

# Sander G C Leeuwenburgh

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/7885293/sander-g-c-leeuwenburgh-publications-by-citations.pdf>

**Version:** 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

178  
papers

5,489  
citations

42  
h-index

67  
g-index

187  
ext. papers

6,279  
ext. citations

6.7  
avg, IF

5.8  
L-index

#	Paper	IF	Citations
178	Organic-inorganic surface modifications for titanium implant surfaces. <i>Pharmaceutical Research</i> , <b>2008</b> , 25, 2357-69	4.5	285
177	Mineralization of hydrogels for bone regeneration. <i>Tissue Engineering - Part B: Reviews</i> , <b>2010</b> , 16, 577-85	7.9	171
176	Surface Engineering for Bone Implants: A Trend from Passive to Active Surfaces. <i>Coatings</i> , <b>2012</b> , 2, 95-119	9.9	165
175	Sustained release of BMP-2 in bioprinted alginate for osteogenicity in mice and rats. <i>PLoS ONE</i> , <b>2013</b> , 8, e72610	3.7	146
174	Combined delivery of BMP-2 and bFGF from nanostructured colloidal gelatin gels and its effect on bone regeneration in vivo. <i>Journal of Controlled Release</i> , <b>2013</b> , 166, 172-81	11.7	130
173	Osteoclastic resorption of biomimetic calcium phosphate coatings in vitro. <i>Journal of Biomedical Materials Research Part B</i> , <b>2001</b> , 56, 208-15		124
172	The use of micro- and nanospheres as functional components for bone tissue regeneration. <i>Tissue Engineering - Part B: Reviews</i> , <b>2012</b> , 18, 24-39	7.9	123
171	Comparison of micro- vs. nanostructured colloidal gelatin gels for sustained delivery of osteogenic proteins: Bone morphogenetic protein-2 and alkaline phosphatase. <i>Biomaterials</i> , <b>2012</b> , 33, 8695-703	15.6	120
170	Oppositely charged gelatin nanospheres as building blocks for injectable and biodegradable gels. <i>Advanced Materials</i> , <b>2011</b> , 23, H119-24	24	117
169	Piezoelectric Nano-Biomaterials for Biomedicine and Tissue Regeneration. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 1909045	15.6	115
168	Bone response to fast-degrading, injectable calcium phosphate cements containing PLGA microparticles. <i>Biomaterials</i> , <b>2011</b> , 32, 8839-47	15.6	108
167	Self-healing hybrid nanocomposites consisting of bisphosphonated hyaluronan and calcium phosphate nanoparticles. <i>Biomaterials</i> , <b>2014</b> , 35, 6918-29	15.6	107
166	In vitro degradation rate of apatitic calcium phosphate cement with incorporated PLGA microspheres. <i>Acta Biomaterialia</i> , <b>2011</b> , 7, 3459-68	10.8	103
165	Physicochemical properties and applications of poly(lactic-co-glycolic acid) for use in bone regeneration. <i>Tissue Engineering - Part B: Reviews</i> , <b>2013</b> , 19, 380-90	7.9	97
164	Development of bone substitute materials: from Biocompatible to Instructive. <i>Journal of Materials Chemistry</i> , <b>2010</b> , 20, 8747		96
163	The osteogenic effect of electrosprayed nanoscale collagen/calcium phosphate coatings on titanium. <i>Biomaterials</i> , <b>2010</b> , 31, 2461-9	15.6	93
162	In vitro and in vivo reactivity of porous, electrosprayed calcium phosphate coatings. <i>Biomaterials</i> , <b>2006</b> , 27, 3368-78	15.6	84

