

Yf Zheng

List of Publications by Citations

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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.

825
papers

39,466
citations

95
h-index

160
g-index

867
ext. papers

48,663
ext. citations

7.7
avg, IF

7.95
L-index

#	Paper	IF	Citations
825	Biodegradable metals. <i>Materials Science and Engineering Reports</i> , 2014 , 77, 1-34	30.9	1355
824	Multiscale vessel enhancement filtering. <i>Lecture Notes in Computer Science</i> , 1998 , 130-137	0.9	1286
823	The development of binary Mg-Ca alloys for use as biodegradable materials within bone. <i>Biomaterials</i> , 2008 , 29, 1329-44	15.6	1166
822	In vitro corrosion and biocompatibility of binary magnesium alloys. <i>Biomaterials</i> , 2009 , 30, 484-98	15.6	986
821	Biomimetic porous scaffolds for bone tissue engineering. <i>Materials Science and Engineering Reports</i> , 2014 , 80, 1-36	30.9	666
820	Novel Magnesium Alloys Developed for Biomedical Application: A Review. <i>Journal of Materials Science and Technology</i> , 2013 , 29, 489-502	9.1	446
819	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
818	Implant-derived magnesium induces local neuronal production of CGRP to improve bone-fracture healing in rats. <i>Nature Medicine</i> , 2016 , 22, 1160-1169	50.5	410
817	A review on magnesium alloys as biodegradable materials. <i>Frontiers of Materials Science in China</i> , 2010 , 4, 111-115		369
816	Corrosion of, and cellular responses to Mg-Zn-Ca bulk metallic glasses. <i>Biomaterials</i> , 2010 , 31, 1093-103	15.6	316
815	Corrosion resistance and surface biocompatibility of a microarc oxidation coating on a Mg-Ca alloy. <i>Acta Biomaterialia</i> , 2011 , 7, 1880-9	10.8	305
814	In vitro and in vivo studies on a Mg-Sr binary alloy system developed as a new kind of biodegradable metal. <i>Acta Biomaterialia</i> , 2012 , 8, 2360-74	10.8	296
813	Electrospinning of PLGA/gelatin randomly-oriented and aligned nanofibers as potential scaffold in tissue engineering. <i>Materials Science and Engineering C</i> , 2010 , 30, 1204-1210	8.3	289
812	Current challenges and concepts of the thermomechanical treatment of nickel-titanium instruments. <i>Journal of Endodontics</i> , 2013 , 39, 163-72	4.7	285
811	Additive manufacturing of ultrafine-grained high-strength titanium alloys. <i>Nature</i> , 2019 , 576, 91-95	50.4	276
810	Rapid Biofilm Eradication on Bone Implants Using Red Phosphorus and Near-Infrared Light. <i>Advanced Materials</i> , 2018 , 30, e1801808	24	256
809	Characterization and degradation behavior of AZ31 alloy surface modified by bone-like hydroxyapatite for implant applications. <i>Applied Surface Science</i> , 2009 , 255, 6433-6438	6.7	253

