

Current status on clinical applications of magnesium-based biomaterials: a review from clinical translational perspective

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Development of magnesium-based biodegradable metals with dietary trace element germanium as orthopaedic implant applications. <i>Acta Biomaterialia</i> , 2017, 64, 421-436.	4.1	81
2	Nanocomposite hydrogels stabilized by self-assembled multivalent bisphosphonate-magnesium nanoparticles mediate sustained release of magnesium ion and promote in-situ bone regeneration. <i>Acta Biomaterialia</i> , 2017, 64, 389-400.	4.1	117
3	The improvement of corrosion resistance, biocompatibility and osteogenesis of the novel porous Mg-Nd-Zn alloy. <i>Journal of Materials Chemistry B</i> , 2017, 5, 7661-7674.	2.9	28
4	Magnesium (Mg) based interference screws developed for promoting tendon graft incorporation in bone tunnel in rabbits. <i>Acta Biomaterialia</i> , 2017, 63, 393-410.	4.1	55
5	Pseudoelastic and corrosion behaviors of Mg ZEK100 alloy under cyclic loading. <i>International Journal of Fatigue</i> , 2017, 103, 466-477.	2.8	9
6	Effects of Heat Treatment on Corrosion and Wear Behaviors of Mg-6Gd-2Zn-0.4Zr Alloy in Simulated Body Fluid. <i>Journal of Materials Engineering and Performance</i> , 2017, 26, 5501-5510.	1.2	11
7	In vivo study of microarc oxidation coated biodegradable magnesium plate to heal bone fracture defect of 3 mm width. <i>Colloids and Surfaces B: Biointerfaces</i> , 2017, 158, 147-156.	2.5	30
8	Biodegradable Metals for Orthopedic Applications. , 2017, , 275-309.		5
9	The role of biomaterials in the treatment of meniscal tears. <i>PeerJ</i> , 2017, 5, e4076.	0.9	11
10	Metallic Biomaterials: Current Challenges and Opportunities. <i>Materials</i> , 2017, 10, 884.	1.3	410
11	Biodegradable Scaffolds for Bone Regeneration Combined with Drug-Delivery Systems in Osteomyelitis Therapy. <i>Pharmaceuticals</i> , 2017, 10, 96.	1.7	120
12	Microstructure and enhanced corrosion resistance of biodegradable Mg-Gd-Cu-Zr alloy by solution treatment. <i>Materials Technology</i> , 2018, 33, 301-310.	1.5	13
13	Biodegradable macroporous scaffold with nano-crystal surface microstructure for highly effective osteogenesis and vascularization. <i>Journal of Materials Chemistry B</i> , 2018, 6, 1658-1667.	2.9	24
14	Biofunctional Mg coating on PEEK for improving bioactivity. <i>Bioactive Materials</i> , 2018, 3, 139-143.	8.6	44
15	Mg ₆₅ Ni ₂₀ Y ₁₅ XAgX (X = 1, 2, 3, 5) alloys prepared via atmosphere controlled induction system. <i>Canadian Journal of Physics</i> , 2018, 96, 810-815.	0.4	2
16	Hybrid scaffolds of Mg alloy mesh reinforced polymer/extracellular matrix composite for critical-sized calvarial defect reconstruction. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2018, 12, 1374-1388.	1.3	18
17	In vitro evaluation of MgSr and MgCaSr alloys via direct culture with bone marrow derived mesenchymal stem cells. <i>Acta Biomaterialia</i> , 2018, 72, 407-423.	4.1	48
18	Degradable Magnesium Implants—Assessment of the Current Situation. <i>Minerals, Metals and Materials Series</i> , 2018, , 405-411.	0.3	4

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19	Initial organ distribution and biological safety of Mg ²⁺ released from a Mg alloy implant. Biomedical Materials (Bristol), 2018, 13, 035006.	1.7	5
20	Building towards a standardised approach to biocorrosion studies: a review of factors influencing Mg corrosion in vitro pertinent to in vivo corrosion. Science China Materials, 2018, 61, 475-500.	3.5	50