161	Electrostatic spray deposition (ESD) of calcium phosphate coatings. <i>Journal of Biomedical Materials Research Part B</i> , <b>2003</b> , 66, 330-4		78
160	Enhanced bone regeneration of cortical segmental bone defects using porous titanium scaffolds incorporated with colloidal gelatin gels for time- and dose-controlled delivery of dual growth factors. <i>Tissue Engineering - Part A</i> , <b>2013</b> , 19, 2605-14	3.9	75
159	Synthesis and application of nanostructured calcium phosphate ceramics for bone regeneration. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , <b>2012</b> , 100, 2316-26	3.5	72
158	Enzymatic mineralization of gellan gum hydrogel for bone tissue-engineering applications and its enhancement by polydopamine. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , <b>2014</b> , 8, 906-18	4.4	69
157	Electrophoretic Deposition of Chitosan Coatings Modified with Gelatin Nanospheres To Tune the Release of Antibiotics. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 13785-92	9.5	66
156	Synergistic effects of bisphosphonate and calcium phosphate nanoparticles on peri-implant bone responses in osteoporotic rats. <i>Biomaterials</i> , <b>2014</b> , 35, 5482-90	15.6	66
155	Enzymatic mineralization of hydrogels for bone tissue engineering by incorporation of alkaline phosphatase. <i>Macromolecular Bioscience</i> , <b>2012</b> , 12, 1077-89	5.5	66
154	Biomimetic modification of synthetic hydrogels by incorporation of adhesive peptides and calcium phosphate nanoparticles: in vitro evaluation of cell behavior. <i>European Cells and Materials</i> , <b>2011</b> , 22, 359-76	4.7	66
153	Electrosprayed Enzyme Coatings as Bioinspired Alternatives to Bioceramic Coatings for Orthopedic and Oral Implants. <i>Advanced Functional Materials</i> , <b>2009</b> , 19, 755-762	15.6	59
152	Effect of surface alkali-based treatment of titanium implants on ability to promote in vitro mineralization and in vivo bone formation. <i>Acta Biomaterialia</i> , <b>2017</b> , 57, 511-523	10.8	56
151	Sodium citrate as an effective dispersant for the synthesis of inorganic-organic composites with a nanodispersed mineral phase. <i>Acta Biomaterialia</i> , <b>2010</b> , 6, 836-44	10.8	56
150	Electrostatic spray deposition (ESD) of calcium phosphate coatings, an in vitro study with osteoblast-like cells. <i>Biomaterials</i> , <b>2004</b> , 25, 2019-27	15.6	56
149	Highly Elastic and Self-Healing Composite Colloidal Gels. <i>Advanced Materials</i> , <b>2017</b> , 29, 1604672	24	53
148	Mineralization, biodegradation, and drug release behavior of gelatin/apatite composite microspheres for bone regeneration. <i>Biomacromolecules</i> , <b>2010</b> , 11, 2653-9	6.9	52
147	Self-Healing Biomaterials: From Molecular Concepts to Clinical Applications. <i>Advanced Materials Interfaces</i> , <b>2018</b> , 5, 1800118	4.6	51
146	Interactions between inorganic and organic phases in bone tissue as a source of inspiration for design of novel nanocomposites. <i>Tissue Engineering - Part B: Reviews</i> , <b>2014</b> , 20, 173-88	7.9	51
145	Development of injectable organic/inorganic colloidal composite gels made of self-assembling gelatin nanospheres and calcium phosphate nanocrystals. <i>Acta Biomaterialia</i> , <b>2014</b> , 10, 508-19	10.8	49
144	Influence of the pore generator on the evolution of the mechanical properties and the porosity and interconnectivity of a calcium phosphate cement. <i>Acta Biomaterialia</i> , <b>2012</b> , 8, 404-14	10.8	49