808	Effects of alloying elements (Mn, Co, Al, W, Sn, B, C and S) on biodegradability and in vitro biocompatibility of pure iron. <i>Acta Biomaterialia</i> , 2011 , 7, 1407-20	10.8	239
807	Corrosion fatigue behaviors of two biomedical Mg alloys - AZ91D and WE43 - In simulated body fluid. <i>Acta Biomaterialia</i> , 2010 , 6, 4605-13	10.8	238
806	Bioinspired anchoring AgNPs onto micro-nanoporous TiO ₂ orthopedic coatings: Trap-killing of bacteria, surface-regulated osteoblast functions and host responses. <i>Biomaterials</i> , 2016 , 75, 203-222	15.6	230
805	Progress of biodegradable metals. <i>Progress in Natural Science: Materials International</i> , 2014 , 24, 414-422	3.6	222
804	Recent advances in bulk metallic glasses for biomedical applications. <i>Acta Biomaterialia</i> , 2016 , 36, 1-20	10.8	220
803	Graphene oxide/hydroxyapatite composite coatings fabricated by electrophoretic nanotechnology for biological applications. <i>Carbon</i> , 2014 , 67, 185-197	10.4	213
802	Advances in functionalized polymer coatings on biodegradable magnesium alloys - A review. <i>Acta Biomaterialia</i> , 2018 , 79, 23-36	10.8	211
801	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
800	Physical properties of 5 root canal sealers. <i>Journal of Endodontics</i> , 2013 , 39, 1281-6	4.7	208
799	Corrosion and characterisation of dual phase Mg ₉₂ Ti ₈ alloy in Hank's solution: The influence of microstructural features. <i>Corrosion Science</i> , 2014 , 79, 69-82	6.8	206
798	Design of magnesium alloys with controllable degradation for biomedical implants: From bulk to surface. <i>Acta Biomaterialia</i> , 2016 , 45, 2-30	10.8	203
797	Recommendation for modifying current cytotoxicity testing standards for biodegradable magnesium-based materials. <i>Acta Biomaterialia</i> , 2015 , 21, 237-49	10.8	201
796	In Vitro Corrosion and Cytocompatibility of a Microarc Oxidation Coating and Poly(L-lactic acid) Composite Coating on Mg-1Li-1Ca Alloy for Orthopedic Implants. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 10014-28	9.5	194
795	Development of biodegradable Zn-1X binary alloys with nutrient alloying elements Mg, Ca and Sr. <i>Scientific Reports</i> , 2015 , 5, 10719	4.9	187
794	A study on alkaline heat treated Mg-Ca alloy for the control of the biocorrosion rate. <i>Acta Biomaterialia</i> , 2009 , 5, 2790-9	10.8	183
793	In situ synthesis and biocompatibility of nano hydroxyapatite on pristine and chitosan functionalized graphene oxide. <i>Journal of Materials Chemistry B</i> , 2013 , 1, 475-484	7.3	181
792	Laser Ablation Synthesis and Optical Characterization of Silicon Carbide Nanowires. <i>Journal of the American Ceramic Society</i> , 2000 , 83, 3228-3230	3.8	181
791	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

790	Synthesis of Large Areas of Highly Oriented, Very Long Silicon Nanowires. <i>Advanced Materials</i> , 2000 , 12, 1343-1345	24	175
789	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
788	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
787	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
786	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
785	Functionalized TiO ₂ Based Nanomaterials for Biomedical Applications. <i>Advanced Functional Materials</i> , 2014 , 24, 5464-5481	15.6	168
784	Evolution of the degradation mechanism of pure zinc stent in the one-year study of rabbit abdominal aorta model. <i>Biomaterials</i> , 2017 , 145, 92-105	15.6	168
783	Fabrication and characterization of three-dimensional nanofiber membrane of PCL/MWCNTs by electrospinning. <i>Materials Science and Engineering C</i> , 2010 , 30, 1014-1021	8.3	168
782	Design and characterizations of novel biodegradable ternary Zn-based alloys with IIA nutrient alloying elements Mg, Ca and Sr. <i>Materials and Design</i> , 2015 , 83, 95-102	8.1	166
781	Preparation and characterization of electrospun PLGA/gelatin nanofibers as a potential drug delivery system. <i>Colloids and Surfaces B: Biointerfaces</i> , 2011 , 84, 97-102	6	165
780	Giant magnetic-field-induced strains in Heusler alloy NiMnGa with modified composition. <i>Applied Physics Letters</i> , 1999 , 75, 2990-2992	3.4	159
779	Enhanced antimicrobial properties, cytocompatibility, and corrosion resistance of plasma-modified biodegradable magnesium alloys. <i>Acta Biomaterialia</i> , 2014 , 10, 544-56	10.8	157
778	In vitro and in vivo studies on the degradation of high-purity Mg (99.99wt.%) screw with femoral intracondylar fractured rabbit model. <i>Biomaterials</i> , 2015 , 64, 57-69	15.6	152
777	Comparative study of torsional and bending properties for six models of nickel-titanium root canal instruments with different cross-sections. <i>Journal of Endodontics</i> , 2006 , 32, 372-5	4.7	148
776	Micro-alloying with Mn in Zn/Mg alloy for future biodegradable metals application. <i>Materials and Design</i> , 2016 , 94, 95-104	8.1	146
775	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
774	Advances in coatings on biodegradable magnesium alloys. <i>Journal of Magnesium and Alloys</i> , 2020 , 8, 42-658	6.8	141
773	A General Synthetic Route to III-V Compound Semiconductor Nanowires. <i>Advanced Materials</i> , 2001 , 13, 591-594	24	140

