## Hakan Engqvist

# List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

186<br/>papers3,193<br/>citations32<br/>h-index44<br/>g-index194<br/>ext. papers3,759<br/>ext. citations4.8<br/>avg, IF5.51<br/>L-index

#	Paper	IF	Citations
186	Bone without borders - Monetite-based calcium phosphate guides bone formation beyond the skeletal envelope <i>Bioactive Materials</i> , <b>2023</b> , 19, 103-114	16.7	O
185	Monocytes and pyrophosphate promote mesenchymal stem cell viability and early osteogenic differentiation <i>Journal of Materials Science: Materials in Medicine</i> , <b>2022</b> , 33, 11	4.5	0
184	Doping of tantalum, niobium, and hafnium in a translucent ZrO2-SiO2 nanocrystalline glass-ceramic. <i>Journal of the European Ceramic Society</i> , <b>2022</b> , 42, 1731-1742	6	O
183	Effects of dopants with various valences on densification behavior and phase composition of a ZrO2BiO2 nanocrystalline glass-ceramic. <i>Ceramics International</i> , <b>2022</b> , 48, 9495-9505	5.1	O
182	Understanding microstructure-mechanical properties relationship in ZrO2BiO2 nanocrystalline glass-ceramics: The effect of ZrO2 content. <i>Materials Science &amp; Dineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2022</b> , 840, 142904	5.3	O
181	1-Year pullout strength and degradation of ultrasound welded vs tapped craniomaxillofacial fixation screws. <i>Polymer Testing</i> , <b>2022</b> , 109, 107519	4.5	
180	Experimental Characterization and Mathematical Modeling of the Adsorption of Proteins and Cells on Biomimetic Hydroxyapatite <i>ACS Omega</i> , <b>2022</b> , 7, 908-920	3.9	O
179	Gluing Living Bone Using a Biomimetic Bioadhesive: From Initial Cut to Final Healing. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2021</b> , 9, 728042	5.8	2
178	Silk fibroin hydrogels induced and reinforced by acidic calcium phosphate - A simple way of producing bioactive and drug-loadable composites for biomedical applications. <i>International Journal of Biological Macromolecules</i> , <b>2021</b> , 193, 433-440	7.9	2
177	The use of heat to deliver fentanyl via pulmonary drug delivery. <i>International Journal of Pharmaceutics: X</i> , <b>2021</b> , 3, 100096	3.2	
176	Monetite-based composite cranial implants demonstrate long-term clinical volumetric balance by concomitant bone formation and degradation. <i>Acta Biomaterialia</i> , <b>2021</b> , 128, 502-513	10.8	6
175	Three-Dimensional Insights into Interfacial Segregation at the Atomic Scale in a Nanocrystalline Glass-Ceramic. <i>Nano Letters</i> , <b>2021</b> , 21, 6898-6906	11.5	0
174	Size-driven phase transformation and microstructure evolution of ZrO2 nanocrystallites associated with thermal treatments. <i>Journal of the European Ceramic Society</i> , <b>2021</b> , 41, 5624-5633	6	4
173	Fabrication and characterization of bioactive zirconia-based nanocrystalline glass-ceramics for dental abutment. <i>Ceramics International</i> , <b>2021</b> , 47, 26877-26890	5.1	2
172	Amorphous Calcium Magnesium Phosphate Particles for Treatment of Dentin Hypersensitivity: A Mode of Action Study. <i>ACS Biomaterials Science and Engineering</i> , <b>2020</b> , 6, 3599-3607	5.5	8
171	Si-Fe-C-N Coatings for Biomedical Applications: A Combinatorial Approach. <i>Materials</i> , <b>2020</b> , 13,	3.5	1
170	Electron microscopy evaluation of mineralization on peritubular dentin with amorphous calcium magnesium phosphate microspheres. <i>Ceramics International</i> , <b>2020</b> , 46, 19469-19475	5.1	7

