

Kelvin Wk Yeung

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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 papers	10,804 citations	55 h-index	97 g-index
192 ext. papers	13,783 ext. citations	10 avg, IF	6.79 L-index

#	Paper	IF	Citations
186	Bone grafts and biomaterials substitutes for bone defect repair: A review. <i>Bioactive Materials</i> , 2017 , 2, 224-247	16.7	704
185	Biomimetic porous scaffolds for bone tissue engineering. <i>Materials Science and Engineering Reports</i> , 2014 , 80, 1-36	30.9	666
184	A biodegradable polymer-based coating to control the performance of magnesium alloy orthopaedic implants. <i>Biomaterials</i> , 2010 , 31, 2084-96	15.6	443
183	Photo-Inspired Antibacterial Activity and Wound Healing Acceleration by Hydrogel Embedded with Ag/Ag@AgCl/ZnO Nanostructures. <i>ACS Nano</i> , 2017 , 11, 9010-9021	16.7	416
182	Rapid Biofilm Eradication on Bone Implants Using Red Phosphorus and Near-Infrared Light. <i>Advanced Materials</i> , 2018 , 30, e1801808	24	256
181	Cytocompatibility, osseointegration, and bioactivity of three-dimensional porous and nanostructured network on polyetheretherketone. <i>Biomaterials</i> , 2013 , 34, 9264-77	15.6	229
180	Repeatable Photodynamic Therapy with Triggered Signaling Pathways of Fibroblast Cell Proliferation and Differentiation To Promote Bacteria-Accompanied Wound Healing. <i>ACS Nano</i> , 2018 , 12, 1747-1759	16.7	209
179	Balancing Bacteria-Osteoblast Competition through Selective Physical Puncture and Biofunctionalization of ZnO/Polydopamine/Arginine-Glycine-Aspartic Acid-Cysteine Nanorods. <i>ACS Nano</i> , 2017 , 11, 11250-11263	16.7	178
178	Synergistic Bacteria Killing through Photodynamic and Physical Actions of Graphene Oxide/Ag/Collagen Coating. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 26417-26428	9.5	173
177	Rapid Sterilization and Accelerated Wound Healing Using Zn ²⁺ and Graphene Oxide Modified g-C ₃ N ₄ under Dual Light Irradiation. <i>Advanced Functional Materials</i> , 2018 , 28, 1800299	15.6	173
176	Zinc-doped Prussian blue enhances photothermal clearance of Staphylococcus aureus and promotes tissue repair in infected wounds. <i>Nature Communications</i> , 2019 , 10, 4490	17.4	170
175	Tuning the Bandgap of Photo-Sensitive Polydopamine/AgPO/Graphene Oxide Coating for Rapid, Noninvasive Disinfection of Implants. <i>ACS Central Science</i> , 2018 , 4, 724-738	16.8	168
174	Enhanced antimicrobial properties, cytocompatibility, and corrosion resistance of plasma-modified biodegradable magnesium alloys. <i>Acta Biomaterialia</i> , 2014 , 10, 544-56	10.8	157
173	Highly Effective and Noninvasive Near-Infrared Eradication of a Biofilm on Implants by a Photoresponsive Coating within 20 Min. <i>Advanced Science</i> , 2019 , 6, 1900599	13.6	142
172	Enhanced photocatalytic activity and photothermal effects of Cu-doped metal-organic frameworks for rapid treatment of bacteria-infected wounds. <i>Applied Catalysis B: Environmental</i> , 2020 , 261, 118248	21.8	140
171	Fabrication and characterization of monodisperse PLGA-alginate core-shell microspheres with monodisperse size and homogeneous shells for controlled drug release. <i>Acta Biomaterialia</i> , 2013 , 9, 7410-9	10.8	127
170	Electrophoretic Deposited Stable Chitosan@MoS ₂ Coating with Rapid In Situ Bacteria-Killing Ability under Dual-Light Irradiation. <i>Small</i> , 2018 , 14, e1704347	11	125

