

Biodegradable metals

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Collagen Self-Assembly on Orthopedic Magnesium Biomaterials Surface and Subsequent Bone Cell Attachment. PLoS ONE, 2014, 9, e110420.	1.1	31
2	Microstructure and biocorrosion behaviors of solution treated and as-extruded Mg ₂ Nd-xSr _{0.3} Zr alloys. Transactions of Nonferrous Metals Society of China, 2014, 24, 3797-3803.	1.7	8
3	Degradation behaviors of surface modified magnesium alloy wires in different simulated physiological environments. Frontiers of Materials Science, 2014, 8, 281-294.	1.1	12
4	Effect of Mucin and Bicarbonate Ion on Corrosion Behavior of AZ31 Magnesium Alloy for Airway Stents. Materials, 2014, 7, 5866-5882.	1.3	17
5	Formation of stacking faults for improving the performance of biodegradable Mg-Ho-Zn alloy. Materials Letters, 2014, 133, 158-162.	1.3	33
6	Progress of biodegradable metals. Progress in Natural Science: Materials International, 2014, 24, 414-422.	1.8	317
7	Preparation, microstructure and degradation performance of biomedical magnesium alloy fine wires. Progress in Natural Science: Materials International, 2014, 24, 523-530.	1.8	44
8	The Influence of MgH ₂ on the Assessment of Electrochemical Data to Predict the Degradation Rate of Mg and Mg Alloys. International Journal of Molecular Sciences, 2014, 15, 11456-11472.	1.8	16
9	Dissolution Control of Mg by Cellulose Acetate-Polyelectrolyte Membranes. ACS Applied Materials & Interfaces, 2014, 6, 22393-22399.	4.0	11
10	Impact behaviors of poly-lactic acid based biocomposite reinforced with unidirectional high-strength magnesium alloy wires. Progress in Natural Science: Materials International, 2014, 24, 472-478.	1.8	36
11	Dissolution and precipitation behaviors of silicon-containing ceramic coating on Mg-Zn-Ca alloy in simulated body fluid. Colloids and Surfaces B: Biointerfaces, 2014, 122, 746-751.	2.5	28
12	Degradation behavior of novel Fe/Ä-TCP composites produced by powder injection molding for cortical bone replacement. Journal of Materials Science, 2014, 49, 8234-8243.	1.7	26
13	Microstructure and In Vitro Biodegradable Properties of Fe-Zn Alloys Prepared by Electroforming. Advanced Materials Research, 0, 1033-1034, 1200-1206.	0.3	7
14	Magnesium based degradable biomaterials: A review. Frontiers of Materials Science, 2014, 8, 200-218.	1.1	133
15	Self-dissolution assisted coating on magnesium metal for biodegradable bone fixation devices. Materials Research Express, 2014, 1, 045406.	0.8	10
16	Effect of corrosion on mechanical behaviors of Mg-Zn-Zr alloy in simulated body fluid. Frontiers of Materials Science, 2014, 8, 264-270.	1.1	26
17	Biodegradable intestinal stents: A review. Progress in Natural Science: Materials International, 2014, 24, 423-432.	1.8	41
18	Uniform corrosion behavior of GZ51K alloy with long period stacking ordered structure for biomedical application. Corrosion Science, 2014, 88, 1-5.	3.0	84

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19	Spectrophotometric analysis to monitor the corrosion behaviour of magnesium during immersion corrosion testing: A suitable alternative to pH measurement?. Corrosion Science, 2014, 89, 338-342.	3.0	4
20	Microstructure, mechanical property and in vitro biocorrosion behavior of single-phase biodegradable Mg-1.5Zn-0.6Zr alloy. Journal of Magnesium and Alloys, 2014, 2, 181-189.	5.5	25
21	Recent advances on the development of magnesium alloys for biodegradable implants. Acta Biomaterialia, 2014, 10, 4561-4573.	4.1	924
22	Electroless iron plating on pure magnesium for biomedical applications. Materials Letters, 2014, 130, 154-156.	1.3	17
23	Effects of solidification cooling rate on the corrosion resistance of Mg-Zn-Ca alloy. Progress in Natural Science: Materials International, 2014, 24, 452-457.	1.8	24
24	Electrochemical Activity and Electrical Properties of Optimized Polypyrrole Coatings on Iron. Journal of the Electrochemical Society, 2015, 162, E307-E313.	1.3	17
25	Cytocompatibility of Fe-O Thin Film Prepared by Unbalanced Magnetron Sputtering. Materials Science Forum, 0, 815, 390-395.	0.3	0
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27	Combined effect of pulse electron beam treatment and thin hydroxyapatite film on mechanical features of biodegradable AZ31 magnesium alloy. IOP Conference Series: Materials Science and Engineering, 2015, 98, 012030.	0.3	2
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36	3D Printing of Scaffolds for Tissue Regeneration Applications. Advanced Healthcare Materials, 2015, 4, 1742-1762.	3.9	692
37	Mechanical Properties of Magnesium-Rare Earth Alloy Systems: A Review. Metals, 2015, 5, 1-39.	1.0	164
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42	Microstructure, corrosion behavior and cytotoxicity of biodegradable Mg ^{Sn} implant alloys prepared by sub-rapid solidification. <i>Materials Science and Engineering C</i> , 2015, 54, 245-251.	3.8	66
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45	Corrosion degradation behavior of Mg ^{Ca} alloy with high Ca content in SBF. <i>Transactions of Nonferrous Metals Society of China</i> , 2015, 25, 3339-3347.	1.7	27
46	Comparative XRD and Microstructure Analysis on Biodegradable Mg-Si-Ca Alloys. <i>Key Engineering Materials</i> , 0, 660, 51-56.	0.4	1
47	Effect of Gd/Nd ratio on mechanical and biocorrosion properties of as-extruded Mg Nd ^{Gd} ^{Sr} ^{Zn} ^{Zr} alloys. <i>Materials Research Innovations</i> , 2015, 19, S236-S239.	1.0	7
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58	Microstructure evolution and mechanical properties of Mg Nd ^Y alloy in different friction stir processing conditions. <i>Journal of Alloys and Compounds</i> , 2015, 636, 12-19.	2.8	47