772	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
771	Zinc-Based Biomaterials for Regeneration and Therapy. <i>Trends in Biotechnology</i> , 2019 , 37, 428-441	15.1	134
770	Bioelectrochemistry of hemoglobin immobilized on a sodium alginate-multiwall carbon nanotubes composite film. <i>Biosensors and Bioelectronics</i> , 2009 , 24, 2352-7	11.8	133
769	Effect of the addition of low rare earth elements (lanthanum, neodymium, cerium) on the biodegradation and biocompatibility of magnesium. <i>Acta Biomaterialia</i> , 2015 , 11, 554-62	10.8	132
768	In vitro cytotoxicity evaluation of a novel root repair material. <i>Journal of Endodontics</i> , 2013 , 39, 478-83	4.7	129
767	Comparative in vitro Study on Pure Metals (Fe, Mn, Mg, Zn and W) as Biodegradable Metals. <i>Journal of Materials Science and Technology</i> , 2013 , 29, 619-627	9.1	127
766	Microstructure, mechanical property, bio-corrosion and cytotoxicity evaluations of Mg/HA composites. <i>Materials Science and Engineering C</i> , 2010 , 30, 827-832	8.3	127
765	Electrophoretic Deposited Stable Chitosan@MoS Coating with Rapid In Situ Bacteria-Killing Ability under Dual-Light Irradiation. <i>Small</i> , 2018 , 14, e1704347	11	125
764	Effect of ageing treatment on the transformation behaviour of Ti-0.9at.% Ni alloy. <i>Acta Materialia</i> , 2008 , 56, 736-745	8.4	125
763	Alloying design of biodegradable zinc as promising bone implants for load-bearing applications. <i>Nature Communications</i> , 2020 , 11, 401	17.4	124
762	In vitro degradation and cytotoxicity of Mg/Ca composites produced by powder metallurgy. <i>Acta Biomaterialia</i> , 2010 , 6, 1783-91	10.8	124
761	Introduction of antibacterial function into biomedical TiNi shape memory alloy by the addition of element Ag. <i>Acta Biomaterialia</i> , 2011 , 7, 2758-67	10.8	119
760	In vitro and in vivo studies on biodegradable CaMgZnSrYb high-entropy bulk metallic glass. <i>Acta Biomaterialia</i> , 2013 , 9, 8561-73	10.8	117
759	Bulk-quantity GaN nanowires synthesized from hot filament chemical vapor deposition. <i>Chemical Physics Letters</i> , 2000 , 327, 263-270	2.5	117
758	Dopamine Modified Organic-Inorganic Hybrid Coating for Antimicrobial and Osteogenesis. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 33972-33981	9.5	117
757	In vitro and in vivo studies on zinc-hydroxyapatite composites as novel biodegradable metal matrix composite for orthopedic applications. <i>Acta Biomaterialia</i> , 2018 , 71, 200-214	10.8	116
756	In vitro investigation of Fe ₃₀ Mn ₆ Si shape memory alloy as potential biodegradable metallic material. <i>Materials Letters</i> , 2011 , 65, 540-543	3.3	116
755	An overview of graphene-based hydroxyapatite composites for orthopedic applications. <i>Bioactive Materials</i> , 2018 , 3, 1-18	16.7	115