169	Modulation of collagen alignment by silver nanoparticles results in better mechanical properties in wound healing. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2011 , 7, 497-504	6	121
168	Fundamental Theory of Biodegradable Metals Definition, Criteria, and Design. <i>Advanced Functional Materials</i> , 2019 , 29, 1805402	15.6	111
167	Controlled-temperature photothermal and oxidative bacteria killing and acceleration of wound healing by polydopamine-assisted Au-hydroxyapatite nanorods. <i>Acta Biomaterialia</i> , 2018 , 77, 352-364	10.8	111
166	Silver nanoparticles promote osteogenesis of mesenchymal stem cells and improve bone fracture healing in osteogenesis mechanism mouse model. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2015 , 11, 1949-59	6	110
165	Noninvasive rapid bacteria-killing and acceleration of wound healing through photothermal/photodynamic/copper ion synergistic action of a hybrid hydrogel. <i>Biomaterials Science</i> , 2018 , 6, 2110-2121	7.4	110
164	Rapid and Superior Bacteria Killing of Carbon Quantum Dots/ZnO Decorated Injectable Folic Acid-Conjugated PDA Hydrogel through Dual-Light Triggered ROS and Membrane Permeability. <i>Small</i> , 2019 , 15, e1900322	11	105
163	Zinc-Modified Sulfonated Polyetheretherketone Surface with Immunomodulatory Function for Guiding Cell Fate and Bone Regeneration. <i>Advanced Science</i> , 2018 , 5, 1800749	13.6	102
162	Surface functionalization of biomaterials by radical polymerization. <i>Progress in Materials Science</i> , 2016 , 83, 191-235	42.2	99
161	Development and Antibacterial Performance of Novel Polylactic Acid-Graphene Oxide-Silver Nanoparticle Hybrid Nanocomposite Mats Prepared By Electrospinning. <i>ACS Biomaterials Science and Engineering</i> , 2017 , 3, 471-486	5.5	98
160	In Situ Disinfection through Photoinspired Radical Oxygen Species Storage and Thermal-Triggered Release from Black Phosphorous with Strengthened Chemical Stability. <i>Small</i> , 2018 , 14, 1703197	11	98
159	The recent progress on metal-organic frameworks for phototherapy. <i>Chemical Society Reviews</i> , 2021 , 50, 5086-5125	58.5	96
158	Precisely controlled delivery of magnesium ions thru sponge-like monodisperse PLGA/nano-MgO-alginate core-shell microsphere device to enable in-situ bone regeneration. <i>Biomaterials</i> , 2018 , 174, 1-16	15.6	92
157	Nanotechnology in biomedical applications: a review. <i>International Journal of Nano and Biomaterials</i> , 2010 , 3, 119	0.2	91
156	Photo-responsive chitosan/Ag/MoS for rapid bacteria-killing. <i>Journal of Hazardous Materials</i> , 2020 , 383, 121122	12.8	91
155	Local Photothermal/Photodynamic Synergistic Therapy by Disrupting Bacterial Membrane To Accelerate Reactive Oxygen Species Permeation and Protein Leakage. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 17902-17914	9.5	88
154	Low-modulus Mg/PCL hybrid bone substitute for osteoporotic fracture fixation. <i>Biomaterials</i> , 2013 , 34, 7016-32	15.6	88
153	Relationship between osseointegration and superelastic biomechanics in porous NiTi scaffolds. <i>Biomaterials</i> , 2011 , 32, 330-8	15.6	86
152	Self-Assembled Injectable Nanocomposite Hydrogels Stabilized by Bisphosphonate-Magnesium (Mg ²⁺) Coordination Regulates the Differentiation of Encapsulated Stem Cells via Dual Crosslinking. <i>Advanced Functional Materials</i> , 2017 , 27, 1701642	15.6	84

151	In vivo stimulation of bone formation by aluminum and oxygen plasma surface-modified magnesium implants. <i>Biomaterials</i> , 2013 , 34, 9863-76	15.6	83