143	Injectable self-gelling composites for bone tissue engineering based on gellan gum hydrogel enriched with different bioglasses. <i>Biomedical Materials (Bristol)</i> , <b>2014</b> , 9, 045014	3.5	47
142	Hydroxyapatite nanocrystals functionalized with alendronate as bioactive components for bone implant coatings to decrease osteoclastic activity. <i>Applied Surface Science</i> , <b>2015</b> , 328, 516-524	6.7	46
141	Functionalization of oligo(poly(ethylene glycol)fumarate) hydrogels with finely dispersed calcium phosphate nanocrystals for bone-substituting purposes. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>2007</b> , 18, 1547-1564	3.5	46
140	Composite Colloidal Gels Made of Bisphosphonate-Functionalized Gelatin and Bioactive Glass Particles for Regeneration of Osteoporotic Bone Defects. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1703438	15.6	45
139	Local delivery of small and large biomolecules in craniomaxillofacial bone. <i>Advanced Drug Delivery Reviews</i> , <b>2012</b> , 64, 1152-64	18.5	44
138	Antibacterial effects of electrospun chitosan/poly(ethylene oxide) nanofibrous membranes loaded with chlorhexidine and silver. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , <b>2016</b> , 12, 1357-64	6	43
137	Instructive coatings for biological guidance of bone implants. <i>Surface and Coatings Technology</i> , <b>2013</b> , 233, 91-98	4.4	42
136	Next Generation Hemostatic Materials Based on NHS-Ester Functionalized Poly(2-oxazoline)s. <i>Biomacromolecules</i> , <b>2017</b> , 18, 2529-2538	6.9	41
135	Morphology of calcium phosphate coatings for biomedical applications deposited using Electrostatic Spray Deposition. <i>Thin Solid Films</i> , <b>2006</b> , 503, 69-78	2.2	41
134	Wet-chemical deposition of functional coatings for bone implantology. <i>Macromolecular Bioscience</i> , <b>2010</b> , 10, 1316-29	5.5	40
133	Influence of precursor solution parameters on chemical properties of calcium phosphate coatings prepared using Electrostatic Spray Deposition (ESD). <i>Biomaterials</i> , <b>2004</b> , 25, 641-9	15.6	40
132	In vitro responses to electrospayed alkaline phosphatase/calcium phosphate composite coatings. <i>Acta Biomaterialia</i> , <b>2009</b> , 5, 2773-82	10.8	38
131	In vivo bone response and mechanical evaluation of electrospayed CaP nanoparticle coatings using the iliac crest of goats as an implantation model. <i>Acta Biomaterialia</i> , <b>2010</b> , 6, 2227-36	10.8	38
130	Electrospun Nanofibrous Silk Fibroin Membranes Containing Gelatin Nanospheres for Controlled Delivery of Biomolecules. <i>Advanced Healthcare Materials</i> , <b>2017</b> , 6, 1700014	10.1	36
129	Acceleration of gelation and promotion of mineralization of chitosan hydrogels by alkaline phosphatase. <i>International Journal of Biological Macromolecules</i> , <b>2013</b> , 56, 122-32	7.9	36
128	Influence of deposition parameters on morphological properties of biomedical calcium phosphate coatings prepared using electrostatic spray deposition. <i>Thin Solid Films</i> , <b>2005</b> , 472, 105-113	2.2	36
127	Electrostatic Spray Deposition of Biomimetic Nanocrystalline Apatite Coatings onto Titanium. <i>Advanced Engineering Materials</i> , <b>2012</b> , 14, B13-B20	3.5	35
126	Injectable biphasic calcium phosphate cements as a potential bone substitute. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , <b>2014</b> , 102, 415-22	3.5	33

125	Three different strategies to obtain porous calcium phosphate cements: comparison of performance in a rat skull bone augmentation model. <i>Tissue Engineering - Part A</i> , <b>2012</b> , 18, 1171-82	3.9	33
124	Strontium doped calcium phosphate coatings on poly(etheretherketone) (PEEK) by pulsed electron deposition. <i>Surface and Coatings Technology</i> , <b>2017</b> , 319, 191-199	4.4	32
123	Synthesis of pH- and thermoresponsive poly(2-n-propyl-2-oxazoline) based copolymers. <i>Journal of Polymer Science Part A</i> , <b>2016</b> , 54, 1573-1582	2.5	31
122	Multilayered DNA coatings: in vitro bioactivity studies and effects on osteoblast-like cell behavior. <i>Acta Biomaterialia</i> , <b>2007</b> , 3, 587-96	10.8	31
121	Bisphosphonate-Functionalized Imaging Agents, Anti-Tumor Agents and Nanocarriers for Treatment of Bone Cancer. <i>Advanced Healthcare Materials</i> , <b>2017</b> , 6, 1601119	10.1	29
120	Self-healing hydrogels formed by complexation between calcium ions and bisphosphonate-functionalized star-shaped polymers. <i>Macromolecules</i> , <b>2017</b> , 50, 8698-8706	5.5	29
119	Genetically engineered silk-collagen-like copolymer for biomedical applications: production, characterization and evaluation of cellular response. <i>Acta Biomaterialia</i> , <b>2014</b> , 10, 3620-9	10.8	28
118	Long-term evaluation of the degradation behavior of three apatite-forming calcium phosphate cements. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2016</b> , 104, 1072-81	5.4	28
117	Effect of calcium carbonate on hardening, physicochemical properties, and in vitro degradation of injectable calcium phosphate cements. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2012</b> , 100, 712-9	5.4	27
116	Facilitating the mineralization of oligo(poly(ethylene glycol) fumarate) hydrogel by incorporation of hydroxyapatite nanoparticles. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2012</b> , 100, 1316-23	5.4	27
115	1-step versus 2-step immobilization of alkaline phosphatase and bone morphogenetic protein-2 onto implant surfaces using polydopamine. <i>Tissue Engineering - Part C: Methods</i> , <b>2013</b> , 19, 610-9	2.9	26
114	Incorporation of PLLA micro-fillers for mechanical reinforcement of calcium-phosphate cement. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2017</b> , 71, 286-294	4.1	24
113	Preclinical evaluation of injectable bone substitute materials. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , <b>2015</b> , 9, 191-209	4.4	24
112	Exploiting Bisphosphonate-Bioactive-Glass Interactions for the Development of Self-Healing and Bioactive Composite Hydrogels. <i>Macromolecular Rapid Communications</i> , <b>2016</b> , 37, 1952-1959	4.8	24
111	Effect of Nano-HA/Collagen Composite Hydrogels on Osteogenic Behavior of Mesenchymal Stromal Cells. <i>Stem Cell Reviews and Reports</i> , <b>2016</b> , 12, 352-64	6.4	24
110	Substrate geometry directs the in vitro mineralization of calcium phosphate ceramics. <i>Acta Biomaterialia</i> , <b>2014</b> , 10, 661-9	10.8	24
109	Gelation and biocompatibility of injectable alginate-calcium phosphate gels for bone regeneration. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2014</b> , 102, 808-17	5.4	24
108	Accelerated calcium phosphate cement degradation due to incorporation of glucono-delta-lactone microparticles. <i>Tissue Engineering - Part A</i> , <b>2014</b> , 20, 378-88	3.9	23

