cells on endothelial progenitor cells vary with tumor type in an in vitro and in vivo rat model. *FASEB Journal*, **2018**, 32, 5587-5601	0.9	9
97	Surface Modification of SPIONs in PHBV Microspheres for Biomedical Applications. *Scientific Reports*, **2018**, 8, 7286	4.9	18
96	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	3.9	9
95	Antibacterial activity and biocompatibility of zein scaffolds containing silver-doped bioactive glass. *Biomedical Materials (Bristol)*, **2018**, 13, 065006	3.5	19
94	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	4.4	15
93	Cell laden alginate-keratin based composite microcapsules containing bioactive glass for tissue engineering applications. *Journal of Materials Science: Materials in Medicine*, **2018**, 29, 185	4.5	11
92	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,	3.5	14
91	Biomaterials. *Learning Materials in Biosciences*, **2018**, 91-105	0.3	5
90	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	5.1	13
89	Biofabrication of a co-culture system in an osteoid-like hydrogel matrix. *Biofabrication*, **2017**, 9, 025016	10.5	25
88	Biofabrication of vessel grafts based on natural hydrogels. *Current Opinion in Biomedical Engineering*, **2017**, 2, 83-89	4.4	11
87	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	5.5	41
86	Cell specificity of magnetic cell seeding approach to hydrogel colonization. *Journal of Biomedical Materials Research - Part A*, **2017**, 105, 2948-2957	5.4	6

85	BMP-7 Preserves Surface Integrity of Degradable-ceramic Cranioplasty in a Göttingen Minipig Model. *Plastic and Reconstructive Surgery - Global Open*, **2017**, 5, e1255	1.2	4
84	Osteoblast and osteoclast responses to A/B type carbonate-substituted hydroxyapatite ceramics for bone regeneration. *Biomedical Materials (Bristol)*, **2017**, 12, 035008	3.5	36
83	Vascular Tissue Engineering: Effects of Integrating Collagen into a PCL Based Nanofiber Material. *BioMed Research International*, **2017**, 2017, 9616939	3	33
82	Cu-releasing bioactive glass/polycaprolactone coating on Mg with antibacterial and anticorrosive properties for bone tissue engineering. *Biomedical Materials (Bristol)*, **2017**, 13, 015001	3.5	31
81	Electrophoretic deposition of tetracycline hydrochloride loaded halloysite nanotubes chitosan/bioactive glass composite coatings for orthopedic implants. *Surface and Coatings Technology*, **2017**, 327, 146-157	4.4	40
80	Bone Morphogenetic Protein-7 Enhances Degradation of Osteoinductive Bioceramic Implants in an Ectopic Model. *Plastic and Reconstructive Surgery - Global Open*, **2017**, 5, e1375	1.2	3
79	PDLLA scaffolds with Cu- and Zn-doped bioactive glasses having multifunctional properties for bone regeneration. *Journal of Biomedical Materials Research - Part A*, **2017**, 105, 746-756	5.4	40
78	Macromolecular interactions in alginate–gelatin hydrogels regulate the behavior of human fibroblasts. *Journal of Bioactive and Compatible Polymers*, **2017**, 32, 309-324	2	21
77	Micropatterned Down-Converting Coating for White Bio-Hybrid Light-Emitting Diodes. *Advanced Functional Materials*, **2017**, 27, 1601792	15.6	25
76	Hydrogel films and microcapsules based on soy protein isolate combined with alginate. *Journal of Applied Polymer Science*, **2017**, 134,	2.9	16
75	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,	2.7	6
74	Sol-gel processing of novel bioactive Mg-containing silicate scaffolds for alveolar bone regeneration. *Journal of Biomaterials Applications*, **2016**, 30, 740-9	2.9	12
73	Evaluation of cell inkjet printing technique for biofabrication. *BioNanoMaterials*, **2016**, 17,		6
72	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, 708-15	2.9	47
71	Ion Release, Hydroxyapatite Conversion, and Cytotoxicity of Boron-Containing Bioactive Glass Scaffolds. *International Journal of Applied Glass Science*, **2016**, 7, 206-215	1.8	30
70	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	4.4	42
69	Fabrication of Cell-Loaded Two-Phase 3D Constructs for Tissue Engineering. *Materials*, **2016**, 9,	3.5	21
68	Synthesis and In Vitro Activity Assessment of Novel Silicon Oxycarbide-Based Bioactive Glasses. *Materials*, **2016**, 9,	3.5	25