150	Interfacial engineering of BiS/TiCT MXene based on work function for rapid photo-excited bacteria-killing. <i>Nature Communications</i> , 2021 , 12, 1224	17.4	82
149	Biofunctionalization of carbon nanotubes/chitosan hybrids on Ti implants by atom layer deposited ZnO nanostructures. <i>Applied Surface Science</i> , 2017 , 400, 14-23	6.7	79
148	Eradicating Multidrug-Resistant Bacteria Rapidly Using a Multi Functional g-C ₃ N ₄ @ Bi ₂ S ₃ Nanorod Heterojunction with or without Antibiotics. <i>Advanced Functional Materials</i> , 2019 , 29, 1900946	15.6	79
147	Treatment of MRSA-infected osteomyelitis using bacterial capturing, magnetically targeted composites with microwave-assisted bacterial killing. <i>Nature Communications</i> , 2020 , 11, 4446	17.4	79
146	Rapid bacteria trapping and killing of metal-organic frameworks strengthened photo-responsive hydrogel for rapid tissue repair of bacterial infected wounds. <i>Chemical Engineering Journal</i> , 2020 , 396, 125194	14.7	77
145	Porous Iron-Carboxylate Metal-Organic Framework: A Novel Bioplatfrom with Sustained Antibacterial Efficacy and Nontoxicity. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 19248-19257	9.5	73
144	The enhanced photocatalytic properties of MnO/g-CN heterostructure for rapid sterilization under visible light. <i>Journal of Hazardous Materials</i> , 2019 , 377, 227-236	12.8	73
143	Magnetic, fluorescent, and thermo-responsive Fe(3)O(4)/rare earth incorporated poly(St-NIPAM) core-shell colloidal nanoparticles in multimodal optical/magnetic resonance imaging probes. <i>Biomaterials</i> , 2013 , 34, 2296-306	15.6	72
142	Functional replication of the tendon tissue microenvironment by a bioimprinted substrate and the support of tenocytic differentiation of mesenchymal stem cells. <i>Biomaterials</i> , 2012 , 33, 7686-98	15.6	71
141	Effects of carbon and nitrogen plasma immersion ion implantation on in vitro and in vivo biocompatibility of titanium alloy. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 1510-6	9.5	70
140	Near-Infrared Light Triggered Phototherapy and Immunotherapy for Elimination of Methicillin-Resistant Biofilm Infection on Bone Implant. <i>ACS Nano</i> , 2020 , 14, 8157-8170	16.7	67
139	Self-assembled magnetic fluorescent polymeric micelles for magnetic resonance and optical imaging. <i>Biomaterials</i> , 2014 , 35, 344-55	15.6	66
138	Novel Electrospun Polylactic Acid Nanocomposite Fiber Mats with Hybrid Graphene Oxide and Nanohydroxyapatite Reinforcements Having Enhanced Biocompatibility. <i>Polymers</i> , 2016 , 8,	4.5	66
137	Dual Metal-Organic Framework Heterointerface. <i>ACS Central Science</i> , 2019 , 5, 1591-1601	16.8	65
136	A surface-engineered polyetheretherketone biomaterial implant with direct and immunoregulatory antibacterial activity against methicillin-resistant Staphylococcus aureus. <i>Biomaterials</i> , 2019 , 208, 8-20	15.6	64
135	Valence State Manipulation of Cerium Oxide Nanoparticles on a Titanium Surface for Modulating Cell Fate and Bone Formation. <i>Advanced Science</i> , 2018 , 5, 1700678	13.6	63
134	Rapid and Highly Effective Noninvasive Disinfection by Hybrid Ag/CS@MnO Nanosheets Using Near-Infrared Light. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 15014-15027	9.5	59

133	Plasma-modified biomaterials for self-antimicrobial applications. <i>ACS Applied Materials & Interfaces</i> , 2011 , 3, 2851-60	9.5	59