754	Fabrication, characterization and in vitro drug release behavior of electrospun PLGA/chitosan nanofibrous scaffold. <i>Materials Chemistry and Physics</i> , 2011 , 125, 606-611	4.4	115
753	Effects of alloying elements (Ca and Sr) on microstructure, mechanical property and in vitro corrosion behavior of biodegradable Zn-5Mg alloy. <i>Journal of Alloys and Compounds</i> , 2016 , 664, 444-452	5.7	112
752	Tailored Surface Treatment of 3D Printed Porous Ti6Al4V by Microarc Oxidation for Enhanced Osseointegration via Optimized Bone In-Growth Patterns and Interlocked Bone/Implant Interface. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 17964-75	9.5	112
751	Fundamental Theory of Biodegradable Metals Definition, Criteria, and Design. <i>Advanced Functional Materials</i> , 2019 , 29, 1805402	15.6	111
750	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
749	Metallurgical characterization of controlled memory wire nickel-titanium rotary instruments. <i>Journal of Endodontics</i> , 2011 , 37, 1566-71	4.7	111
748	Biomedical Applications of Functionalized ZnO Nanomaterials: from Biosensors to Bioimaging. <i>Advanced Materials Interfaces</i> , 2016 , 3, 1500494	4.6	111
747	A biomimetic hierarchical scaffold: natural growth of nanotitanates on three-dimensional microporous Ti-based metals. <i>Nano Letters</i> , 2008 , 8, 3803-8	11.5	110
746	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
745	Biofunctionalization of metallic implants by calcium phosphate coatings. <i>Bioactive Materials</i> , 2019 , 4, 196-206	16.7	109
744	Biodegradable CaMgZn bulk metallic glass for potential skeletal application. <i>Acta Biomaterialia</i> , 2011 , 7, 3196-208	10.8	109
743	Microstructure, mechanical properties, in vitro degradation behavior and hemocompatibility of novel Zn-Mg-Br alloys as biodegradable metals. <i>Materials Letters</i> , 2016 , 162, 242-245	3.3	108
742	Biological Responses and Mechanisms of Human Bone Marrow Mesenchymal Stem Cells to Zn and Mg Biomaterials. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 27453-27461	9.5	108
741	Mechanical property, biocorrosion and in vitro biocompatibility evaluations of Mg-Li-(Al)-(RE) alloys for future cardiovascular stent application. <i>Acta Biomaterialia</i> , 2013 , 9, 8488-98	10.8	107
740	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
739	In vitro cytotoxicity of calcium silicate-containing endodontic sealers. <i>Journal of Endodontics</i> , 2015 , 41, 56-61	4.7	100
738	In vitro degradation performance and biological response of a Mg-Zn-Br alloy. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2011 , 176, 1778-1784	3.1	100
737	Surface functionalization of biomaterials by radical polymerization. <i>Progress in Materials Science</i> , 2016 , 83, 191-235	42.2	99

736	Rapid Photo-Sonotherapy for Clinical Treatment of Bacterial Infected Bone Implants by Creating Oxygen Deficiency Using Sulfur Doping. <i>ACS Nano</i> , 2020 , 14, 2077-2089	16.7	98
735	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
734	Effect of surface modified hydroxyapatite on the tensile property improvement of HA/PLA composite. <i>Applied Surface Science</i> , 2008 , 255, 494-497	6.7	97
733	The recent progress on metal-organic frameworks for phototherapy. <i>Chemical Society Reviews</i> , 2021 , 50, 5086-5125	58.5	96
732	Nano Ag/ZnO-Incorporated Hydroxyapatite Composite Coatings: Highly Effective Infection Prevention and Excellent Osteointegration. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 1266-1277	9.5	96
731	High-purity magnesium interference screws promote fibrocartilaginous entheses regeneration in the anterior cruciate ligament reconstruction rabbit model via accumulation of BMP-2 and VEGF. <i>Biomaterials</i> , 2016 , 81, 14-26	15.6	95
730	Additive manufacturing of biodegradable metals: Current research status and future perspectives. <i>Acta Biomaterialia</i> , 2019 , 98, 3-22	10.8	92
729	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
728	In vivo degradation behavior of Ca-deficient hydroxyapatite coated Mg-Zn-Ca alloy for bone implant application. <i>Colloids and Surfaces B: Biointerfaces</i> , 2011 , 88, 254-9	6	92
727	Microstructures of gallium nitride nanowires synthesized by oxide-assisted method. <i>Chemical Physics Letters</i> , 2001 , 345, 377-380	2.5	92
726	Nanocomposites of poly(L-lactide) and surface-grafted TiO ₂ nanoparticles: Synthesis and characterization. <i>European Polymer Journal</i> , 2008 , 44, 2476-2481	5.2	91
725	Photo-responsive chitosan/Ag/MoS for rapid bacteria-killing. <i>Journal of Hazardous Materials</i> , 2020 , 383, 121122	12.8	91
724	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
723	Low-modulus Mg/PCL hybrid bone substitute for osteoporotic fracture fixation. <i>Biomaterials</i> , 2013 , 34, 7016-32	15.6	88
722	Degradation and cytotoxicity of lotus-type porous pure magnesium as potential tissue engineering scaffold material. <i>Materials Letters</i> , 2010 , 64, 1871-1874	3.3	87
721	In vitro corrosion and biocompatibility study of phytic acid modified WE43 magnesium alloy. <i>Applied Surface Science</i> , 2012 , 258, 3420-3427	6.7	86
720	Relationship between osseointegration and superelastic biomechanics in porous NiTi scaffolds. <i>Biomaterials</i> , 2011 , 32, 330-8	15.6	86
719	Direct electrochemistry and electrocatalysis of hemoglobin immobilized in TiO ₂ nanotube films. <i>Talanta</i> , 2008 , 74, 1414-9	6.2	86

