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Biodegradable Magnesium Alloys: A Review of Material Development and Applications

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#	Paper	IF	Citations
204	Limitations in the use of the potentiodynamic polarisation curves to investigate the effect of Zn on the corrosion behaviour of as-extruded MgZn binary alloy. 2013 , 75, 426-433		54
203	The formation of an organic coat and the release of corrosion microparticles from metallic magnesium implants. 2013 , 9, 7580-9		38
202	Biocompatibility Assessment of Novel Bioresorbable Alloys Mg-Zn-Se and Mg-Zn-Cu for Endovascular Applications: Studies. <i>Journal of Biomimetics, Biomaterials, and Tissue Engineering</i> , 2013 , 17, 25-44		5
201	Mechanical Properties and Tensile Failure Analysis of Novel Bio-absorbable Mg-Zn-Cu and Mg-Zn-Se Alloys for Endovascular Applications. 2013 , 3, 23-40		7
200	In vitro biocompatibility and endothelialization of novel magnesium-rare Earth alloys for improved stent applications. 2014 , 9, e98674		23
199	Endothelialization of novel magnesium-rare earth alloys with fluoride and collagen coating. 2014 , 15, 5263-76		26
198	Comparison of the effects of Mg-6Zn and Ti-3Al-2.5V alloys on TGF- β /TNF- α /VEGF/b-FGF in the healing of the intestinal tract in vivo. 2014 , 9, 025011		13
197	Comparison of degradation behavior and the associated bone response of ZK60 and PLLA in vivo. 2014 , 102, 1255-63		20
196	Deposition of microarc oxidation polycaprolactone duplex coating to improve the corrosion resistance of magnesium for biodegradable implants. 2014 , 562, 561-567		43
195	Immunological Response to Biodegradable Magnesium Implants. 2014 , 66, 573-579		20
194	Monetite and brushite coated magnesium: in vivo and in vitro models for degradation analysis. 2014 , 25, 173-83		28
193	Effects of alloying elements on the corrosion behavior and biocompatibility of biodegradable magnesium alloys: a review. 2014 , 2, 1912-1933		265
192	Characterization and corrosion resistance of pure Mg modified by micro-arc oxidation using phosphate electrolyte with/without NaOH. 2014 , 46, 7-15		11
191	Bioresorbable scaffolds for the treatment of coronary artery disease: current status and future perspective. 2014 , 11, 467-80		5
190	Biodegradable electroactive polymers for electrochemically-triggered drug delivery. 2014 , 2, 6809-6822		56
189	Magnesium biomaterials for orthopedic application: a review from a biological perspective. 2014 , 102, 1316-31		184
188	A new approach to the fabrication of porous magnesium with well-controlled 3D pore structure for orthopedic applications. 2014 , 43, 317-20		46

187	Biodegradation of a magnesium alloy implant in the intercondylar femoral notch showed an appropriate response to the synovial membrane in a rabbit model in vivo. 2014 , 29, 291-302	11
186	Recent advances on the development of magnesium alloys for biodegradable implants. 2014 , 10, 4561-4573	693
185	The effects of novel, bioresorbable scaffolds on coronary vascular pathophysiology. 2014 , 7, 413-25	18
184	References. 2015 , 457-546	
183	Fabrication and Characterization of Electrospun PCL-MgO-Keratin-Based Composite Nanofibers for Biomedical Applications. 2015 , 8, 4080-4095	58
182	Socio-Economic Aspects and Scope of Bioceramic Materials and Biomedical Implants. 2015 , 11-40	
181	When 1+1>2: Nanostructured composites for hard tissue engineering applications. 2015 , 57, 434-51	32
180	Optimized in vitro procedure for assessing the cytocompatibility of magnesium-based biomaterials. 2015 , 23, 354-363	56
179	Influence of the intramedullary nail preparation method on nail's mechanical properties and degradation rate. 2015 , 51, 99-106	18
178	Biocompatibility of MgF2-coated MgNd2 specimens in contact with mucosa of the nasal sinus - a long term study. 2015 , 18, 249-61	15
177	A passive biodegradable implant for subcutaneous soft-tissue trauma monitoring. 2015 , 19, 901-9	8
176	Endothelial responses of magnesium and other alloying elements in magnesium-based stent materials. 2015 , 7, 118-28	70
175	Metallic implant biomaterials. 2015 , 87, 1-57	1142
174	Effect of the addition of low rare earth elements (lanthanum, neodymium, cerium) on the biodegradation and biocompatibility of magnesium. 2015 , 11, 554-62	132
173	The influence of milling-burnishing successive and simultaneous processes on the material hardness. 2016 , 145, 022009	
172	3D-Printed Scaffolds and Biomaterials: Review of Alveolar Bone Augmentation and Periodontal Regeneration Applications. 2016 , 2016, 1239842	70
171	In Vitro Corrosion and Cytocompatibility Properties of Mg-2Gd-X(Ag, Ca) Alloys. 2016 , 347-351	
170	Cytotoxicity assessment of adipose-derived mesenchymal stem cells on synthesized biodegradable Mg-Zn-Ca alloys. 2016 , 69, 584-97	27