132	Tannic Acid/Fe/Ag Nanofilm Exhibiting Superior Photodynamic and Physical Antibacterial Activity. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 39657-39671	9.5	55
131	Spark Plasma Sintered Hydroxyapatite/Graphite Nanosheet and Hydroxyapatite/Multiwalled Carbon Nanotube Composites: Mechanical and in Vitro Cellular Properties. <i>Advanced Engineering Materials</i> , 2011 , 13, 336-341	3.5	54
130	Improved corrosion resistance and cytocompatibility of magnesium alloy by two-stage cooling in thermal treatment. <i>Corrosion Science</i> , 2012 , 59, 360-365	6.8	53
129	Surface nano-architectures and their effects on the mechanical properties and corrosion behavior of Ti-based orthopedic implants. <i>Surface and Coatings Technology</i> , 2013 , 233, 13-26	4.4	51
128	Superimposed surface plasma resonance effect enhanced the near-infrared photocatalytic activity of Au@BiWO coating for rapid bacterial killing. <i>Journal of Hazardous Materials</i> , 2019 , 380, 120818	12.8	50
127	Improved surface corrosion resistance of WE43 magnesium alloy by dual titanium and oxygen ion implantation. <i>Thin Solid Films</i> , 2013 , 529, 407-411	2.2	50
126	Photoresponsive Materials for Antibacterial Applications. <i>Cell Reports Physical Science</i> , 2020 , 1, 100245	6.1	50
125	AgPO decorated black urchin-like defective TiO for rapid and long-term bacteria-killing under visible light. <i>Bioactive Materials</i> , 2021 , 6, 1575-1587	16.7	50
124	Ag/AgBr-loaded mesoporous silica for rapid sterilization and promotion of wound healing. <i>Biomaterials Science</i> , 2018 , 6, 1735-1744	7.4	50
123	Infection-prevention on Ti implants by controlled drug release from folic acid/ZnO quantum dots sealed titania nanotubes. <i>Materials Science and Engineering C</i> , 2018 , 85, 214-224	8.3	49
122	Lysozyme-Assisted Photothermal Eradication of Methicillin-Resistant Infection and Accelerated Tissue Repair with Natural Melanosome Nanostructures. <i>ACS Nano</i> , 2019 , 13, 11153-11167	16.7	49
121	Novel polypropylene biocomposites reinforced with carbon nanotubes and hydroxyapatite nanorods for bone replacements. <i>Materials Science and Engineering C</i> , 2013 , 33, 1380-8	8.3	49
120	Enhanced photocatalytic and photothermal properties of ecofriendly metal-organic framework heterojunction for rapid sterilization. <i>Chemical Engineering Journal</i> , 2021 , 405, 126730	14.7	49
119	Light-Activated Rapid Disinfection by Accelerated Charge Transfer in Red Phosphorus/ZnO Heterointerface. <i>Small Methods</i> , 2019 , 3, 1900048	12.8	48
118	Photothermy-strengthened photocatalytic activity of polydopamine-modified metal-organic frameworks for rapid therapy of bacteria-infected wounds. <i>Journal of Materials Science and Technology</i> , 2021 , 62, 83-95	9.1	48
117	Engineered polycaprolactone-magnesium hybrid biodegradable porous scaffold for bone tissue engineering. <i>Progress in Natural Science: Materials International</i> , 2014 , 24, 561-567	3.6	47
116	Electrospun chitosan/PVA/bioglass Nanofibrous membrane with spatially designed structure for accelerating chronic wound healing. <i>Materials Science and Engineering C</i> , 2019 , 105, 110083	8.3	46

115	A functionalized TiO/MgTiO nano-layer on biodegradable magnesium implant enables superior bone-implant integration and bacterial disinfection. <i>Biomaterials</i> , 2019 , 219, 119372	15.6	46
114	Controlled release and biocompatibility of polymer/titania nanotube array system on titanium implants. <i>Bioactive Materials</i> , 2017 , 2, 44-50	16.7	44