21	Mg-based bone implants show promising osteoinductivity and controllable degradation: A long-term study in a goat femoral condyle fracture model. Materials Science and Engineering C, 2018, 86, 42-47.	3.8	38
22	Effects of scandium addition on biocompatibility of biodegradable Mgâ€‘1.5Znâ€‘0.6Zr alloy. Materials Letters, 2018, 215, 200-202.	1.3	27
23	Exploring the effects of organic molecules on the degradation of magnesium under cell culture conditions. Corrosion Science, 2018, 132, 35-45.	3.0	42
24	A crack-free anti-corrosive coating strategy for magnesium implants under deformation. Corrosion Science, 2018, 132, 116-124.	3.0	22
25	In Vitro and in Vivo Studies on Biomedical Magnesium Low-Alloying with Elements Gadolinium and Zinc for Orthopedic Implant Applications. ACS Applied Materials & Interfaces, 2018, 10, 4394-4408.	4.0	82
26	â€‘Petal effectâ€‘inspired superhydrophobic and highly adhesive coating on magnesium with enhanced corrosion resistance and biocompatibility. Science China Materials, 2018, 61, 629-642.	3.5	25
27	Layered double hydroxide/poly-dopamine composite coating with surface heparinization on Mg alloys: improved anticorrosion, endothelialization and hemocompatibility. Biomaterials Science, 2018, 6, 1846-1858.	2.6	65
28	Biodegradable coronary scaffolds: their future and clinical and technological challenges. Cardiovascular Research, 2018, 114, 1063-1072.	1.8	23
29	Biomimetic fluoridated hydroxyapatite coating with micron/nano-topography on magnesium alloy for orthopaedic application. Chemical Engineering Journal, 2018, 339, 7-13.	6.6	32
30	An <i>in vitro</i> and <i>in vivo</i> characterization of fine ^{WE43B} magnesium wire with varied thermomechanical processing conditions. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 1987-1997.	1.6	18
31	Biomaterial Cues Regulate Epigenetic State and Cell Functionsâ€‘A Systematic Review. Tissue Engineering - Part B: Reviews, 2018, 24, 112-132.	2.5	31
32	Recent Advancements in Bulk Metallic Glasses and Their Applications: A Review. Critical Reviews in Solid State and Materials Sciences, 2018, 43, 233-268.	6.8	170
33	Effects of nanofeatures induced by severe shot peening (SSP) on mechanical, corrosion and cytocompatibility properties of magnesium alloy AZ31. Acta Biomaterialia, 2018, 66, 93-108.	4.1	167
34	Loading 5-Fluorouracil into calcined Mg/Al layered double hydroxide on AZ31 via memory effect. Materials Letters, 2018, 213, 383-386.	1.3	35
35	Additively manufactured biodegradable porous magnesium. Acta Biomaterialia, 2018, 67, 378-392.	4.1	273
36	Magnesium alloy based interference screw developed for ACL reconstruction attenuates peri-tunnel bone loss in rabbits. Biomaterials, 2018, 157, 86-97.	5.7	79

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37	SYNERGISTIC EFFECTS OF WEAR AND CORROSION ON MASS LOSS OF GZ62K ALLOY IN SIMULATED BODY FLUID FOR ORTHOPEDIC APPLICATION. <i>Surface Review and Letters</i> , 2018, 25, 1950021.	0.5	3
38	Hydroxyapatite/Titania Composite Coatings on Biodegradable Magnesium Alloy for Enhanced Corrosion Resistance, Cytocompatibility and Antibacterial Properties. <i>Journal of the Electrochemical Society</i> , 2018, 165, C962-C972.	1.3	38
39	Lanthanum phosphate/chitosan scaffolds enhance cytocompatibility and osteogenic efficiency via the Wnt/ β -catenin pathway. <i>Journal of Nanobiotechnology</i> , 2018, 16, 98.	4.2	42
40	Fabrication of magnesium-hydroxyapatite composites targeted for biodegradable implant application. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	2