169	Susceptibility of metallic magnesium implants to bacterial biofilm infections. 2016 , 104, 1489-99	30
168	Controlling Wettability for Improved Corrosion Inhibition on Magnesium Alloy as Biomedical Implant Materials. 2016 , 3, 1500723	25
167	Enhanced corrosion protection and biocompatibility of a PLGA/Silane coating on AZ31 Mg alloy for orthopaedic applications. 2016 , 6, 113871-113883	20
166	In Vitro Corrosion and Cytocompatibility Properties of Mg-2Gd-X(Ag, Ca) Alloys. 2016 , 347-351	0
165	Mechanical and corrosion properties of Mg-Gd-Zn-Zr-Mn biodegradable alloy by hot extrusion. 2016 , 685, 222-230	57
164	Influence of surface condition on the corrosion of ultra-high-purity Mg alloy wire. 2016 , 108, 66-75	30
163	The fluoride coated AZ31B magnesium alloy improves corrosion resistance and stimulates bone formation in rabbit model. 2016 , 63, 506-11	47
162	Improved corrosion resistance and biocompatibility of a calcium phosphate coating on a magnesium alloy for orthopedic applications. 2016 , 14, 169-183	6
161	Electrophoretic deposition of colloidal particles on Mg with cytocompatibility, antibacterial performance, and corrosion resistance. 2016 , 45, 387-398	42
160	Bioresorbable Vascular Scaffolds for Coronary Revascularization. 2016 , 134, 168-82	82
159	Paving the way to a bioresorbable technology: Development of the absorb BRS program. 2016 , 88, 1-9	7
158	Development of plasma electrolytic oxidation for improved Ti6Al4V biomaterial surface properties. 2016 , 85, 2425-2437	36
157	Hydroxyapatite (HA)/poly-L-lactic acid (PLLA) dual coating on magnesium alloy under deformation for biomedical applications. 2016 , 27, 34	30
156	Silane/TiO ₂ coating to control the corrosion rate of magnesium alloys in simulated body fluid. 2016 , 104, 152-161	68
155	Crystal-orientation-dependent corrosion behaviour of single crystals of a pure Mg and Mg-Al and Mg-Cu solid solutions. 2016 , 109, 68-85	82
154	An in vivo study on the metabolism and osteogenic activity of bioabsorbable Mg-1Sr alloy. 2016 , 29, 455-467	68
153	Bio-Adaption between Magnesium Alloy Stent and the Blood Vessel: A Review. 2016 , 32, 815-826	41
152	Fabrication and Evaluation of a Bioactive Sr/Ca Contained Micro-Arc Oxidation Coating on Magnesium Strontium Alloy for Bone Repair Application. 2016 , 32, 233-244	51