107	Enzymatically induced mineralization of platelet-rich fibrin. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2012</b> , 100, 1335-46	5.4	23
106	In vivo evaluation of the trabecular bone behavior to porous electrostatic spray deposition-derived calcium phosphate coatings. <i>Clinical Oral Implants Research</i> , <b>2007</b> , 18, 354-61	4.8	23
105	Increased acellular and cellular surface mineralization induced by nanogrooves in combination with a calcium-phosphate coating. <i>Acta Biomaterialia</i> , <b>2016</b> , 31, 368-377	10.8	22
104	Development of porous polyurethane/strontium-substituted hydroxyapatite composites for bone regeneration. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2015</b> , 103, 1930-9	5.4	21
103	Electrodeposited Assembly of Additive-Free Silk Fibroin Coating from Pre-Assembled Nanospheres for Drug Delivery. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 12018-12029	9.5	21
102	Subcutaneous tissue response and osteogenic performance of calcium phosphate nanoparticle-enriched hydrogels in the tibial medullary cavity of guinea pigs. <i>Acta Biomaterialia</i> , <b>2013</b> , 9, 5464-74	10.8	20
101	The influence of the crystallinity of electrostatic spray deposition-derived coatings on osteoblast-like cell behavior, in vitro. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2006</b> , 78, 258-67	5.4	20
100	Enzymatically biomineralized chitosan scaffolds for tissue-engineering applications. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , <b>2017</b> , 11, 1500-1513	4.4	19
99	Tuning the degradation rate of calcium phosphate cements by incorporating mixtures of polylactic-co-glycolic acid microspheres and glucono-delta-lactone microparticles. <i>Tissue Engineering - Part A</i> , <b>2014</b> , 20, 2870-82	3.9	19
98	Injectable composites based on biosilicate and alginate: handling and in vitro characterization. <i>RSC Advances</i> , <b>2014</b> , 4, 45778-45785	3.7	19
97	Porous calcium phosphate cement for alveolar bone regeneration. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , <b>2014</b> , 8, 473-82	4.4	19
96	Influence of the Molecular Weight and Charge of Antibiotics on Their Release Kinetics From Gelatin Nanospheres. <i>Macromolecular Bioscience</i> , <b>2015</b> , 15, 901-11	5.5	18
95	Mechanical properties of porous, electrosprayed calcium phosphate coatings. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2006</b> , 78, 558-69	5.4	18
94	Osteoclastic resorption of calcium phosphate coatings applied with electrostatic spray deposition (ESD), in vitro. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2005</b> , 74, 570-80	5.4	18
93	The osteoinductive potential of printable, cell-laden hydrogel-ceramic composites. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2012</b> , 100, 2412-20	5.4	17
92	Bulk physicochemical, interconnectivity, and mechanical properties of calcium phosphate cements-fibrin glue composites for bone substitute applications. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2013</b> , 101, 478-90	5.4	17
91	Platinum-loaded, selenium-doped hydroxyapatite nanoparticles selectively reduce proliferation of prostate and breast cancer cells co-cultured in the presence of stem cells. <i>Journal of Materials Chemistry B</i> , <b>2020</b> , 8, 2792-2804	7.3	16
90	Enzymatic pH control for biomimetic deposition of calcium phosphate coatings. <i>Acta Biomaterialia</i> , <b>2014</b> , 10, 931-9	10.8	16