67	Evaluation of hydrogel matrices for vessel bioplotting: Vascular cell growth and viability. *Journal of Biomedical Materials Research - Part A*, **2016**, 104, 577-585	5.4	22
66	High-resolution synchrotron X-ray analysis of bioglass-enriched hydrogels. *Journal of Biomedical Materials Research - Part A*, **2016**, 104, 1194-201	5.4	14
65	Evaluation of in vivo angiogenetic effects of copper doped bioactive glass scaffolds in the AV loop model. *Biomedical Glasses*, **2016**, 2,	2.7	8
64	Soft-matrices based on silk fibroin and alginate for tissue engineering. *International Journal of Biological Macromolecules*, **2016**, 93, 1420-1431	7.9	26
63	Nanoscale bioactive glass activates osteoclastic differentiation of RAW 264.7 cells. *Nanomedicine*, **2016**, 11, 1093-105	5.6	15
62	Accelerated Degradation Behavior and Cytocompatibility of Pure Iron Treated with Sandblasting. *ACS Applied Materials & Interfaces*, **2016**, 8, 26482-26492	9.5	43
61	Initial studies on the cytotoxicity of ceramics prepared from dry discharge incinerator bottom ash dust. *Ceramics International*, **2016**, 42, 17924-17927	5.1	
60	Fabrication and cytotoxicity assessment of novel polysiloxane/bioactive glass films for biomedical applications. *Ceramics International*, **2016**, 42, 15442-15448	5.1	30
59	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	5.5	75
58	The role of osteoclasts in bone tissue engineering. *Journal of Tissue Engineering and Regenerative Medicine*, **2015**, 9, 1133-49	4.4	81
57	45S5 Bioglass(□)-MWCNT composite: processing and bioactivity. *Journal of Materials Science: Materials in Medicine*, **2015**, 26, 199	4.5	25
56	Alginate-based hydrogels with improved adhesive properties for cell encapsulation. *International Journal of Biological Macromolecules*, **2015**, 78, 72-8	7.9	87
55	Antibacterial 45S5 Bioglass□ -based scaffolds reinforced with genipin cross-linked gelatin for bone tissue engineering. *Journal of Materials Chemistry B*, **2015**, 3, 3367-3378	7.3	42
54	Evaluation of an alginate-gelatine crosslinked hydrogel for bioplotting. *Biofabrication*, **2015**, 7, 025001	10.5	113
53	Top-down Processing of Submicron 45S5 Bioglass□ for Enhanced in Vitro Bioactivity and Biocompatibility. *Procedia Engineering*, **2015**, 102, 534-541		7
52	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	10.3	73
51	Osteogenic differentiation of umbilical cord and adipose derived stem cells onto highly porous 45S5 Bioglass□ -based scaffolds. *Journal of Biomedical Materials Research - Part A*, **2015**, 103, 1029-37	5.4	28
50	Engineering of Metabolic Pathways by Artificial Enzyme Channels. *Frontiers in Bioengineering and Biotechnology*, **2015**, 3, 168	5.8	53

49	Advanced alginate-based hydrogels. *Materials Today*, **2015**, 18, 590-591	21.8	17
48	In vitro reactivity of Sr-containing bioactive glass (type 1393) nanoparticles. *Journal of Non-Crystalline Solids*, **2014**, 387, 41-46	3.9	37
47	Novel porous Al2O3-SiO2-TiO2 bone grafting materials: formation and characterization. *Journal of Biomaterials Applications*, **2014**, 28, 813-24	2.9	12
46	Behavior of encapsulated MG-63 cells in RGD and gelatine-modified alginate hydrogels. *Tissue Engineering - Part A*, **2014**, 20, 2140-50	3.9	84
45	45S5 bioactive glass-based scaffolds coated with cellulose nanowhiskers for bone tissue engineering. *RSC Advances*, **2014**, 4, 56156-56164	3.7	30
44	Towards the synthesis of an Mg-containing silicate glass□eramic to be used as a scaffold for cementum/alveolar bone regeneration. *Ceramics International*, **2014**, 40, 16287-16298	5.1	21
43	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, 4055-61	5.4	63
42	Injectable self-gelling composites for bone tissue engineering based on gellan gum hydrogel enriched with different bioglasses. *Biomedical Materials (Bristol)*, **2014**, 9, 045014	3.5	47
41	Hybrid hydrogels based on keratin and alginate for tissue engineering. *Journal of Materials Chemistry B*, **2014**, 2, 5441-5451	7.3	51
40	Role of ZnO additions on the /□phase relation in TCP based materials: Phase stability, properties, dissolution and biological response. *Journal of the European Ceramic Society*, **2014**, 34, 1375-1385	6	17
39	Bioglass□ /chitosan-polycaprolactone bilayered composite scaffolds intended for osteochondral tissue engineering. *Journal of Biomedical Materials Research - Part A*, **2014**, 102, 4510-8	5.4	19
38	Fabrication of alginate-gelatin crosslinked hydrogel microcapsules and evaluation of the microstructure and physico-chemical properties. *Journal of Materials Chemistry B*, **2014**, 2, 1470-1482	7.3	250
37	Evaluation of fibroblasts adhesion and proliferation on alginate-gelatin crosslinked hydrogel. *PLoS ONE*, **2014**, 9, e107952	3.7	144
36	and Biocompatibility of Alginate Dialdehyde/Gelatin Hydrogels with and without Nanoscaled Bioactive Glass for Bone Tissue Engineering Applications. *Materials*, **2014**, 7, 1957-1974	3.5	80
35	Formation and in vitro biocompatibility of biomimetic hydroxyapatite coatings on chemically treated carbon substrates. *Journal of Biomedical Materials Research - Part A*, **2014**, 102, 193-203	5.4	19
34	Biocompatibility of submicron Bioglass□ powders obtained by a top-down approach. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2014**, 102, 952-61	3.5	13
33	Effects of Cu-doped 45S5 bioactive glass on the lipid peroxidation-associated growth of human osteoblast-like cells in vitro. *Journal of Biomedical Materials Research - Part A*, **2014**, 102, 3556-61	5.4	32
32	Magnetic Glass Ceramics by Sintering of Borosilicate Glass and Inorganic Waste. *Materials*, **2014**, 7, 5565-5580	3.5	17