113	Rapid Biofilm Elimination on Bone Implants Using Near-Infrared-Activated Inorganic Semiconductor Heterostructures. <i>Advanced Healthcare Materials</i> , 2019 , 8, e1900835	10.1	44
112	Enhancing the antibacterial efficacy of low-dose gentamicin with 5 minute assistance of phototherapy at 50 °C. <i>Biomaterials Science</i> , 2019 , 7, 1437-1447	7.4	44
111	Plasma Surface Functionalized Polyetheretherketone for Enhanced Osseo-Integration at Bone-Implant Interface. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 3901-11	9.5	44
110	A combined coating strategy based on atomic layer deposition for enhancement of corrosion resistance of AZ31 magnesium alloy. <i>Applied Surface Science</i> , 2018 , 434, 1101-1111	6.7	44
109	Soluble polyimides based on a novel pyridine-containing diamine m,p-PAPP and various aromatic dianhydrides. <i>Polymer Bulletin</i> , 2011 , 66, 1191-1206	2.4	43
108	Osteogenic ability of Cu-bearing stainless steel. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2015 , 103, 1433-44	3.5	42
107	Masquelet technique for treatment of posttraumatic bone defects. <i>Scientific World Journal, The</i> , 2014 , 2014, 710302	2.2	42
106	Microfluidic fabrication of polymeric core-shell microspheres for controlled release applications. <i>Biomicrofluidics</i> , 2013 , 7, 44128	3.2	41
105	Regulation of macrophage polarization through surface topography design to facilitate implant-to-bone osteointegration. <i>Science Advances</i> , 2021 , 7,	14.3	41
104	Ultrasonic Interfacial Engineering of Red Phosphorous-Metal for Eradicating MRSA Infection Effectively. <i>Advanced Materials</i> , 2021 , 33, e2006047	24	41
103	Fluorescent magnetic Fe ₃ O ₄ /rare Earth colloidal nanoparticles for dual-modality imaging. <i>Small</i> , 2013 , 9, 2991-3000	11	40
102	AgBr Nanoparticles in Situ Growth on 2D MoS ₂ Nanosheets for Rapid Bacteria-Killing and Photodisinfection. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 34364-34375	9.5	39
101	Droplet based microfluidic fabrication of designer microparticles for encapsulation applications. <i>Biomicrofluidics</i> , 2012 , 6, 34104	3.2	39
100	Near-infrared light photocatalysis and phototherapy of carbon quantum dots and au nanoparticles loaded titania nanotube array. <i>Materials and Design</i> , 2019 , 177, 107845	8.1	38
99	A Z-scheme heterojunction of ZnO/CDots/C ₃ N ₄ for strengthened photoresponsive bacteria-killing and acceleration of wound healing. <i>Journal of Materials Science and Technology</i> , 2020 , 57, 1-11	9.1	38
98	Electrochemically deposited chitosan/Ag complex coatings on biomedical NiTi alloy for antibacterial application. <i>Surface and Coatings Technology</i> , 2013 , 232, 370-375	4.4	38

97	Thermosensitive poly(N-isopropylacrylamide-co-glycidyl methacrylate) microgels for controlled drug release. <i>Colloids and Surfaces B: Biointerfaces</i> , 2013 , 101, 251-5	6	38
96	Ce and Er Co-doped TiO for rapid bacteria- killing using visible light. <i>Bioactive Materials</i> , 2020 , 5, 201-209	16.7	37
95	Formation and electrochemical behavior of Al and O plasma-implanted biodegradable Mg-Y-RE alloy. <i>Materials Chemistry and Physics</i> , 2012 , 132, 187-191	4.4	37
94	Nanocarrier-Mediated Codelivery of Small Molecular Drugs and siRNA to Enhance Chondrogenic Differentiation and Suppress Hypertrophy of Human Mesenchymal Stem Cells. <i>Advanced Functional Materials</i> , 2016 , 26, 2463-2472	15.6	37