### (2019-2020)

169	In vivo safety assessment of a bio-inspired bone adhesive. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2020</b> , 31, 24	4.5	4
168	Glass-Ceramics in Dentistry: A Review. <i>Materials</i> , <b>2020</b> , 13,	3.5	44
167	Synthesis of Phospho-Amino Acid Analogues as Tissue Adhesive Cement Additives. <i>ACS Central Science</i> , <b>2020</b> , 6, 226-231	16.8	5
166	Mechanical behaviour of composite calcium phosphate-titanium cranial implants: Effects of loading rate and design. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2020</b> , 104, 103701	4.1	8
165	Quantitative phase analyses of biomedical pyrophosphate-bearing monetite and brushite cements by solid-state NMR and powder XRD. <i>Ceramics International</i> , <b>2020</b> , 46, 11000-11012	5.1	3
164	Factors That Determine the Adhesive Strength in a Bioinspired Bone Tissue Adhesive. <i>ChemEngineering</i> , <b>2020</b> , 4, 19	2.6	5
163	Observation of yttrium oxide segregation in a ZrO2-SiO2 glass-ceramic at nanometer dimensions. <i>Journal of the American Ceramic Society</i> , <b>2020</b> , 103, 7147-7158	3.8	2
162	The Effect of N, C, Cr, and Nb Content on Silicon Nitride Coatings for Joint Applications. <i>Materials</i> , <b>2020</b> , 13,	3.5	2
161	A biomimetic engineered bone platform for advanced testing of prosthetic implants. <i>Scientific Reports</i> , <b>2020</b> , 10, 22154	4.9	2
160	Injectable and assembled 3D solid structure for free-to-fixed shape in bone reconstruction. <i>Applied Materials Today</i> , <b>2020</b> , 21, 100823	6.6	1
159	In situ bone regeneration of large cranial defects using synthetic ceramic implants with a tailored composition and design. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 26660-26671	11.5	14
158	Solid-State NMR Rationalizes the Bone-Adhesive Properties of Serine- and Phosphoserine-Bearing Calcium Phosphate Cements by Unveiling Their Organic/Inorganic Interface. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 21512-21531	3.8	6
157	Titanium reinforced calcium phosphate improves bone formation and osteointegration in ovine calvaria defects: a comparative 52-weeks study. <i>Biomedical Materials (Bristol)</i> , <b>2020</b> ,	3.5	4
156	Synthesis and assessment of metallic ion migration through a novel calcium carbonate coating for biomedical implants. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , <b>2020</b> , 108, 429-438	3.5	2
155	Zebrafish embryo as a replacement model for initial biocompatibility studies of biomaterials and drug delivery systems. <i>Acta Biomaterialia</i> , <b>2019</b> , 100, 235-243	10.8	19
154	Thromboinflammation as bioactivity assessment of HO-alkali modified titanium surfaces. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2019</b> , 30, 66	4.5	1
153	Towards Functional Silicon Nitride Coatings for Joint Replacements. <i>Coatings</i> , <b>2019</b> , 9, 73	2.9	6
152	A biomechanical test model for evaluating osseous and osteochondral tissue adhesives. <i>BMC Biomedical Engineering</i> , <b>2019</b> , 1, 11	4.3	13