41	PEO/Mg α -Zn α -Al LDH Composite Coating on Mg Alloy as a Zn/Mg Ion-Release Platform with Multifunctions: Enhanced Corrosion Resistance, Osteogenic, and Antibacterial Activities. <i>ACS Biomaterials Science and Engineering</i> , 2018, 4, 4112-4121.	2.6	76
42	Effect of High- and Low-Molecular-Weight Hyaluronic-Acid-Functionalized-AZ31 Mg and Ti Alloys on Proliferation and Differentiation of Osteoblast Cells. <i>ACS Biomaterials Science and Engineering</i> , 2018, 4, 3874-3884.	2.6	11
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44	Unraveling the osteogenesis of magnesium by the activity of osteoblasts <i>in vitro</i> . <i>Journal of Materials Chemistry B</i> , 2018, 6, 6615-6621.	2.9	38
45	Zirconium ions integrated in 1-hydroxyethylidene-1,1-diphosphonic acid (HEDP) as a metalorganic-like complex coating on biodegradable magnesium for corrosion control. <i>Corrosion Science</i> , 2018, 144, 277-287.	3.0	29
46	In vitro degradation behavior of Mg scaffolds with three-dimensional interconnected porous structures for bone tissue engineering. <i>Corrosion Science</i> , 2018, 144, 301-312.	3.0	36
47	Advances and Challenges of Biodegradable Implant Materials with a Focus on Magnesium-Alloys and Bacterial Infections. <i>Metals</i> , 2018, 8, 532.	1.0	60
48	Design of a migration assay for human gingival fibroblasts on biodegradable magnesium surfaces. <i>Acta Biomaterialia</i> , 2018, 79, 158-167.	4.1	31
49	The prospect of layered double hydroxide as bone implants: A study of mechanical properties, cytocompatibility and antibacterial activity. <i>Applied Clay Science</i> , 2018, 165, 179-187.	2.6	35
50	Surface design of Mg-Zn alloy temporary orthopaedic implants: Tailoring wettability and biodegradability using laser surface melting. <i>Surface and Coatings Technology</i> , 2018, 347, 337-349.	2.2	43
51	Updates on the research and development of absorbable metals for biomedical applications. <i>Progress in Biomaterials</i> , 2018, 7, 93-110.	1.8	182
52	Viewpoint - Understanding Mg corrosion in the body for biodegradable medical implants. <i>Scripta Materialia</i> , 2018, 154, 92-100.	2.6	156
53	Microstructure and mechanical property of biodegradable Mg α -1.5Zn α -0.6Zr alloy with varying contents of scandium. <i>Materials Letters</i> , 2018, 229, 60-63.	1.3	6
54	In vitro degradation of a biodegradable polylactic acid/magnesium composite as potential bone augmentation material in the presence of titanium and PEEK dental implants. <i>Dental Materials</i> , 2018, 34, 1492-1500.	1.6	19

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56	A review of biomaterials in bone defect healing, remaining shortcomings and future opportunities for bone tissue engineering. <i>Bone and Joint Research</i> , 2018, 7, 232-243.	1.3	345
57	Mechanical properties of magnesium alloys for medical application: A review. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018, 87, 68-79.	1.5	197
58	Ag-Introduced Antibacterial Ability and Corrosion Resistance for Bio-Mg Alloys. <i>BioMed Research International</i> , 2018, 2018, 1-13.	0.9	16
59	Hemocompatibility of plasma electrolytic oxidation (PEO) coated Mg-RE and Mg-Zn-Ca alloys for vascular scaffold applications. <i>Materials Science and Engineering C</i> , 2018, 92, 819-826.	3.8	17
60	Applications of Metals for Bone Regeneration. <i>International Journal of Molecular Sciences</i> , 2018, 19, 826.	1.8	159