718	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
717	A review on in vitro corrosion performance test of biodegradable metallic materials. <i>Transactions of Nonferrous Metals Society of China</i> , 2013 , 23, 2283-2293	3.3	83
716	Effect of aging on the phase transformation and mechanical behavior of Ti36Ni49Hf15 high temperature shape memory alloy. <i>Scripta Materialia</i> , 2000 , 42, 341-348	5.6	83
715	In vitro degradation and biocompatibility of Fe-Pd and Fe-Pt composites fabricated by spark plasma sintering. <i>Materials Science and Engineering C</i> , 2014 , 35, 43-53	8.3	82
714	Bioinspired and Biomimetic AgNPs/Gentamicin-Embedded Silk Fibroin Coatings for Robust Antibacterial and Osteogenetic Applications. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 25830-25846	9.5	82
713	The application of poly (glycerol-sebacate) as biodegradable drug carrier. <i>Biomaterials</i> , 2009 , 30, 5209-14	5.6	82
712	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
711	Influence of artificial biological fluid composition on the biocorrosion of potential orthopedic Mg-Ca, AZ31, AZ91 alloys. <i>Biomedical Materials (Bristol)</i> , 2009 , 4, 065011	3.5	81
710	Hemolysis and cytotoxicity mechanisms of biodegradable magnesium and its alloys. <i>Materials Science and Engineering C</i> , 2015 , 46, 202-6	8.3	80
709	Antibacterial Activity of Silver Doped Titanate Nanowires on Ti Implants. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 16584-94	9.5	80
708	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
707	Eradicating Multidrug-Resistant Bacteria Rapidly Using a Multi Functional g-C3N4@ Bi2S3 Nanorod Heterojunction with or without Antibiotics. <i>Advanced Functional Materials</i> , 2019 , 29, 1900946	15.6	79
706	Pore formation mechanism and characterization of porous NiTi shape memory alloys synthesized by capsule-free hot isostatic pressing. <i>Acta Materialia</i> , 2007 , 55, 3437-3451	8.4	79
705	Shape memory properties of the Ti36Ni49Hf15 high temperature shape memory alloy. <i>Materials Letters</i> , 2000 , 45, 128-132	3.3	79
704	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
703	The microstructure and properties of cyclic extrusion compression treated Mg-Zn-Y-Nd alloy for vascular stent application. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2012 , 8, 1-7	4.1	78
702	In vitro corrosion, cytotoxicity and hemocompatibility of bulk nanocrystalline pure iron. <i>Biomedical Materials (Bristol)</i> , 2010 , 5, 065015	3.5	78
701	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