89	The behavior of osteoblast-like cells on various substrates with functional blocking of integrin-beta1 and integrin-beta3. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2008</b> , 19, 861-8	4.5	16
88	Osteophilic properties of bone implant surface modifications in a cassette model on a decorticated goat spinal transverse process. <i>Acta Biomaterialia</i> , <b>2016</b> , 37, 195-205	10.8	16
87	Tough and Osteocompatible Calcium Phosphate Cements Reinforced with Poly(vinyl alcohol) Fibers. <i>ACS Biomaterials Science and Engineering</i> , <b>2019</b> , 5, 2491-2505	5.5	15
86	Bisphosphonate-functionalized hyaluronic acid showing selective affinity for osteoclasts as a potential treatment for osteoporosis. <i>Biomaterials Science</i> , <b>2015</b> , 3, 1197-207	7.4	15
85	In vitro response to alkaline phosphatase coatings immobilized onto titanium implants using electrospray deposition or polydopamine-assisted deposition. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2014</b> , 102, 1102-9	5.4	15
84	Fibrous Hydrogels for Cell Encapsulation: A Modular and Supramolecular Approach. <i>PLoS ONE</i> , <b>2016</b> , 11, e0155625	3.7	15
83	Influence of polymeric additives on the cohesion and mechanical properties of calcium phosphate cements. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2016</b> , 27, 58	4.5	14
82	Effects of physical and chemical treatments on the molecular weight and degradation of alginate-hydroxyapatite composites. <i>Macromolecular Bioscience</i> , <b>2014</b> , 14, 872-80	5.5	14
81	Sustained delivery of biomolecules from gelatin carriers for applications in bone regeneration. <i>Therapeutic Delivery</i> , <b>2014</b> , 5, 943-58	3.8	14
80	Tantalumpentoxide as a radiopacifier in injectable calcium phosphate cements for bone substitution. <i>Tissue Engineering - Part C: Methods</i> , <b>2011</b> , 17, 907-13	2.9	14
79	Gelatin Nanoparticles with Enhanced Affinity for Calcium Phosphate. <i>Macromolecular Bioscience</i> , <b>2016</b> , 16, 717-29	5.5	14
78	Controlled Release of Chemotherapeutic Platinum-Bisphosphonate Complexes from Injectable Calcium Phosphate Cements. <i>Tissue Engineering - Part A</i> , <b>2016</b> , 22, 788-800	3.9	14
77	Stabilizing dental implants with a fiber-reinforced calcium phosphate cement: An in vitro and in vivo study. <i>Acta Biomaterialia</i> , <b>2020</b> , 110, 280-288	10.8	13
76	Physicochemical properties and in vitro mineralization of porous polymethylmethacrylate cement loaded with calcium phosphate particles. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , <b>2015</b> , 103, 548-55	3.5	13
75	Tantalum oxide and barium sulfate as radiopacifiers in injectable calcium phosphate-poly(lactic-co-glycolic acid) cements for monitoring in vivo degradation. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2014</b> , 102, 141-9	5.4	13
74	Calcium phosphate coatings <b>2008</b> , 464-484		12
73	Deposition of calcium phosphate coatings with defined chemical properties using the electrostatic spray deposition technique. <i>Journal of the European Ceramic Society</i> , <b>2006</b> , 26, 487-493	6	12
72	Nanofibrillar hydrogel scaffolds from recombinant protein-based polymers with integrin- and proteoglycan-binding domains. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2016</b> , 104, 3082-3092	5.4	12