61	The Mechanical Properties and Corrosion Resistance of Magnesium Alloys with Different Alloying Elements for Bone Repair. <i>Crystals</i> , 2018, 8, 271.	1.0	10
62	Magnesium Replacement to Protect Cardiovascular and Kidney Damage? Lack of Prospective Clinical Trials. <i>International Journal of Molecular Sciences</i> , 2018, 19, 664.	1.8	24
63	Effect of the Microstructure and Distribution of the Second Phase on the Stress Corrosion Cracking of Biomedical Mg-Zn-Zr-xSr Alloys. <i>Materials</i> , 2018, 11, 551.	1.3	19
64	Biodegradable Metallic Wires in Dental and Orthopedic Applications: A Review. <i>Metals</i> , 2018, 8, 212.	1.0	33
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66	Effects of solidification cooling rate on the corrosion resistance of a biodegradable \hat{I}^2 -TCP/Mg-Zn-Ca composite. <i>Bioelectrochemistry</i> , 2018, 124, 93-104.	2.4	9
67	Wrapping effect of secondary phases on the grains: increased corrosion resistance of Mg \hat{e} “Al alloys. <i>Virtual and Physical Prototyping</i> , 2018, 13, 292-300.	5.3	17
68	Plasma-Sprayed Hydroxylapatite Coatings as Biocompatible Intermediaries Between Inorganic Implant Surfaces and Living Tissue. <i>Journal of Thermal Spray Technology</i> , 2018, 27, 1212-1237.	1.6	48
69	Magnesium-based Biodegradable Materials for Biomedical Applications. <i>MRS Advances</i> , 2018, 3, 2359-2364.	0.5	13
70	An innovative Mg/Ti hybrid fixation system developed for fracture fixation and healing enhancement at load-bearing skeletal site. <i>Biomaterials</i> , 2018, 180, 173-183.	5.7	55
71	The light alloy Calphad databases PanAl and PanMg. <i>Calphad: Computer Coupling of Phase Diagrams and Thermochemistry</i> , 2018, 61, 246-263.	0.7	22
72	An ultrasensitive and selective electrochemical aptasensor based on rGO-MWCNTs/Chitosan/carbon quantum dot for the detection of lysozyme. <i>Biosensors and Bioelectronics</i> , 2018, 115, 37-44.	5.3	81

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74	Biodegradable Poly(l-lactic acid) (PLLA) Coatings Fabricated from Nonsolvent Induced Phase Separation for Improving Corrosion Resistance of Magnesium Rods in Biological Fluids. <i>Langmuir</i> , 2018, 34, 10684-10693.	1.6	17
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76	“The return of ceramic implants” Rose stem inspired dual layered modification of ceramic scaffolds with improved mechanical and anti-infective properties. <i>Materials Science and Engineering C</i> , 2018, 93, 873-879.	3.8	13
77	Morphologically modified surface with hierarchical micro-/nano-structures for enhanced bioactivity of titanium implants. <i>Journal of Materials Science</i> , 2018, 53, 12679-12691.	1.7	38
78	Implantable drug delivery systems. , 2018, , 473-511.		38
79	Transcriptome sequencing analysis reveals the effect of combinative treatment with low-intensity pulsed ultrasound and magnesium ions on hFOB1.19 human osteoblast cells. <i>Molecular Medicine Reports</i> , 2018, 18, 749-762.	1.1	7
80	Current status and outlook on the clinical translation of biodegradable metals. <i>Materials Today</i> , 2019, 23, 57-71.	8.3	271
81	Hybrid fracture fixation systems developed for orthopaedic applications: A general review. <i>Journal of Orthopaedic Translation</i> , 2019, 16, 1-13.	1.9	72
82	Improved corrosion resistance and biocompatibility of biodegradable magnesium alloy by coating graphite carbon nitride (g-C ₃ N ₄). <i>Journal of Alloys and Compounds</i> , 2019, 770, 823-830.	2.8	33
83	Design Principles in Biomaterials and Scaffolds. , 2019, , 505-522.		6