700	Electrophoretic deposition of graphene oxide reinforced chitosan-hydroxyapatite nanocomposite coatings on Ti substrate. <i>Journal of Materials Science: Materials in Medicine</i> , 2016 , 27, 48	4.5	77
699	In vitro degradation of AZ31 magnesium alloy coated with nano TiO ₂ film by sol-gel method. <i>Applied Surface Science</i> , 2011 , 257, 8772-8777	6.7	77
698	Corrosion behaviour of Ti ₆₀ Nb ₃₀ shape memory alloys in different simulated body solutions. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006 , 438-440, 891-895	5.3	77
697	A facile fabrication of novel stuff with antibacterial property and osteogenic promotion utilizing red phosphorus and near-infrared light. <i>Bioactive Materials</i> , 2019 , 4, 17-21	16.7	76
696	Enhanced cytocompatibility and antibacterial property of zinc phosphate coating on biodegradable zinc materials. <i>Acta Biomaterialia</i> , 2019 , 98, 174-185	10.8	75
695	The tensile behavior of Ti ₃₆ Ni ₄₉ Hf ₁₅ high temperature shape memory alloy. <i>Scripta Materialia</i> , 1999 , 40, 1327-1331	5.6	75
694	Mechanical properties, in vitro degradation behavior, hemocompatibility and cytotoxicity evaluation of Zn _{1.2} Mg alloy for biodegradable implants. <i>RSC Advances</i> , 2016 , 6, 86410-86419	3.7	74
693	Oxide-assisted growth and optical characterization of gallium-arsenide nanowires. <i>Applied Physics Letters</i> , 2001 , 78, 3304-3306	3.4	74
692	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
691	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
690	Characterization of TiN, TiC and TiCN coatings on Ti _{60.6} at.% Ni alloy deposited by PIII and deposition technique. <i>Surface and Coatings Technology</i> , 2007 , 201, 4909-4912	4.4	73
689	Electrochemical corrosion behavior of biomedical Ti ₆₂ Nb and Ti ₆₂ Nb ₃ Zr alloys in saline medium. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2009 , 60, 788-794	1.6	72
688	Corrosion resistance of dicalcium phosphate dihydrate/poly(lactic-co-glycolic acid) hybrid coating on AZ31 magnesium alloy. <i>Corrosion Science</i> , 2016 , 102, 209-221	6.8	71
687	Polymeric nanoarchitectures on Ti-based implants for antibacterial applications. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 17323-45	9.5	71
686	Mechanical properties of controlled memory and superelastic nickel-titanium wires used in the manufacture of rotary endodontic instruments. <i>Journal of Endodontics</i> , 2012 , 38, 1535-40	4.7	71
685	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
684	Corrosion performances in simulated body fluids and cytotoxicity evaluation of Fe-based bulk metallic glasses. <i>Materials Science and Engineering C</i> , 2012 , 32, 599-606	8.3	69
683	Electrophoretic deposition and electrochemical behavior of novel graphene oxide-hyaluronic acid-hydroxyapatite nanocomposite coatings. <i>Applied Surface Science</i> , 2013 , 284, 804-810	6.7	69

682	Effect of Ag on the corrosion behavior of Ti-Ag alloys in artificial saliva solutions. <i>Dental Materials</i> , 2009 , 25, 672-7	5.7	69
681	Additively Manufactured Macroporous Titanium with Silver-Releasing Micro-/Nanoporous Surface for Multipurpose Infection Control and Bone Repair - A Proof of Concept. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 28495-28510	9.5	69
680	Fabrication of mineralized electrospun PLGA and PLGA/gelatin nanofibers and their potential in bone tissue engineering. <i>Materials Science and Engineering C</i> , 2013 , 33, 699-706	8.3	68
679	Influence of cross-sectional design and dimension on mechanical behavior of nickel-titanium instruments under torsion and bending: a numerical analysis. <i>Journal of Endodontics</i> , 2010 , 36, 1394-8	4.7	68
678	Surface modification of an Mg-1Ca alloy to slow down its biocorrosion by chitosan. <i>Biomedical Materials (Bristol)</i> , 2009 , 4, 044109	3.5	68
677	Effects of Sn content on the microstructure, phase constitution and shape memory effect of TiNbSn alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 486, 146-151	5.3	68
676	Synthesis and microstructure of gallium phosphide nanowires. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2001 , 19, 1115		68
675	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
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