151	The Addition of Poly(Vinyl Alcohol) Fibers to Apatitic Calcium Phosphate Cement Can Improve Its Toughness. <i>Materials</i> , <b>2019</b> , 12,	3.5	3
150	Gentamicin loading of calcium phosphate implants: implications for cranioplasty. <i>Acta Neurochirurgica</i> , <b>2019</b> , 161, 1255-1259	3	3
149	Cemented injectable multi-phased porous bone grafts for the treatment of femoral head necrosis. Journal of Materials Chemistry B, <b>2019</b> , 7, 2997-3006	7.3	3
148	Comparison of Decellularized Cow and Human Bone for Engineering Bone Grafts with Human Induced Pluripotent Stem Cells. <i>Tissue Engineering - Part A</i> , <b>2019</b> , 25, 288-301	3.9	19
147	Adhesive Cements That Bond Soft Tissue Ex Vivo. <i>Materials</i> , <b>2019</b> , 12,	3.5	12
146	Evaluation of an alkali-treated and hydroxyapatite-coated orthopedic implant loaded with tobramycin. <i>Journal of Biomaterials Applications</i> , <b>2019</b> , 34, 699-720	2.9	5
145	Advanced solid-state 1H/31P NMR characterization of pyrophosphate-doped calcium phosphate cements for biomedical applications: The structural role of pyrophosphate. <i>Ceramics International</i> , <b>2019</b> , 45, 20642-20655	5.1	13
144	The Effect of Coating Density on Functional Properties of SiN Coated Implants. <i>Materials</i> , <b>2019</b> , 12,	3.5	3
143	Investigation of Copper Alloying in a TNTZ-Cu Alloy. <i>Materials</i> , <b>2019</b> , 12,	3.5	2
142	Ion substitution induced formation of spherical ceramic particles. <i>Ceramics International</i> , <b>2019</b> , 45, 103	05.405	
	ion boostices on modele formation of spine flex established por tiexes, established meeting of a 12, 13, 10,	385 <del>5.</del> 10 <i>2</i>	39 <u>3</u>
141	The Monetite Structure Probed by Advanced Solid-State NMR Experimentation at Fast Magic-Angle Spinning. <i>International Journal of Molecular Sciences</i> , <b>2019</b> , 20,	6.3	14
141	The Monetite Structure Probed by Advanced Solid-State NMR Experimentation at Fast Magic-Angle		
	The Monetite Structure Probed by Advanced Solid-State NMR Experimentation at Fast Magic-Angle Spinning. <i>International Journal of Molecular Sciences</i> , <b>2019</b> , 20,	6.3	14
140	The Monetite Structure Probed by Advanced Solid-State NMR Experimentation at Fast Magic-Angle Spinning. <i>International Journal of Molecular Sciences</i> , <b>2019</b> , 20,  Effect of Copper Ion Concentration on Bacteria and Cells. <i>Materials</i> , <b>2019</b> , 12,  Development of Antibacterial Ti-Cu Alloys for Dental Applications: Effects of Ageing for Alloys with	6.3 3·5	14
140	The Monetite Structure Probed by Advanced Solid-State NMR Experimentation at Fast Magic-Angle Spinning. <i>International Journal of Molecular Sciences</i> , <b>2019</b> , 20,  Effect of Copper Ion Concentration on Bacteria and Cells. <i>Materials</i> , <b>2019</b> , 12,  Development of Antibacterial Ti-Cu Alloys for Dental Applications: Effects of Ageing for Alloys with Up to 10 wt% Cu. <i>Materials</i> , <b>2019</b> , 12,  Antibacterial investigation of titanium-copper alloys using luminescent Staphylococcus epidermidis	6.3 3.5 3.5	14 18
140 139 138	The Monetite Structure Probed by Advanced Solid-State NMR Experimentation at Fast Magic-Angle Spinning. <i>International Journal of Molecular Sciences</i> , <b>2019</b> , 20,  Effect of Copper Ion Concentration on Bacteria and Cells. <i>Materials</i> , <b>2019</b> , 12,  Development of Antibacterial Ti-Cu Alloys for Dental Applications: Effects of Ageing for Alloys with Up to 10 wt% Cu. <i>Materials</i> , <b>2019</b> , 12,  Antibacterial investigation of titanium-copper alloys using luminescent Staphylococcus epidermidis in a direct contact test. <i>Materials Science and Engineering C</i> , <b>2019</b> , 97, 707-714  Titanium surface modification to enhance antibacterial and bioactive properties while retaining	6.3 3.5 3.5 8.3	14 18 12 22
140 139 138	The Monetite Structure Probed by Advanced Solid-State NMR Experimentation at Fast Magic-Angle Spinning. <i>International Journal of Molecular Sciences</i> , <b>2019</b> , 20,  Effect of Copper Ion Concentration on Bacteria and Cells. <i>Materials</i> , <b>2019</b> , 12,  Development of Antibacterial Ti-Cu Alloys for Dental Applications: Effects of Ageing for Alloys with Up to 10 wt% Cu. <i>Materials</i> , <b>2019</b> , 12,  Antibacterial investigation of titanium-copper alloys using luminescent Staphylococcus epidermidis in a direct contact test. <i>Materials Science and Engineering C</i> , <b>2019</b> , 97, 707-714  Titanium surface modification to enhance antibacterial and bioactive properties while retaining biocompatibility. <i>Materials Science and Engineering C</i> , <b>2019</b> , 96, 272-279  A novel rapid synthesis, characterization and applications of calcium phosphate nanospheres from	6.3 3.5 3.5 8.3 8.3	14 18 12 22 32