93	Strontium exerts dual effects on calcium phosphate cement: Accelerating the degradation and enhancing the osteoconductivity both in vitro and in vivo. <i>Journal of Biomedical Materials Research - Part A</i> , 2015 , 103, 1613-21	5.4	36
92	Corrosion products and mechanism on NiTi shape memory alloy in physiological environment. <i>Journal of Materials Research</i> , 2010 , 25, 350-358	2.5	36
91	2D MOF Periodontitis Photodynamic Ion Therapy. <i>Journal of the American Chemical Society</i> , 2021 , 143, 15427-15439	16.4	36
90	Engineered probiotics biofilm enhances osseointegration via immunoregulation and anti-infection. <i>Science Advances</i> , 2020 , 6,	14.3	34
89	Sintered Hydroxyapatite/Polyetheretherketone Nanocomposites: Mechanical Behavior and Biocompatibility. <i>Advanced Engineering Materials</i> , 2012 , 14, B155-B165	3.5	33
88	Functionalized Polymeric Membrane with Enhanced Mechanical and Biological Properties to Control the Degradation of Magnesium Alloy. <i>Advanced Healthcare Materials</i> , 2017 , 6, 1601269	10.1	32
87	Fabrication and characterization of biomimetic multichanneled crosslinked-urethane-doped polyester tissue engineered nerve guides. <i>Journal of Biomedical Materials Research - Part A</i> , 2014 , 102, 2793-804	5.4	32
86	The development, fabrication, and material characterization of polypropylene composites reinforced with carbon nanofiber and hydroxyapatite nanorod hybrid fillers. <i>International Journal of Nanomedicine</i> , 2014 , 9, 1299-310	7.3	32
85	Modulation of the mechanosensing of mesenchymal stem cells by laser-induced patterning for the acceleration of tissue reconstruction through the Wnt/ β -catenin signaling pathway activation. <i>Acta Biomaterialia</i> , 2020 , 101, 152-167	10.8	32
84	Sr/ZnO doped titania nanotube array: An effective surface system with excellent osteoinductivity and self-antibacterial activity. <i>Materials and Design</i> , 2017 , 130, 403-412	8.1	30
83	Overcoming Multidrug-Resistant MRSA Using Conventional Aminoglycoside Antibiotics. <i>Advanced Science</i> , 2020 , 7, 1902070	13.6	30
82	Preparation of polyetheretherketone composites with nanohydroxyapatite rods and carbon nanofibers having high strength, good biocompatibility and excellent thermal stability. <i>RSC Advances</i> , 2016 , 6, 19417-19429	3.7	30
81	Metal-Organic Frameworks Incorporated Polycaprolactone Film for Enhanced Corrosion Resistance and Biocompatibility of Mg Alloy. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 18114-18124	8.3	29
80	Melt-compounded polylactic acid composite hybrids with hydroxyapatite nanorods and silver nanoparticles: biodegradation, antibacterial ability, bioactivity and cytotoxicity. <i>RSC Advances</i> , 2015 , 5, 72288-72299	3.7	29

79	Photoelectric-Responsive Extracellular Matrix for Bone Engineering. <i>ACS Nano</i> , 2019 , 13, 13581-13594	16.7	27
78	Near-infrared light controlled fast self-healing protective coating on magnesium alloy. <i>Corrosion Science</i> , 2020 , 163, 108257	6.8	27
77	Polyetheretherketone Hybrid Composites with Bioactive Nanohydroxyapatite and Multiwalled Carbon Nanotube Fillers. <i>Polymers</i> , 2016 , 8,	4.5	26
76	Synthesis and properties of hyperbranched polyimides derived from novel triamine with prolonged chain segments. <i>Journal of Polymer Science Part A</i> , 2013 , 51, 2425-2437	2.5	25
75	Enhanced corrosion resistance and hemocompatibility of biomedical NiTi alloy by atmospheric-pressure plasma polymerized fluorine-rich coating. <i>Applied Surface Science</i> , 2014 , 297, 109-115	6.7	24