151	Structure, mechanical characteristics and in vitro degradation, cytotoxicity, genotoxicity and mutagenicity of novel biodegradable Zn-Mg alloys. 2016 , 58, 24-35	157
150	Radiological, histological, and hematological evaluation of hydroxyapatite-coated resorbable magnesium alloy screws placed in rabbit tibia. 2017 , 105, 1636-1644	14
149	Reinforced magnesium composites by metallic particles for biomedical applications. 2017 , 685, 349-357	14
148	Corrosion Behavior of PEO Coatings Formed on AZ31 Alloy in Phosphate-Based Electrolytes with Calcium Acetate Additive. 2017 , 26, 3204-3215	7
147	Electronic properties of MgZnPt ₂ at extremely high temperatures and pressures. 2017 , 55, 1011-1017	
146	Differential apoptotic response of MC3T3-E1 pre-osteoblasts to biodegradable magnesium alloys in an in vitro direct culture model. 2017 , 28, 155	2
145	Biodegradable materials. 2017 , 31, 316-320	24
144	Insight of magnesium alloys and composites for orthopedic implant applications  review. 2017 , 5, 286-312	217
143	Biological Responses and Mechanisms of Human Bone Marrow Mesenchymal Stem Cells to Zn and Mg Biomaterials. 2017 , 9, 27453-27461	108
142	Comparison of electrochemical behavior of hydroxyapatite coated onto WE43 Mg alloy by electrophoretic and pulsed laser deposition. 2017 , 309, 840-848	28
141	Effects of Zn concentration and heat treatment on the microstructure, mechanical properties and corrosion behavior of as-extruded Mg-Zn alloys produced by powder metallurgy. 2017 , 693, 1277-1289	58
140	Metallic Biomaterials: Current Challenges and Opportunities. 2017 , 10,	258
139	Mg and Its Alloys for Biomedical Applications: Exploring Corrosion and Its Interplay with Mechanical Failure. 2017 , 7, 252	64
138	Titanium dioxide coatings on magnesium alloys for biomaterials: A review. 2017 , 84, 261-270	11
137	Strategy on biological evaluation for biodegradable/absorbable materials and medical devices. 2018 , 29, 269-278	
136	Microstructure and Mechanical Properties of Mg-Gd Alloys as Biodegradable Implant Materials. 2018 , 253-262	1
135	A Multifunctional Zinc Oxide/Poly(Lactic Acid) Nanocomposite Layer Coated on Magnesium Alloys for Controlled Degradation and Antibacterial Function. 2018 , 4, 2169-2180	48
134	Defect-Mediated Reactive Oxygen Species Generation in Mg-Substituted ZnO Nanoparticles: Efficient Nanomaterials for Bacterial Inhibition and Cancer Therapy. 2018 , 3, 2956-2965	42

133	Biodegradable Metals as Biomaterials for Clinical Practice: Iron-Based Materials. 2018 , 225-280	6
132	Microstructure characterization of a directionally solidified Mg-12wt.%Zn alloy: Equiaxed dendrites, eutectic mixture and type/ morphology of intermetallics. 2018 , 204, 105-131	10
131	Utilizing Low-Cost Eggshell Particles to Enhance the Mechanical Response of Mg ₂ .5Zn Magnesium Alloy Matrix. 2018 , 20, 1700919	24
130	Topical Notions About in Vivo Analysis for Degradable Biomaterials with Utility in Human Body. 2018 , 374, 012092	1
129	Microstructure characterization and effect of extrusion temperature on biodegradation behavior of Mg-5Zn-1Y-xCa alloy. 2018 , 28, 2199-2213	7
128	Degradation Rates of Pure Zinc, Magnesium, and Magnesium Alloys Measured by Volume Loss, Mass Loss, and Hydrogen Evolution. 2018 , 8, 1459	15
127	Evaluation of a Porous Bioabsorbable Interbody Mg-Zn Alloy Cage in a Goat Cervical Spine Model. 2018 , 2018, 7961509	3
126	Rare earth-copper-magnesium intermetallics: crystal structure of CeCuMg, magnetocaloric effect of GdCuMg and physical properties of the Laves phases RECu ₄ Mg (RE=Sm, Gd, Tb, Tm). 2018 , 73, 987-997	3
125	Nitric oxide donor delivery. 2018 , 291-304	1
124	Surface Finish and Back-Wall Dross Behavior during the Fiber Laser Cutting of AZ31 Magnesium Alloy. 2018 , 9,	1
123	The Suitability of Zn _{0.3} %Fe Alloy as a Biodegradable Implant Material. 2018 , 8, 153	43
122	In vivo performances of pure Zn and Zn-Fe alloy as biodegradable implants. 2018 , 29, 94	45
121	Microstructure and corrosion resistance of MAO coatings on AZ31 magnesium. 2018 , 5, 086510	16
120	Biodegradable Magnesium Alloys Developed as Bone Repair Materials: A Review. 2018 , 2018, 9216314	83
119	Acceleration of the corrosion reaction of magnesium by Fenton reagents. 2018 , 71, 1852-1862	1
118	Corrosion Protection of Magnesium Alloys by Functional Coatings. 2018 , 2473-2505	2
117	Toward a Biocompatible and Degradable Battery Using a Mg-Zn-Zr Alloy with β -Tricalcium Phosphate Nanocoating as Anode. 2018 , 27, 4005-4009	3
116	Numerical Modelling of Effects of Biphasic Layers of Corrosion Products to the Degradation of Magnesium Metal In Vitro. 2017 , 11,	464