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60	Engineering and functionalization of biomaterials via surface modification. <i>Journal of Materials Chemistry B</i> , 2015, 3, 2024-2042.	2.9	138
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69	Controlling the degradation kinetics of porous iron by poly(lactic-co-glycolic acid) infiltration for use as temporary medical implants. <i>Scientific Reports</i> , 2015, 5, 11194.	1.6	78
70	In vitro study of polycaprolactone/bioactive glass composite coatings on corrosion and bioactivity of pure Mg. <i>Applied Surface Science</i> , 2015, 355, 832-841.	3.1	38
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74	Sintering of Mg-Ca-Zn Alloy Metallic Foam Based on Mg-Zn-CaH ₂ System. <i>Advanced Materials Research</i> , 0, 1112, 474-477.	0.3	1
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78	Recommendation for modifying current cytotoxicity testing standards for biodegradable magnesium-based materials. <i>Acta Biomaterialia</i> , 2015, 21, 237-249.	4.1	338
79	In Vitro Analysis of Electrophoretic Deposited Fluoridated Hydroxyapatite Coating on Micro-arc Oxidized AZ91 Magnesium Alloy for Biomaterials Applications. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015, 46, 1394-1404.	1.1	34
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86	Improvement of bio-corrosion resistance for Ti ₄₂ Zr ₄₀ Si ₁₅ Ta ₃ metallic glasses in simulated body fluid by annealing within supercooled liquid region. <i>Materials Science and Engineering C</i> , 2015, 52, 144-150.	3.8	16
87	A new Fe-Mn-Si alloplastic biomaterial as bone grafting material: In vivo study. <i>Applied Surface Science</i> , 2015, 352, 129-139.	3.1	24
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90	Ultrathin film coating of hydroxyapatite (HA) on a magnesium-calcium alloy using RF magnetron sputtering for bioimplant applications. <i>Materials Letters</i> , 2015, 152, 280-282.	1.3	59
91	Sandwiched polydopamine (PDA) layer for titanium dioxide (TiO ₂) coating on magnesium to enhance corrosion protection. <i>Corrosion Science</i> , 2015, 96, 67-73.	3.0	91
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108	In vivo assessments of bioabsorbable AZ91 magnesium implants coated with nanostructured fluoridated hydroxyapatite by MAO/EPD technique for biomedical applications. Materials Science and Engineering C, 2015, 48, 21-27.	3.8	96
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123	Proteomic profile of mouse fibroblasts exposed to pure magnesium extract. <i>Materials Science and Engineering C</i> , 2016, 69, 522-531.	3.8	9
124	The synthesis and characterization of Mg-Zn-Ca alloy by powder metallurgy process. <i>AIP Conference Proceedings</i> , 2016, , .	0.3	14
125	Effect of phosphate additives on the microstructure, bioactivity, and degradability of microarc oxidation coatings on Mg-Zn-Ca-Mn alloy. <i>Biointerphases</i> , 2016, 11, 031006.	0.6	7
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129	Enhanced corrosion protection and biocompatibility of a PLGA-silane coating on AZ31 Mg alloy for orthopaedic applications. <i>RSC Advances</i> , 2016, 6, 113871-113883.	1.7	27
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131	Inorganic dissolvable electronics: materials and devices for biomedicine and environment. <i>Journal of Materials Research</i> , 2016, 31, 2549-2570.	1.2	28