133	Influence of cement compressive strength and porosity on augmentation performance in a model of orthopedic screw pull-out. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2018</b> , 77, 624-	6 <del>3</del> 3 <sup>1</sup>	12
132	Spark plasma sintering of biodegradable Si3N4 bioceramic with Sr, Mg and Si as sintering additives for spinal fusion. <i>Journal of the European Ceramic Society</i> , <b>2018</b> , 38, 2110-2119	6	12
131	Stiffness and strength of cranioplastic implant systems in comparison to cranial bone. <i>Journal of Cranio-Maxillo-Facial Surgery</i> , <b>2018</b> , 46, 418-423	3.6	17
130	Bioceramic microneedle arrays are able to deliver OVA to dendritic cells in human skin. <i>Journal of Materials Chemistry B</i> , <b>2018</b> , 6, 6808-6816	7.3	16
129	A Novel Class of Injectable Bioceramics that Glue Tissues and Biomaterials. <i>Materials</i> , <b>2018</b> , 11,	3.5	29
128	A ready-to-use acidic, brushite-forming calcium phosphate cement. <i>Acta Biomaterialia</i> , <b>2018</b> , 81, 304-31	<b>4</b> 10.8	20
127	Ultrastrong Translucent Glass Ceramic with Nanocrystalline, Biomimetic Structure. <i>Nano Letters</i> , <b>2018</b> , 18, 7146-7154	11.5	15
126	Novel Fast-Setting Mineral Trioxide Aggregate: Its Formulation, Chemical-Physical Properties, and Cytocompatibility. <i>ACS Applied Materials &amp; Material</i>	9.5	9
125	Debridement of Bacterial Biofilms with TiO/HO Solutions and Visible Light Irradiation. <i>International Journal of Biomaterials</i> , <b>2018</b> , 2018, 5361632	3.2	
124	Biodegradable Si3N4 bioceramic sintered with Sr, Mg and Si for spinal fusion: Surface characterization and biological evaluation. <i>Applied Materials Today</i> , <b>2018</b> , 12, 260-275	6.6	12
123	Guided growth of auditory neurons: Bioactive particles towards gapless neural - electrode interface. <i>Biomaterials</i> , <b>2017</b> , 122, 1-9	15.6	19
122	Classification and Effects of Implant Surface Modification on the Bone: Human Cell-Based In Vitro Studies. <i>Journal of Oral Implantology</i> , <b>2017</b> , 43, 58-83	1.2	20
121	Highly translucent and strong ZrO2-SiO2 nanocrystalline glass ceramic prepared by sol-gel method and spark plasma sintering with fine 3D microstructure for dental restoration. <i>Journal of the European Ceramic Society</i> , <b>2017</b> , 37, 4067-4081	6	28
120	In Situ Synchrotron X-ray Diffraction Analysis of the Setting Process of Brushite Cement: Reaction and Crystal Growth. <i>ACS Applied Materials &amp; Amp; Interfaces</i> , <b>2017</b> , 9, 36392-36399	9.5	7
119	Influence of Substrate Heating and Nitrogen Flow on the Composition, Morphological and Mechanical Properties of SiN Coatings Aimed for Joint Replacements. <i>Materials</i> , <b>2017</b> , 10,	3.5	9
118	Organic degradation potential of a TiO/HO/UV-vis system for dental applications. <i>Journal of Dentistry</i> , <b>2017</b> , 67, 53-57	4.8	6
117	The formation of calcium fluoride microspheres via solubility equilibrium. <i>Ceramics International</i> , <b>2017</b> , 43, 14521-14524	5.1	4
116	A general strategy for template-free and low-cost synthesis of inorganic hollow spheres. <i>Powder Technology</i> , <b>2017</b> , 319, 163-171	5.2	6

115	Template-free synthesis of phosphate-based spheres via modified supersaturated phosphate buffer solutions. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2017</b> , 28, 99	4.5	5
114	Critical cracking thickness of calcium phosphates biomimetic coating: Verification via a Singh-Tirumkudulu model. <i>Ceramics International</i> , <b>2017</b> , 43, 15729-15734	5.1	10
113	Thickness dependency of mechanical properties for thin-walled titanium parts manufactured by Electron Beam Melting (EBM) [] . <i>Additive Manufacturing</i> , <b>2016</b> , 12, 45-50	6.1	42
112	Transparent single crystalline ZrO2-SiO2 glass nanoceramic sintered by SPS. <i>Journal of the European Ceramic Society</i> , <b>2016</b> , 36, 3487-3494	6	34
111	Compressive, diametral tensile and biaxial flexural strength of cutting-edge calcium phosphate cements. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2016</b> , 60, 617-627	4.1	36
110	Morphology and Dissolution Rate of Wear Debris from Silicon Nitride Coatings. <i>ACS Biomaterials Science and Engineering</i> , <b>2016</b> , 2, 998-1004	5.5	8
109	Brushite foamsthe effect of Tween 80 and Pluronic F-127 on foam porosity and mechanical properties. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , <b>2016</b> , 104, 67-77	3.5	15
108	Dissolution behaviour of silicon nitride coatings for joint replacements. <i>Materials Science and Engineering C</i> , <b>2016</b> , 62, 497-505	8.3	19
107	Synthesis of calcium phosphate crystals with thin nacreous structure. <i>CrystEngComm</i> , <b>2016</b> , 18, 1064-10	0693	8
106	Simvastatin and zinc synergistically enhance osteoblasts activity and decrease the acute response of inflammatory cells. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2016</b> , 27, 23	4.5	13
105	In vitro antibacterial properties and UV induced response from Staphylococcus epidermidis on Ag/Ti oxide thin films. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2016</b> , 27, 49	4.5	4
104	Enhanced bioactivity of glass ionomer cement by incorporating calcium silicates. <i>Biomatter</i> , <b>2016</b> , 6, e1	12384	2 10
103	In vivo and in vitro evaluation of hydroxyapatite nanoparticle morphology on the acute inflammatory response. <i>Biomaterials</i> , <b>2016</b> , 90, 1-11	15.6	47
102	The effect of oligo(trimethylene carbonate) addition on the stiffness of acrylic bone cement. <i>Biomatter</i> , <b>2016</b> , 6, e1133394		6
101	A Study for Tooth Bleaching via Carbamide Peroxide-Loaded Hollow Calcium Phosphate Spheres. <i>Dentistry Journal</i> , <b>2016</b> , 5,	3.1	5
100	Pyrophosphate Stimulates Differentiation, Matrix Gene Expression and Alkaline Phosphatase Activity in Osteoblasts. <i>PLoS ONE</i> , <b>2016</b> , 11, e0163530	3.7	28
99	Cytotoxicity of modified glass ionomer cement on odontoblast cells. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2016</b> , 27, 116	4.5	9
98	Compressive fatigue limit of four types of dental restorative materials. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2016</b> , 61, 283-289	4.1	6