84	Poly(l-lactic acid) (PLLA) Coatings with Controllable Hierarchical Porous Structures on Magnesium Substrate: An Evaluation of Corrosion Behavior and Cytocompatibility. <i>ACS Applied Bio Materials</i> , 2019, 2, 3843-3853.	2.3	17
85	Development of magnesium implants by application of conjoint-based quality function deployment. <i>Journal of Biomedical Materials Research - Part A</i> , 2019, 107, 2814-2834.	2.1	6
86	Selenium conversion coating on AZ31 Mg alloy: A solution for improved corrosion rate and enhanced bio-adaptability. <i>Surface and Coatings Technology</i> , 2019, 378, 124902.	2.2	23
87	Evaluation of the Corrosion Resistance and Cytocompatibility of a Bioactive Micro-Arc Oxidation Coating on AZ31 Mg Alloy. <i>Coatings</i> , 2019, 9, 396.	1.2	17
88	Corrosion resistance and cytotoxicity of AZ31 magnesium alloy with N ⁺ ion implantation. <i>Materials Technology</i> , 2019, 34, 730-736.	1.5	15
89	Evolution of mechanical behavior of magnesium alloy infiltrated 3D-printed CoCr scaffolds under corrosion in simulated body fluid. <i>Materials Science and Engineering C</i> , 2019, 105, 109747.	3.8	8
90	ZnO and Hydroxyapatite-Modified Magnesium Implant with a Broad Spectrum of Antibacterial Properties and a Unique Minimally Invasive Defined Degrading Capability. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 4285-4292.	2.6	9

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92	3D Printing of Salt as a Template for Magnesium with Structured Porosity. <i>Advanced Materials</i> , 2019, 31, e1903783.	11.1	52
93	Mechanical and biocorrosive properties of magnesium-aluminum alloy scaffold for biomedical applications. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2019, 98, 213-224.	1.5	30
94	Halloysite Nanotube Based Scaffold for Enhanced Bone Regeneration. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 4037-4047.	2.6	61
95	The influence of the crosslinking degree on the corrosion protection properties of chitosan coatings in simulated body fluid. <i>Progress in Organic Coatings</i> , 2019, 137, 105328.	1.9	15
96	Biological and Bio-inspired Nanomaterials. <i>Advances in Experimental Medicine and Biology</i> , 2019, , .	0.8	8
97	Endoscopic submucosal dissection of distal intestinal tumors using grasping forceps for traction. <i>Techniques in Coloproctology</i> , 2019, 23, 1079-1083.	0.8	7
98	Tailoring Surface Hydrophilicity Property for Biomedical 316L and 304 Stainless Steels: A Special Perspective on Studying Osteoconductivity and Biocompatibility. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 45489-45497.	4.0	24
99	Biocorrosion Zoomed In: Evidence for Dealloying of Nanometric Intermetallic Particles in Magnesium Alloys. <i>Advanced Materials</i> , 2019, 31, e1903080.	11.1	29
100	Leaky-Wave Antennas with Loaded Complementary Components for High-Performance and Wideband Application. , 2019, , .		1
101	Osteogenic magnesium incorporated into PLGA/TCP porous scaffold by 3D printing for repairing challenging bone defect. <i>Biomaterials</i> , 2019, 197, 207-219.	5.7	348
102	Hydrophilic thin films formation on AZ31 alloys by hydrothermal treatment in silicate containing solution and the evaluation of corrosion protection in phosphate buffered saline. <i>Materials Research Express</i> , 2019, 6, 116424.	0.8	4
103	Three-dimensional printing of metals for biomedical applications. <i>Materials Today Bio</i> , 2019, 3, 100024.	2.6	150
104	Overview of Biocompatible Materials and Their Use in Medicine. <i>Folia Medica</i> , 2019, 61, 34-40.	0.2	35