71	Fiber-reinforced colloidal gels as injectable and moldable biomaterials for regenerative medicine. <i>Materials Science and Engineering C</i> , <b>2018</b> , 92, 143-150	8.3	11
70	Alginate-hydroxypropylcellulose hydrogel microbeads for alkaline phosphatase encapsulation. <i>Journal of Microencapsulation</i> , <b>2014</b> , 31, 68-76	3.4	11
69	RANKL delivery from calcium phosphate containing PLGA microspheres. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2013</b> , 101, 3123-30	5.4	11
68	Selenium-doped hydroxyapatite nanoparticles for potential application in bone tumor therapy. <i>Journal of Inorganic Biochemistry</i> , <b>2021</b> , 215, 111334	4.2	11
67	Monitoring local delivery of vancomycin from gelatin nanospheres in zebrafish larvae. <i>International Journal of Nanomedicine</i> , <b>2018</b> , 13, 5377-5394	7.3	11
66	Functionalization of oligo(poly(ethylene glycol)fumarate) hydrogels with finely dispersed calcium phosphate nanocrystals for bone-substituting purposes. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>2007</b> , 18, 1547-64	3.5	11
65	Nanostructured raspberry-like gelatin microspheres for local delivery of multiple biomolecules. <i>Acta Biomaterialia</i> , <b>2017</b> , 58, 67-79	10.8	10
64	Polyester fibers can be rendered calcium phosphate-binding by surface functionalization with bisphosphonate groups. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2017</b> , 105, 2335-2342	5.4	10
63	Hybrid particles derived from alendronate and bioactive glass for treatment of osteoporotic bone defects. <i>Journal of Materials Chemistry B</i> , <b>2019</b> , 7, 796-808	7.3	10
62	Quantitative imaging of platinum-based antitumor complexes in bone tissue samples using LA-ICP-MS. <i>Journal of Trace Elements in Medicine and Biology</i> , <b>2019</b> , 54, 98-102	4.1	10
61	Enzymatic control of chitosan gelation for delivery of periodontal ligament cells. <i>Macromolecular Bioscience</i> , <b>2014</b> , 14, 1004-14	5.5	10
60	Targeting of radioactive platinum-bisphosphonate anticancer drugs to bone of high metabolic activity. <i>Scientific Reports</i> , <b>2020</b> , 10, 5889	4.9	9
59	Calcium-mediated secondary cross-linking of bisphosphonated oligo(poly(ethylene glycol) fumarate) hydrogels. <i>Macromolecular Bioscience</i> , <b>2013</b> , 13, 1308-13	5.5	9
58	Effects of Stirring and Fluid Perfusion on the In Vitro Degradation of Calcium Phosphate Cement/PLGA Composites. <i>Tissue Engineering - Part C: Methods</i> , <b>2015</b> , 21, 1171-7	2.9	8
57	Micro- and macromechanical characterization of the influence of surface-modification of poly(vinyl alcohol) fibers on the reinforcement of calcium phosphate cements. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2020</b> , 109, 103776	4.1	8
56	Alendronate-Functionalized Poly(2-oxazoline)s with Tunable Affinity for Calcium Cations. <i>Biomacromolecules</i> , <b>2019</b> , 20, 2913-2921	6.9	8
55	Effect of mechanical loading and substrate elasticity on the osteogenic and adipogenic differentiation of mesenchymal stem cells. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , <b>2019</b> , 13, 2279-2290	4.4	8
54	Configurational effects of collagen/ALP coatings on enzyme immobilization and surface mineralization. <i>Applied Surface Science</i> , <b>2014</b> , 311, 292-299	6.7	8