#### (2015-2016)

97	Ceramic cement as a potential stand-alone treatment for bone fractures: An in vitro study of ceramic-bone composites. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2016</b> , 61, 519-529	9 4.1	3
96	Surface and Subsurface Analyses of Metal-on-Polyethylene Total Hip Replacement Retrievals.  Annals of Biomedical Engineering, 2016, 44, 1685-97	4.7	1
95	Biomineralization on single crystalline rutile: the modulated growth of hydroxyapatite by fibronectin in a simulated body fluid. <i>RSC Advances</i> , <b>2016</b> , 6, 35507-35516	3.7	15
94	Bioactive Spheres: The Way of Treating Dentin Hypersensitivity. <i>ACS Biomaterials Science and Engineering</i> , <b>2016</b> , 2, 734-740	5.5	9
93	Fabrication of macroporous cement scaffolds using PEG particles: In vitro evaluation with induced pluripotent stem cell-derived mesenchymal progenitors. <i>Materials Science and Engineering C</i> , <b>2016</b> , 69, 640-52	8.3	14
92	Synthesis of Ag doped calcium phosphate particles and their antibacterial effect as additives in dental glass ionomer cements. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2016</b> , 27, 172	4.5	12
91	Biomimetic calcium phosphate coating of additively manufactured porous CoCr implants. <i>Applied Surface Science</i> , <b>2015</b> , 353, 40-47	6.7	14
90	Bioceramic microneedles with flexible and self-swelling substrate. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , <b>2015</b> , 94, 404-10	5.7	29
89	Highly repeatable synthesis of nHA with high aspect ratio. <i>Materials Letters</i> , <b>2015</b> , 159, 163-167	3.3	7
88	Development and evaluation of a tampering resistant transdermal fentanyl patch. <i>International Journal of Pharmaceutics</i> , <b>2015</b> , 488, 102-7	6.5	8
87	The influence of Sr content in calcium phosphate coatings. <i>Materials Science and Engineering C</i> , <b>2015</b> , 53, 322-30	8.3	22
86	Biomechanics of low-modulus and standard acrylic bone cements in simulated vertebroplasty: A human ex vivo study. <i>Journal of Biomechanics</i> , <b>2015</b> , 48, 3258-66	2.9	10
85	The effect of unsaturated fatty acid and triglyceride oil addition on the mechanical and antibacterial properties of acrylic bone cements. <i>Journal of Biomaterials Applications</i> , <b>2015</b> , 30, 279-89	2.9	16
84	Reactive combinatorial synthesis and characterization of a gradient Ag-Ti oxide thin film with antibacterial properties. <i>Acta Biomaterialia</i> , <b>2015</b> , 11, 503-10	10.8	32
83	Surface oxidation behavior of TiBALBV manufactured by Electron Beam Melting (EBMI). <i>Journal of Manufacturing Processes</i> , <b>2015</b> , 17, 120-126	5	39
82	Bacteria-material surface interactions: methodological development for the assessment of implant surface induced antibacterial effects. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , <b>2015</b> , 103, 179-87	3.5	23
81	Enhanced drug delivery of antibiotic-loaded acrylic bone cements using calcium phosphate spheres. Journal of Applied Biomaterials and Functional Materials, <b>2015</b> , 13, e241-7	1.8	8
80	Rebamipide delivered by brushite cement enhances osteoblast and macrophage proliferation. <i>PLoS ONE</i> , <b>2015</b> , 10, e0128324	3.7	5