31	Additive manufacturing of cell-loaded alginate enriched with alkaline phosphatase for bone tissue engineering application. *BioNanoMaterials*, **2014**, 15,		12
30	Cancer research by means of tissue engineering--is there a rationale?. *Journal of Cellular and Molecular Medicine*, **2013**, 17, 1197-206	5.6	42
29	Evaluation of angiogenesis of bioactive glass in the arteriovenous loop model. *Tissue Engineering - Part C: Methods*, **2013**, 19, 479-86	2.9	72
28	45S5 Bioglass -derived scaffolds coated with organic-inorganic hybrids containing graphene. *Materials Science and Engineering C*, **2013**, 33, 3592-600	8.3	28
27	Sterilization effects on the physical properties and cytotoxicity of poly(glycerol sebacate). *Materials Letters*, **2013**, 105, 32-35	3.3	21
26	Structural and Biological Characterization of Scaffolds **2013**, 299-310		4
25	Nanotechnologies in tissue engineering. *Nanotechnology Reviews*, **2013**, 2, 411-425	6.3	5
24	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	4.1	54
23	Alginate and Gelatine Blending for Bone Cell Printing and Biofabrication **2013**,		7
22	Initial Attatchment of rMSC and MG-63 Cells on Patterned Bioglass Substrates. *Advanced Engineering Materials*, **2012**, 14, B38-B44	3.5	22
21	The chemical composition of synthetic bone substitutes influences tissue reactions in vivo: 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	3.5	102
20	How Degradation of Calcium Phosphate Bone Substitute Materials is influenced by Phase Composition and Porosity. *Advanced Engineering Materials*, **2011**, 13, 342-350	3.5	38
19	Processing, physico-chemical characterisation and in vitro evaluation of silicon containing tricalcium phosphate ceramics. *Materials Science and Engineering C*, **2011**, 31, 531-539	8.3	14
18	In vitro: osteoclastic activity studies on surfaces of 3D printed calcium phosphate scaffolds. *Journal of Biomaterials Applications*, **2011**, 26, 359-80	2.9	111
17	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, 580-8	3.6	8
16	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, 423-30	3.6	69
15	Biofunctionalization of dispense-plotted hydroxyapatite scaffolds with peptides: quantification and cellular response. *Journal of Biomedical Materials Research - Part A*, **2010**, 92, 493-503	5.4	5
14	The resorption of nanocrystalline calcium phosphates by osteoclast-like cells. *Acta Biomaterialia*, **2010**, 6, 3223-33	10.8	77

13	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, 3039-48	4.5	44
12	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, 3119-27	4.5	63
11	Different Calcium Phosphate Granules for 3-D Printing of Bone Tissue Engineering Scaffolds. *Advanced Engineering Materials*, **2009**, 11, B41-B46	3.5	55
10	A novel method for producing electron transparent films of interfaces between cells and biomaterials. *Journal of Materials Science: Materials in Medicine*, **2008**, 19, 467-70	4.5	10
9	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, 1491-6	4.5	55
8	Formation of osteoclast-like cells on HA and TCP ceramics. *Acta Biomaterialia*, **2008**, 4, 139-48	10.8	135
7	Topology-Dependent Cellular Interactions **2008**, 215-248		3
6	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	3
5	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	18
4	In Vitro Studies of Cell Growth on Three Differently Fabricated Hydroxyapatite Ceramic Scaffolds for Bone Tissue Engineering. *Key Engineering Materials*, **2007**, 361-363, 1181-1184	0.4	3
3	Influence of Phase Composition on Degradation and Resorption of Biphasic Calcium Phosphate Ceramics. *Key Engineering Materials*, **2007**, 361-363, 1043-1046	0.4	8
2	A novel antibacterial titania coating: metal ion toxicity and in vitro surface colonization. *Journal of Materials Science: Materials in Medicine*, **2005**, 16, 883-8	4.5	222
1	A New Printable Alginate/Hyaluronic Acid/Gelatin Hydrogel Suitable for Biofabrication of In Vitro and In Vivo Metastatic Melanoma Models. *Advanced Functional Materials*,2107993	15.6	1