53	In vitro and in vivo enzyme-mediated biomineralization of oligo(poly(ethylene glycol) fumarate hydrogels. <i>Macromolecular Bioscience</i> , <b>2013</b> , 13, 777-88	5.5	8
52	Experimental and numerical analysis on bending and tensile failure behavior of calcium phosphate cements. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2020</b> , 103, 103565	4.1	8
51	Surface functionalization of polylactic acid fibers with alendronate groups does not improve the mechanical properties of fiber-reinforced calcium phosphate cements. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2019</b> , 90, 472-483	4.1	8
50	Porous titanium scaffolds with injectable hyaluronic acid-DBM gel for bone substitution in a rat critical-sized calvarial defect model. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , <b>2017</b> , 11, 2537-2548	4.4	7
49	Sterilization effects on the handling and degradation properties of calcium phosphate cements containing poly (l-lactic-co-glycolic acid) porogens and carboxymethyl cellulose. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , <b>2019</b> , 107, 2216-2228	3.5	7
48	Preclinical evaluation of platinum-loaded hydroxyapatite nanoparticles in an embryonic zebrafish xenograft model. <i>Nanoscale</i> , <b>2020</b> , 12, 13582-13594	7.7	7
47	Dual-functionalisation of gelatine nanoparticles with an anticancer platinum(II)Bisphosphonate complex and mineral-binding alendronate. <i>RSC Advances</i> , <b>2016</b> , 6, 113025-113037	3.7	7
46	Acellular mineral deposition within injectable, dual-gelling hydrogels for bone tissue engineering. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2017</b> , 105, 110-117	5.4	7
45	Rapid screening of mineralization capacity of biomaterials by means of quantification of enzymatically deposited calcium phosphate. <i>Tissue Engineering - Part C: Methods</i> , <b>2014</b> , 20, 838-50	2.9	7
44	Top-Down Approach for the Preparation of Highly Porous PLLA Microcylinders. <i>ACS Biomaterials Science and Engineering</i> , <b>2016</b> , 2, 2099-2107	5.5	7
43	Bone tumor-targeted delivery of theranostic Pt-bisphosphonate complexes promotes killing of metastatic tumor cells. <i>Materials Today Bio</i> , <b>2021</b> , 9, 100088	9.9	7
42	A self-healable, moldable and bioactive biomaterial gum for personalised and wearable drug delivery. <i>Journal of Materials Chemistry B</i> , <b>2020</b> , 8, 4340-4356	7.3	6
41	Calcium Phosphate Bioceramics and Cements <b>2019</b> , 591-611		6
40	Interfacial characterization of poly (vinyl alcohol) fibers embedded in a calcium phosphate cement matrix: An experimental and numerical investigation. <i>Acta Biomaterialia</i> , <b>2019</b> , 96, 582-593	10.8	6
39	Thermoresponsive Brushes Facilitate Effective Reinforcement of Calcium Phosphate Cements. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 26690-26703	9.5	6
38	Development of an in vitro confinement test to predict the clinical handling of polymer-based injectable bone substitutes. <i>Polymer Testing</i> , <b>2013</b> , 32, 1379-1384	4.5	5
37	Putty-like bone fillers based on CaP ceramics or Biosilicate combined with carboxymethylcellulose: Characterization, optimization, and evaluation. <i>Journal of Biomaterials Applications</i> , <b>2017</b> , 32, 276-288	2.9	5
36	A comparative study of two advanced spraying techniques for the deposition of biologically active enzyme coatings onto bone-substituting implants. <i>Thin Solid Films</i> , <b>2010</b> , 518, 5615-5621	2.2	5

35	The Use of Fibers in Bone Tissue Engineering. <i>Tissue Engineering - Part B: Reviews</i> , <b>2021</b> ,	7.9	5
34	The molecular conformation of silk fibroin regulates osteogenic cell behavior by modulating the stability of the adsorbed protein-material interface. <i>Bone Research</i> , <b>2021</b> , 9, 13	13.3	5
33	Electrophoretic deposition of silk fibroin coatings with pre-defined architecture to facilitate precise control over drug delivery. <i>Bioactive Materials</i> , <b>2021</b> , 6, 4243-4254	16.7	5
32	DNA-Coatings: Bioactive Properties and Effects on Osteoblast-Like Cells. <i>Key Engineering Materials</i> , <b>2007</b> , 361-363, 605-608	0.4	4
31	Colloidal hydrogels made of gelatin nanoparticles exhibit fast stress relaxation at strains relevant for cell activity. <i>Acta Biomaterialia</i> , <b>2021</b> ,	10.8	4
30	Nanoclay Reinforced Biomaterials for Mending Musculoskeletal Tissue Disorders. <i>Advanced Healthcare Materials</i> , <b>2021</b> , 10, e2100217	10.1	4
29	Pre-Clinical Evaluation of Biological Bone Substitute Materials for Application in Highly Loaded Skeletal Sites. <i>Biomolecules</i> , <b>2020</b> , 10,	5.9	3
28	Tough and injectable fiber reinforced calcium phosphate cement as an alternative to polymethylmethacrylate cement for vertebral augmentation: a biomechanical study. <i>Biomaterials Science</i> , <b>2020</b> , 8, 4239-4250	7.4	3
27	Calcium phosphate cement reinforced with poly (vinyl alcohol) fibers: An experimental and numerical failure analysis. <i>Acta Biomaterialia</i> , <b>2021</b> , 119, 458-471	10.8	3
26	Bone-Adhesive Hydrogels Based on Dual Crosslinked Poly(2-oxazoline)s. <i>Macromolecular Bioscience</i> , <b>2021</b> , 21, e2100257	5.5	3
25	Degradation and excretion of poly(2-oxazoline) based hemostatic materials. <i>Materialia</i> , <b>2020</b> , 12, 100763.2		2
24	Designing biomaterials for the delivery of RNA therapeutics to stimulate bone healing. <i>Materials Today Bio</i> , <b>2021</b> , 10, 100105	9.9	2
23	A systematic review and meta-analyses on animal models used in bone adhesive research. <i>Journal of Orthopaedic Research</i> , <b>2021</b> ,	3.8	2
22	Characterization of $\beta$ -TCP Based Injectable Calcium Phosphate Cement as a Potential Bone Substitute. <i>Key Engineering Materials</i> , <b>2012</b> , 529-530, 157-160	0.4	1
21	Bone Regenerative Properties of Injectable Calcium Phosphate/PLGA Cement in an Alveolar Bone Defect. <i>Key Engineering Materials</i> , <b>2012</b> , 529-530, 300-303	0.4	1
20	Adsorption of Alendronate onto Biomimetic Apatite Nanocrystals to Develop Drug Carrier Coating for Bone Implants. <i>Key Engineering Materials</i> , <b>2012</b> , 529-530, 475-479	0.4	1
19	Electrospray Deposition of Bioactive Alkaline Phosphatase Coatings. <i>Key Engineering Materials</i> , <b>2007</b> , 361-363, 589-592	0.4	1
18	Chemical and Morphological Properties of Calcium Phosphate Coatings Deposited Using the Electrostatic Spray Deposition (ESD) Technique. <i>Key Engineering Materials</i> , <b>2005</b> , 284-286, 199-202	0.4	1