79	Bioceramic Implant Induces Bone Healing of Cranial Defects. <i>Plastic and Reconstructive Surgery - Global Open</i> , <b>2015</b> , 3, e491	1.2	27
78	Fabrication of translucent nanoceramics via a simple filtration method. <i>RSC Advances</i> , <b>2015</b> , 5, 99848-99	9 <b>8</b> ,5/5	3
77	Evaluation of the resistance of a geopolymer-based drug delivery system to tampering. <i>International Journal of Pharmaceutics</i> , <b>2014</b> , 465, 169-74	6.5	13
76	Photocatalytic inactivation of biofilms on bioactive dental adhesives. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , <b>2014</b> , 102, 62-7	3.5	22
75	Photocatalysis induces bioactivity of an organic polymer based material. RSC Advances, 2014, 4, 57715-	5 <i>3,7</i> 23	4
74	Self-setting bioceramic microscopic protrusions for transdermal drug delivery. <i>Journal of Materials Chemistry B</i> , <b>2014</b> , 2, 5992-5998	7.3	23
73	Digital image correlation analysis of local strain fields on Ti6Al4V manufactured by electron beam melting. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2014</b> , 618, 456-461	5.3	24
72	Wear and friction properties of experimental Ti-Si-Zr alloys for biomedical applications. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2014</b> , 39, 61-72	4.1	24
71	The effect of composition on mechanical properties of brushite cements. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2014</b> , 29, 81-90	4.1	50
70	Development of a bioactive implant for repair and potential healing of cranial defects. <i>Journal of Neurosurgery</i> , <b>2014</b> , 120, 273-7	3.2	45
69	Characterization of dental interfaces with electron tomography. <i>Biointerphases</i> , <b>2014</b> , 9, 029001	1.8	3
68	Calcium phosphate cements with strontium halides as radiopacifiers. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , <b>2014</b> , 102, 250-9	3.5	12
67	Compressive mechanical properties and cytocompatibility of bone-compliant, linoleic acid-modified bone cement in a bovine model. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2014</b> , 32, 245-256	4.1	22
66	Laser induced surface structuring and ion conversion in the surface oxide of titanium: possible implications for the wetability of laser treated implants. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2013</b> , 24, 11-5	4.5	3
65	Three-dimensional structure of laser-modified Ti6Al4V and bone interface revealed with STEM tomography. <i>Ultramicroscopy</i> , <b>2013</b> , 127, 48-52	3.1	17
64	Stability and prospect of UV/H2O2 activated titania films for biomedical use. <i>Applied Surface Science</i> , <b>2013</b> , 285, 317-323	6.7	16
63	Effect of strontium ions on the early formation of biomimetic apatite on single crystalline rutile. <i>Applied Surface Science</i> , <b>2013</b> , 266, 199-204	6.7	7
62	Apatite Coatings: Ion Substitution and Biological Properties. <i>Ceramic Engineering and Science Proceedings</i> , <b>2013</b> , 27-34	0.1	

61	Nanoscale size control of protein aggregates. Small, 2013, 9, 3320-6	11	2
60	Influence of particle size on hardening and handling of a premixed calcium phosphate cement. Journal of Materials Science: Materials in Medicine, <b>2013</b> , 24, 829-35	4.5	12
59	Influence of water content on hardening and handling of a premixed calcium phosphate cement. <i>Materials Science and Engineering C</i> , <b>2013</b> , 33, 527-31	8.3	19
58	Characterization and comparison of materials produced by Electron Beam Melting (EBM) of two different TiBALBV powder fractions. <i>Journal of Materials Processing Technology</i> , <b>2013</b> , 213, 2109-2118	5.3	170
57	Influence of polymer addition on the mechanical properties of a premixed calcium phosphate cement. <i>Biomatter</i> , <b>2013</b> , 3,		10
56	Osteogenic potential of Sr-doped calcium phosphate hollow spheres in vitro and in vivo. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2013</b> , 101, 2322-31	5.4	18
55	Synergetic inactivation of Staphylococcus epidermidis and Streptococcus mutansin a TiO2/H2O2/UV system. <i>Biomatter</i> , <b>2013</b> , 3,		19
54	The Effect of Curing Conditions on Compression Strength and Porosity of Metakaolin-Based Geopolymers. <i>Ceramic Engineering and Science Proceedings</i> , <b>2013</b> , 49-56	0.1	2
53	Bone response to free-form fabricated hydroxyapatite and zirconia scaffolds: a transmission electron microscopy study in the human maxilla. <i>Clinical Implant Dentistry and Related Research</i> , <b>2012</b> , 14, 461-9	3.9	18
52	Spark plasma sintered Ephase silicon nitride with Sr and Ca as a sintering aid for load bearing medical applications. <i>Journal of the European Ceramic Society</i> , <b>2012</b> , 32, 2705-2709	6	8
51	Effect of deposition parameters on the photocatalytic activity and bioactivity of TiO2 thin films deposited by vacuum arc on Ti-6Al-4V substrates. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , <b>2012</b> , 100, 1078-85	3.5	21
50	Photocatalytic and antimicrobial properties of surgical implant coatings of titanium dioxide deposited though cathodic arc evaporation. <i>Biotechnology Letters</i> , <b>2012</b> , 34, 2299-305	3	42
49	Calcium sulfate spinal cord scaffold: a study on degradation and fibroblast growth factor 1 loading and release. <i>Journal of Biomaterials Applications</i> , <b>2012</b> , 26, 667-85	2.9	3
48	Bone tissue reactions to biomimetic ion-substituted apatite surfaces on titanium implants. <i>Journal of the Royal Society Interface</i> , <b>2012</b> , 9, 1615-24	4.1	36
47	Nano grain sized zirconia lilica glass ceramics for dental applications. <i>Journal of the European Ceramic Society</i> , <b>2012</b> , 32, 4105-4110	6	28
46	Polymer excipients enable sustained drug release in low pH from mechanically strong inorganic geopolymers. <i>Results in Pharma Sciences</i> , <b>2012</b> , 2, 23-8		7
45	FGF1 containing biodegradable device with peripheral nerve grafts induces corticospinal tract regeneration and motor evoked potentials after spinal cord resection. <i>Restorative Neurology and Neuroscience</i> , <b>2012</b> , 30, 91-102	2.8	12
44	Photocatalytic activity of low temperature oxidized Ti-6Al-4V. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2012</b> , 23, 1173-80	4.5	4