105	Exceptional Strengthening of Biodegradable Mg-Zn-Ca Alloys through High Pressure Torsion and Subsequent Heat Treatment. <i>Materials</i> , 2019, 12, 2460.	1.3	26
106	Material-based therapy for bone nonunion. <i>Materials and Design</i> , 2019, 183, 108161.	3.3	23
107	Dual-Purpose Magnesium-Incorporated Titanium Nanotubes for Combating Bacterial Infection and Ameliorating Osteolysis to Realize Better Osseointegration. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 5368-5383.	2.6	38
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110	Hierarchical ZnO Nanotube/Graphene Oxide Nanostructures Endow Pure Zn Implant with Synergistic Bactericidal Activity and Osteogenicity. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 19377-19385.	1.8	16
111	Microstructure, mechanical and corrosion properties of magnesium alloy bone plate treated by high-energy shot peening. <i>Transactions of Nonferrous Metals Society of China</i> , 2019, 29, 1641-1652.	1.7	33
112	In Vivo Simulation of Magnesium Degradability Using a New Fluid Dynamic Bench Testing Approach. <i>International Journal of Molecular Sciences</i> , 2019, 20, 4859.	1.8	21
113	Microstructure and Properties of Nano-Hydroxyapatite Reinforced WE43 Alloy Fabricated by Friction Stir Processing. <i>Materials</i> , 2019, 12, 2994.	1.3	19
114	Quantitative Evaluation of the Interaction Between Wear and Corrosion on Mg-3Gd-1Zn Alloy in Simulated Body Fluid. <i>Journal of Materials Engineering and Performance</i> , 2019, 28, 355-362.	1.2	10
115	Simultaneously improving corrosion resistance and mechanical properties of a magnesium alloy via equal-channel angular pressing and post water annealing. <i>Materials and Design</i> , 2019, 166, 107621.	3.3	97
116	Improved In Vitro Test Procedure for Full Assessment of the Cytocompatibility of Degradable Magnesium Based on ISO 10993-5/-12. <i>International Journal of Molecular Sciences</i> , 2019, 20, 255.	1.8	63
117	Bioactive coating on a new Mg-2Zn-0.5Nd alloy: modulation of degradation rate and cellular response. <i>Materials Technology</i> , 2019, 34, 394-402.	1.5	13
118	Degradation and biocompatibility of a series of strontium substituted hydroxyapatite coatings on magnesium alloys. <i>RSC Advances</i> , 2019, 9, 15013-15021.	1.7	20
119	Effect of fluoride coating on degradation behaviour of unidirectional Mg/PLA biodegradable composite for load-bearing bone implant application. <i>Composites Part A: Applied Science and Manufacturing</i> , 2019, 124, 105464.	3.8	30
120	Crevice corrosion – A newly observed mechanism of degradation in biomedical magnesium. <i>Acta Biomaterialia</i> , 2019, 98, 152-159.	4.1	28
121	Metallic biomaterials – A review. , 2019, , 83-99.		17
122	Biodegradable Magnesium-Incorporated Poly(l-lactic acid) Microspheres for Manipulation of Drug Release and Alleviation of Inflammatory Response. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 23546-23557.	4.0	59
123	Current Research Perspectives of Orthopedic Implant Materials. , 2019, , 337-374.		2
124	Magnesium matrix nanocomposites for orthopedic applications: A review from mechanical, corrosion, and biological perspectives. <i>Acta Biomaterialia</i> , 2019, 96, 1-19.	4.1	113
125	Treatment of trauma-induced femoral head necrosis with biodegradable pure Mg screw-fixed pedicle iliac bone flap. <i>Journal of Orthopaedic Translation</i> , 2019, 17, 133-137.	1.9	14