17	New insights into the biomimetic design and biomedical applications of bioengineered bone microenvironments. <i>APL Bioengineering</i> , <b>2021</b> , 5, 041507	6.6	1
16	Regenerating Critical Size Rat Segmental Bone Defects with a Self-Healing Hybrid Nanocomposite Hydrogel: Effect of Bone Condition and BMP-2 Incorporation. <i>Macromolecular Bioscience</i> , <b>2021</b> , 21, e2100088	5.5	1
15	Pharmacological interventions targeting bone diseases in adjunction with bone grafting <b>2020</b> , 251-280		1
14	Bone-adhesive barrier membranes based on alendronate-functionalized poly(2-oxazoline)s. <i>Journal of Materials Chemistry B</i> , <b>2021</b> , 9, 5848-5860	7.3	1
13	A Practical Procedure for the Generation of Human Osteoclasts and Their Characterization. <i>Tissue Engineering - Part C: Methods</i> , <b>2021</b> , 27, 421-432	2.9	0
12	Dual-functional porous and cisplatin-loaded polymethylmethacrylate cement for reconstruction of load-bearing bone defect kills bone tumor cells.. <i>Bioactive Materials</i> , <b>2022</b> , 15, 120-130	16.7	0
11	Micro- and Nanospheres for Tissue Engineering <b>2013</b> , 202-219		
10	Biomimetic Mineralization of Hydrogel Biomaterials for Bone Tissue Engineering <b>2013</b> , 51-67		
9	Nanostructured Bioceramics. <i>Journal of Nanomaterials</i> , <b>2013</b> , 2013, 1-1	3.2	
8	In Vitro and In Vivo Surface Reactivity of Various Calcium Phosphate Coatings Deposited Using Electrostatic Spray Deposition (ESD). <i>Key Engineering Materials</i> , <b>2006</b> , 309-311, 607-610	0.4	
7	Correlating Electro spray Characteristics with Surface Morphology of Calcium Phosphate Coatings Deposited Using Electrostatic Spray Deposition (ESD). <i>Key Engineering Materials</i> , <b>2006</b> , 309-311, 611-614	0.4	
6	Materiomics using synthetic materials: metals, cements, covalent polymers and supramolecular systems	31-50	
5	Bone Tissue Engineering: Biodegradable Polymeric/Ceramic Composite Scaffolds for Tissue Regeneration	1148-1163	
4	Electrosprayed Calcium Phosphate Coating for Biomedical Purposes <b>2009</b> , 263-300		
3	Combining Osteochondral Stem Cells and Biodegradable Hydrogels for Bone Regeneration <b>2013</b> , 326-348		
2	Biodegradable Polymeric/Ceramic Composite Scaffolds to Regenerate Bone Tissue <b>2013</b> , 221-242		
1	A salt-based method to adapt stiffness and biodegradability of porous collagen scaffolds.. <i>RSC Advances</i> , <b>2019</b> , 9, 36742-36750	3.7	