43	Evaluation of silicon nitride as a wear resistant and resorbable alternative for total hip joint replacement. <i>Biomatter</i> , <b>2012</b> , 2, 94-102		50
42	Resolving the CaP-bone interface: a review of discoveries with light and electron microscopy. <i>Biomatter</i> , <b>2012</b> , 2, 15-23		6
41	Focused Ion Beam in the Study of Biomaterials and Biological Matter. <i>Advances in Materials Science and Engineering</i> , <b>2012</b> , 2012, 1-6	1.5	38
40	High-resolution three-dimensional probes of biomaterials and their interfaces. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2012</b> , 370, 1337-51	3	20
39	Ultrastructural characterisation of the hydroxyapatite-coated pedicle screw and human bone interface. <i>International Journal of Nano and Biomaterials</i> , <b>2012</b> , 4, 1	0.2	1
38	Commercially Available Dental Implants: Review of Their Surface Characteristics. <i>Journal of Biomaterials and Tissue Engineering</i> , <b>2012</b> , 2, 112-124	0.3	13
37	Low-modulus PMMA bone cement modified with castor oil. <i>Bio-Medical Materials and Engineering</i> , <b>2011</b> , 21, 323-32	1	8
36	Free form fabricated features on CoCr implants with and without hydroxyapatite coating in vivo: a comparative study of bone contact and bone growth induction. <i>Journal of Materials Science:</i> Materials in Medicine, <b>2011</b> , 22, 899-906	4.5	36
35	Direct and interactive effects of three variables on properties of PMMA bone cement for vertebral body augmentation. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2011</b> , 22, 1599-606	4.5	8
34	Co-loading of bisphosphonates and antibiotics to a biomimetic hydroxyapatite coating. <i>Biotechnology Letters</i> , <b>2011</b> , 33, 1265-8	3	26
33	Synthesis and release of trace elements from hollow and porous hydroxyapatite spheres. <i>Nanotechnology</i> , <b>2011</b> , 22, 305610	3.4	35
32	Premixed calcium silicate cement for endodontic applications: injectability, setting time and radiopacity. <i>Biomatter</i> , <b>2011</b> , 1, 76-80		14
31	Synthetic geopolymers for controlled delivery of oxycodone: adjustable and nanostructured porosity enables tunable and sustained drug release. <i>PLoS ONE</i> , <b>2011</b> , 6, e17759	3.7	13
30	In Vivo Evaluation of Functionalized Biomimetic Hydroxyapatite for Local Delivery of Active Agents. <i>Journal of Biomaterials and Nanobiotechnology</i> , <b>2011</b> , 02, 149-154	1	13
29	A novel method for local administration of strontium from implant surfaces. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2010</b> , 21, 1605-9	4.5	20
28	Studies of early growth mechanisms of hydroxyapatite on single crystalline rutile: a model system for bioactive surfaces. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2010</b> , 21, 2743-9	4.5	20
27	Mechanically strong geopolymers offer new possibilities in treatment of chronic pain. <i>Journal of Controlled Release</i> , <b>2010</b> , 146, 370-7	11.7	37
26	Dental adhesives with bioactive and on-demand bactericidal properties. <i>Dental Materials</i> , <b>2010</b> , 26, 491	<b>3</b> .7	43