126	In vivo study of microarc oxidation coated Mg alloy as a substitute for bone defect repairing: Degradation behavior, mechanical properties, and bone response. <i>Colloids and Surfaces B: Biointerfaces</i> , 2019, 181, 349-359.	2.5	29

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128	One-pot hydrothermal synthesis, in vitro biodegradation and biocompatibility of Sr-doped nanorod/nanowire hydroxyapatite coatings on ZK60 magnesium alloy. <i>Journal of Alloys and Compounds</i> , 2019, 799, 71-82.	2.8	31
129	Hydrothermal Synthesis of Protective Coating on Mg Alloy for Degradable Implant Applications. <i>Coatings</i> , 2019, 9, 160.	1.2	11
130	In vitro degradation behavior of Mg wire/poly(lactic acid) composite rods prepared by hot pressing and hot drawing. <i>Acta Biomaterialia</i> , 2019, 98, 125-141.	4.1	31
131	Osteogenic activity and antibacterial ability on titanium surfaces modified with magnesium-doped titanium dioxide coating. <i>Nanomedicine</i> , 2019, 14, 1109-1133.	1.7	35
132	Effect of aluminium content and processing parameters on the microstructure and mechanical properties of laser powder-bed fused magnesium-aluminium (0, 3, 6, 9wt%) powder mixture. <i>Rapid Prototyping Journal</i> , 2019, 25, 744-751.	1.6	7
133	Mg-Zn-Mn alloy extract induces the angiogenesis of human umbilical vein endothelial cells via FGF/FGFR signaling pathway. <i>Biochemical and Biophysical Research Communications</i> , 2019, 514, 618-624.	1.0	20
134	Assessment of magnesium-based biomaterials: from bench to clinic. <i>Biomaterials Science</i> , 2019, 7, 2241-2263.	2.6	36
135	LOC103691336/miR-138-5p/BMP2 axis modulates Mg-mediated osteogenic differentiation in rat femoral fracture model and rat primary bone marrow stromal cells. <i>Journal of Cellular Physiology</i> , 2019, 234, 21316-21330.	2.0	36
136	Osteogenic and pH stimuli-responsive self-healing coating on biomedical Mg-1Ca alloy. <i>Acta Biomaterialia</i> , 2019, 92, 336-350.	4.1	79
137	Mg-based absorbable membrane for guided bone regeneration (GBR): a pilot study. <i>Rare Metals</i> , 2019, 38, 577-587.	3.6	19
138	Biodegradation-affected fatigue behavior of additively manufactured porous magnesium. <i>Additive Manufacturing</i> , 2019, 28, 299-311.	1.7	34
139	Polyelectrolytes fabrication on magnesium alloy surface by layer-by-layer assembly technique with antiplatelet adhesion and antibacterial activities. <i>Journal of Coatings Technology Research</i> , 2019, 16, 857-868.	1.2	8
140	Effect of alkali/acid pretreatment on the topography and corrosion resistance of as-deposited CaP coating on magnesium alloys. <i>Journal of Alloys and Compounds</i> , 2019, 793, 202-211.	2.8	46
141	Embedding magnesium metallic particles in polycaprolactone nanofiber mesh improves applicability for biomedical applications. <i>Acta Biomaterialia</i> , 2019, 98, 215-234.	4.1	57
142	A pH-sensitive self-healing coating for biodegradable magnesium implants. <i>Acta Biomaterialia</i> , 2019, 98, 160-173.	4.1	73
143	Additive manufacturing of biodegradable metals: Current research status and future perspectives. <i>Acta Biomaterialia</i> , 2019, 98, 3-22.	4.1	176
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146	In vitro degradation and antibacterial property of a copper-containing micro-arc oxidation coating on Mg-2Zn-1Gd-0.5Zr alloy. <i>Colloids and Surfaces B: Biointerfaces</i> , 2019, 179, 77-86.	2.5	63
147	In vitro and in vivo studies of Mg-30Sc alloys with different phase structure for potential usage within bone. <i>Acta Biomaterialia</i> , 2019, 98, 50-66.	4.1	62
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