74	Zn-assisted photothermal therapy for rapid bacteria-killing using biodegradable humic acid encapsulated MOFs. <i>Colloids and Surfaces B: Biointerfaces</i> , 2020 , 188, 110781	6	24
73	Silver nanoparticles alter proteoglycan expression in the promotion of tendon repair. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2014 , 10, 1375-83	6	23
72	Antibacterial Hybrid Hydrogels. <i>Macromolecular Bioscience</i> , 2021 , 21, e2000252	5.5	23
71	Regulation of extracellular bioactive cations in bone tissue microenvironment induces favorable osteoimmune conditions to accelerate bone regeneration. <i>Bioactive Materials</i> , 2021 , 6, 2315-2330	16.7	23
70	Development of novel implants with self-antibacterial performance through in-situ growth of 1D ZnO nanowire. <i>Colloids and Surfaces B: Biointerfaces</i> , 2016 , 141, 623-633	6	22
69	A near infrared-activated photocatalyst based on elemental phosphorus by chemical vapor deposition. <i>Applied Catalysis B: Environmental</i> , 2019 , 258, 117980	21.8	22
68	TRPM7 kinase-mediated immunomodulation in macrophage plays a central role in magnesium ion-induced bone regeneration. <i>Nature Communications</i> , 2021 , 12, 2885	17.4	22
67	Rapid bacteria capturing and killing by AgNPs/N-CD@ZnO hybrids strengthened photo-responsive xerogel for rapid healing of bacteria-infected wounds. <i>Chemical Engineering Journal</i> , 2021 , 414, 128805	14.7	22
66	Ocean acidification reduces hardness and stiffness of the Portuguese oyster shell with impaired microstructure: a hierarchical analysis. <i>Biogeosciences</i> , 2018 , 15, 6833-6846	4.6	21
65	Biomaterials based strategies for rotator cuff repair. <i>Colloids and Surfaces B: Biointerfaces</i> , 2017 , 157, 407-416	6	20
64	3D-printed nanocomposite scaffolds with tunable magnesium ionic microenvironment induce in situ bone tissue regeneration. <i>Applied Materials Today</i> , 2019 , 16, 493-507	6.6	20
63	A surface-engineered multifunctional TiO based nano-layer simultaneously elevates the corrosion resistance, osteoconductivity and antimicrobial property of a magnesium alloy. <i>Acta Biomaterialia</i> , 2019 , 99, 495-513	10.8	20
62	The effects of a phytic acid/calcium ion conversion coating on the corrosion behavior and osteoinductivity of a magnesium-strontium alloy. <i>Applied Surface Science</i> , 2019 , 484, 511-523	6.7	20

61	Polypropylene Biocomposites with Boron Nitride and Nanohydroxyapatite Reinforcements. <i>Materials</i> , 2015 , 8, 992-1008	3.5	20
60	Construction of perfluorohexane/IR780@liposome coating on Ti for rapid bacteria killing under permeable near infrared light. <i>Biomaterials Science</i> , 2018 , 6, 2460-2471	7.4	19
59	Functionalization of biomedical materials using plasma and related technologies. <i>Applied Surface Science</i> , 2014 , 310, 11-18	6.7	19
58	Design and preparation of novel fluorescent polyimides containing ortho-linked units and pyridine moieties. <i>Designed Monomers and Polymers</i> , 2012 , 15, 389-404	3.1	18
57	Photoelectrons Mediating Angiogenesis and Immunotherapy through Heterojunction Film for Noninvasive Disinfection. <i>Advanced Science</i> , 2020 , 7, 2000023	13.6	18
56	Temperature-responsive tungsten doped vanadium dioxide thin film starves bacteria to death. <i>Materials Today</i> , 2019 , 22, 35-49	21.8	18