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133	Influence of Precipitation Hardening in Mg-Y-Nd on Mechanical and Corrosion Properties. <i>Jom</i> , 2016, 68, 1183-1190.	0.9	22
134	Overview: Magnesium-Based Biodegradable Implants. <i>Jom</i> , 2016, 68, 1175-1176.	0.9	6
135	Effect of Mn addition on grain refinement of biodegradable Mg 4Zn 0.5Ca alloy. <i>Journal of Alloys and Compounds</i> , 2016, 676, 461-468.	2.8	37
136	Mechanical and corrosion properties of Mg-Gd-Zn-Zr-Mn biodegradable alloy by hot extrusion. <i>Journal of Alloys and Compounds</i> , 2016, 685, 222-230.	2.8	76
137	Influence of surface pre-treatment on the cytocompatibility of a novel biodegradable ZnMg alloy. <i>Materials Science and Engineering C</i> , 2016, 68, 198-204.	3.8	48
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144	Spark Plasma Sintering of Load-Bearing Iron-Carbon Nanotube-Tricalcium Phosphate CerMets for Orthopaedic Applications. <i>Jom</i> , 2016, 68, 1134-1142.	0.9	8
145	Improvement of the Biodegradation Property and Biomineralization Ability of Magnesium-Hydroxyapatite Composites with Dicalcium Phosphate Dihydrate and Hydroxyapatite Coatings. <i>ACS Biomaterials Science and Engineering</i> , 2016, 2, 818-828.	2.6	66
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148	In Vitro Corrosion and Cytocompatibility of a Microarc Oxidation Coating and Poly(l-lactic acid) Composite Coating on Mg-Li-Ca Alloy for Orthopedic Implants. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 10014-10028.	4.0	256
149	In vitro degradation of ZM21 magnesium alloy in simulated body fluids. <i>Materials Science and Engineering C</i> , 2016, 65, 59-69.	3.8	39

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151	Adhesion evaluation of different bioceramic coatings on Mg-Ca alloys for biomedical applications. <i>Journal of Adhesion Science and Technology</i> , 2016, 30, 1968-1983.	1.4	31
152	Surface functionalization of biomaterials by radical polymerization. <i>Progress in Materials Science</i> , 2016, 83, 191-235.	16.0	120
153	Magnesium Phosphate Cement Systems for Hard Tissue Applications: A Review. <i>ACS Biomaterials Science and Engineering</i> , 2016, 2, 1067-1083.	2.6	155
154	Influence of bicarbonate concentration on the conversion layer formation onto AZ31 magnesium alloy and its electrochemical corrosion behaviour in simulated body fluid. <i>RSC Advances</i> , 2016, 6, 49910-49922.	1.7	20
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1244	Photocrosslinkable Col/PCL/Mg composite membrane providing spatiotemporal maintenance and positive osteogenetic effects during guided bone regeneration. <i>Bioactive Materials</i> , 2022, 13, 53-63.	8.6	15
1246	Corrosion characteristics of sintered heterogeneous materials composed of iron and iron oxides. <i>Koroze A Ochrana Materialu</i> , 2020, 64, 72-78.	0.4	0
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1248	Investigating machining characteristics and degradation rate of biodegradable ZM21 magnesium alloy in end milling process. <i>International Journal of Lightweight Materials and Manufacture</i> , 2022, 5, 102-112.	1.3	4
1249	Influence of microstructural characteristics on corrosion behavior of Mg ⁵ Sn ³ In alloy in Hank's solution. <i>Transactions of Nonferrous Metals Society of China</i> , 2021, 31, 2999-3011.	1.7	6
1250	Competitive Effect of Grain Size and Second Phase on Corrosion Behavior of Biodegradable Mg-3Zn-1Mn-xSr Alloys. <i>Journal of Materials Engineering and Performance</i> , 2022, 31, 3136-3150.	1.2	2
1251	Semicoherent strengthens graphene/zinc scaffolds. <i>Materials Today Nano</i> , 2022, 17, 100163.	2.3	18
1252	Biocompatibility Analyses of HF-Passivated Magnesium Screws for Guided Bone Regeneration (GBR). <i>International Journal of Molecular Sciences</i> , 2021, 22, 12567.	1.8	12
1253	Biomechanical evaluation of magnesium plates for management of mandibular angle fracture. <i>British Journal of Oral and Maxillofacial Surgery</i> , 2021, , .	0.4	1
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1379	A Repeater Antenna System Utilizing Genetically Modified Bacteria for Multiscale Communications. , 2022, , .		2
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1397	Current Status and Outlook of Temporary Implants (Magnesium/Zinc) in Cardiovascular Applications. <i>Metals</i> , 2022, 12, 999.	1.0	11
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