#### (2005-2010)

25	A ceramic drug delivery vehicle for oral administration of highly potent opioids. <i>Journal of Pharmaceutical Sciences</i> , <b>2010</b> , 99, 219-26	3.9	62
24	Biomineralized strontium-substituted apatite/titanium dioxide coating on titanium surfaces. <i>Acta Biomaterialia</i> , <b>2010</b> , 6, 1591-600	10.8	71
23	In vitro characterization of bioactive titanium dioxide/hydroxyapatite surfaces functionalized with BMP-2. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , <b>2009</b> , 91, 780-7	3.5	38
22	Multifunctional implant coatings providing possibilities for fast antibiotics loading with subsequent slow release. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2009</b> , 20, 1859-67	4.5	75
21	Bisphosphonate incorporation in surgical implant coatings by fast loading and co-precipitation at low drug concentrations. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2009</b> , 20, 2053-61	4.5	20
20	A novel graded bioactive high adhesion implant coating. <i>Applied Surface Science</i> , <b>2009</b> , 255, 7723-7728	6.7	45
19	Assessing surface area evolution during biomimetic growth of hydroxyapatite coatings. <i>Langmuir</i> , <b>2009</b> , 25, 1292-5	4	29
18	A comparative study of the bioactivity of three materials for dental applications. <i>Dental Materials</i> , <b>2008</b> , 24, 653-9	5.7	53
17	Hydroxylapatite growth on single-crystal rutile substrates. <i>Biomaterials</i> , <b>2008</b> , 29, 3317-23	15.6	46
16	A novel method for producing electron transparent films of interfaces between cells and biomaterials. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2008</b> , 19, 467-70	4.5	10
15	Technique for preparation and characterization in cross-section of oral titanium implant surfaces using focused ion beam and transmission electron microscopy. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2008</b> , 87, 1003-9	5.4	50
14	Phase formation of CaAl2O4 from CaCO3Al2O3 powder mixtures. <i>Journal of the European Ceramic Society</i> , <b>2008</b> , 28, 747-756	6	51
13	Characterization of the surface properties of commercially available dental implants using scanning electron microscopy, focused ion beam, and high-resolution transmission electron microscopy. <i>Clinical Implant Dentistry and Related Research</i> , <b>2008</b> , 10, 11-22	3.9	65
12	Formation and adhesion of biomimetic hydroxyapatite deposited on titanium substrates. <i>Acta Biomaterialia</i> , <b>2007</b> , 3, 980-4	10.8	108
11	Nano-Size Biomaterials Based on Ca-Aluminate. Advances in Science and Technology, <b>2006</b> , 49, 21-26	0.1	5
10	Characterization of the Tissue-Bioceramic Interface In Vivo Using New Preparation and Analytical Tools. <i>Advances in Science and Technology</i> , <b>2006</b> , 49, 275-281	0.1	2
9	Mechanical Property Aspects of a Biomineral Based Dental Restorative System. <i>Key Engineering Materials</i> , <b>2005</b> , 284-286, 741-744	0.4	6
8	In Vivo Hydrating Calcium Aluminate Coatings for Anchoring of Metal Implants in Bone. <i>Key Engineering Materials</i> , <b>2005</b> , 284-286, 831-834	0.4	12

7	Microstructure and Abrasive Wear of Binderless Carbides. <i>Journal of the American Ceramic Society</i> , <b>2004</b> , 83, 2491-2496	3.8	41
6	Early-age deformation, drying shrinkage and thermal dilation in a new type of dental restorative material based on calcium aluminate cement. <i>Cement and Concrete Research</i> , <b>2004</b> , 34, 439-446	10.3	27
5	An Injectable Bone Void Filler Cement Based on Ca-Aluminate. <i>Key Engineering Materials</i> , <b>2003</b> , 254-256, 265-268	0.4	10
4	Chemically Bonded Ceramics as Biomaterials. <i>Key Engineering Materials</i> , <b>2003</b> , 247, 437-442	0.4	15
3	Mechanical Testing of Chemically Bonded Bioactive Ceramic Materials. <i>Key Engineering Materials</i> , <b>2003</b> , 254-256, 51-54	0.4	5
2	Mapping of mechanical properties of WCIIo using nanoindentation. <i>Tribology Letters</i> , <b>2000</b> , 8, 147-152	2.8	32
1	Formation of Apatite Coatings on Chemically Bonded Ceramics. Ceramic Transactions, 199-206	0.1	