55	Development and characterization of co-polyimide/attapulgit nanocomposites with highly enhanced thermal and mechanical properties. <i>Polymer Composites</i> , 2014 , 35, 86-96	3	17
54	Calcium carbonate unit realignment under acidification: A potential compensatory mechanism in an edible estuarine oyster. <i>Marine Pollution Bulletin</i> , 2019 , 139, 141-149	6.7	17
53	Novel anionic fluorine-containing amphiphilic self-assembly polymer micelles for potential application in protein drug carrier. <i>Journal of Fluorine Chemistry</i> , 2012 , 141, 21-28	2.1	16
52	Construction of TiO ₂ /silane nanofilm on AZ31 magnesium alloy for controlled degradability and enhanced biocompatibility. <i>Rare Metals</i> , 2019 , 38, 588-600	5.5	16
51	Contribution of the in situ release of endogenous cations from xenograft bone driven by fluoride incorporation toward enhanced bone regeneration. <i>Biomaterials Science</i> , 2018 , 6, 2951-2964	7.4	16
50	Sodium butyrate-modified sulfonated polyetheretherketone modulates macrophage behavior and shows enhanced antibacterial and osteogenic functions during implant-associated infections. <i>Journal of Materials Chemistry B</i> , 2019 , 7, 5541-5553	7.3	15
49	Fluorine-containing pH-responsive core/shell microgel particles: preparation, characterization, and their applications in controlled drug release. <i>Colloid and Polymer Science</i> , 2012 , 290, 349-357	2.4	14
48	Activation of mitogen-activated protein kinases cellular signal transduction pathway in mammalian cells induced by silicon carbide nanowires. <i>Biomaterials</i> , 2010 , 31, 7856-62	15.6	14
47	Stringent requirement for spatial arrangement of extracellular matrix in supporting cell morphogenesis and differentiation. <i>BMC Cell Biology</i> , 2014 , 15, 10		13
46	Synthesis and characterization of novel hyperbranched polyimides/attapulgit nanocomposites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2013 , 55, 161-168	8.4	13
45	In vitro corrosion inhibition on biomedical shape memory alloy by plasma-polymerized allylamine film. <i>Materials Letters</i> , 2012 , 89, 51-54	3.3	13
44	Wear mechanism and tribological characteristics of porous NiTi shape memory alloy for bone scaffold. <i>Journal of Biomedical Materials Research - Part A</i> , 2013 , 101, 2586-601	5.4	13

43	Synthesis and characterization of fluorescent copolymer containing rare earth metal complex and its interaction with DNA. <i>Journal of Polymer Science Part A</i> , 2010 , 48, 5961-5967	2.5	13
42	Photo-controlled degradation of PLGA/TiC hybrid coating on Mg-Sr alloy using near infrared light. <i>Bioactive Materials</i> , 2021 , 6, 568-578	16.7	13
41	Sequential activation of heterogeneous macrophage phenotypes is essential for biomaterials-induced bone regeneration. <i>Biomaterials</i> , 2021 , 276, 121038	15.6	13
40	Synthesis and characterization of highly soluble and optically transparent polyimides derived from novel fluorinated pyridine-containing aromatic diamine. <i>High Performance Polymers</i> , 2013 , 25, 268-277	1.6	12
39	"Imitative" click chemistry to form a sticking xerogel for the portable therapy of bacteria-infected wounds. <i>Biomaterials Science</i> , 2019 , 7, 5383-5387	7.4	12
38	Preparation of Fe ₃ O ₄ /poly(styrene-butyl acrylate-[2-(methacryloxy)ethyl]trimethylammonium chloride) by emulsifier-free emulsion polymerization and its interaction with DNA. <i>Journal of Magnetism and Magnetic Materials</i> , 2012 , 324, 1410-1418	2.8	11
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