115	Biodegradable Metallic Wires in Dental and Orthopedic Applications: A Review. 2018 , 8, 212	22
114	Recent Progress in Research and Development of Metallic Structural Biomaterials with Mainly Focusing on Mechanical Biocompatibility. 2018 , 59, 1-13	16
113	Biodegradable stents for coronary artery disease treatment: Recent advances and future perspectives. 2018 , 91, 163-178	64
112	Recent Advances in Biodegradable Conducting Polymers and Their Biomedical Applications. 2018 , 19, 1783-1803	102
111	Evidence of a novel intermetallic Mg ₇ Ag ₃ phase in Mg–Ag binary alloy system. 2018 , 51, 844-848	8
110	In Vivo Response of Growth Plate to Biodegradable Mg-Ca-Zn Alloys Depending on the Surface Modification. 2019 , 20,	6
109	Corrosion behavior of as-cast ZK60 alloy modified with rare earth addition in sodium sulfate medium. 2019 , 158, 108092	5
108	The Prospects for Biodegradable Zinc in Wound Closure Applications. 2019 , 8, e1900408	26
107	Hierarchical Functionalized Polymeric-Ceramic Coatings on Mg-Ca Alloys for Biodegradable Implant Applications. 2019 , 19, e1900179	8
106	Microstructural characteristics of chitosan deposited az91 magnesium alloy. 2019 , 16, 456-462	3
105	Biodegradable magnesium alloys as temporary orthopaedic implants: a review. 2019 , 32, 185-193	106
104	The influence of alloying and fabrication techniques on the mechanical properties, biodegradability and biocompatibility of zinc: A comprehensive review. 2019 , 87, 1-40	158
103	Acetic Acid Etching of Mg-xGd Alloys. 2019 , 9, 117	3
102	Evaluation of Magnesium-based Medical Devices in Preclinical Studies: Challenges and Points to Consider. 2019 , 47, 390-400	10
101	Metallic biomaterialsA review. 2019 , 83-99	6
100	Magnesium matrix nanocomposites for orthopedic applications: A review from mechanical, corrosion, and biological perspectives. 2019 , 96, 1-19	55
99	Mg-Zn-Mn alloy extract induces the angiogenesis of human umbilical vein endothelial cells via FGF/FGFR signaling pathway. 2019 , 514, 618-624	7
98	Near-eutectic Zn-Mg alloys: Interrelations of solidification thermal parameters, microstructure length scale and tensile/corrosion properties. 2019 , 19, 582-598	16

97	Experimental evidence of the Mg ₇ (Zn, Ag) ₃ continuous solid solution in Mg-rich corner of Mg ₇ Zn ₃ Ag ternary system at 335 °C. 2019 , 789, 991-995	1
96	Corrosion behavior of porous magnesium coated by plasma electrolytic oxidation in simulated body fluid. 2019 , 70, 1561-1569	2
95	Recent Progress on Mg- and Zn-Based Alloys for Biodegradable Vascular Stent Applications. 2019 , 2019, 1-16	4
94	The Fundamental Comparison of Zn-2Mg and Mg-4Y-3RE Alloys as a Perspective Biodegradable Materials. 2019 , 12,	10
93	The Effect of Laser Shock Peening on the Corrosion Behavior of Biocompatible Magnesium Alloy ZK60. 2019 , 9, 1237	3
92	Biocompatibility of bioabsorbable Mg-Ca alloys with rare earth elements addition. 2019 , 30, 134	4
91	Mg-Phenolic Network Strategy for Enhancing Corrosion Resistance and Osteocompatibility of Degradable Magnesium Alloys. 2019 , 4, 21931-21944	13
90	In vitro and in vivo analysis of the biodegradable behavior of a magnesium alloy for biomedical applications. 2019 , 38, 11-21	10
89	Materials Design and Applications II. 2019 ,	
88	Synthesis of Mg ₇ Zn ₃ Ca Alloy by the Spark Plasma Sintering. 2019 , 85-96	1
87	Optimization of microstructure and mechanical property of a Mg-Zn-Y-Nd alloy by extrusion process. 2019 , 775, 990-1001	31
86	Effect of composite coating with poly-dopamine/PCL on the corrosion resistance of magnesium. 2019 , 68, 328-337	5
85	Mechanical and in vitro degradation behavior of magnesium-bioactive glass composites prepared by SPS for biomedical applications. 2019 , 107, 352-365	16
84	Mg in β TCP/Mg-Zn composite enhances the differentiation of human bone marrow stromal cells into osteoblasts through MAPK-regulated Runx2/Osx. 2020 , 235, 5182-5191	16
83	Impact of Wound Closure on the Corrosion Rate of Biodegradable Mg-Ca-Zn Alloys in the Oral Environment. 2020 , 13,	2
82	A Biodegradable Implant Antenna Detecting Post-Surgical Infection. 2020 ,	1
81	Effects of hydroxyapatite content on mechanical properties and in-vitro corrosion behavior of ZK60/HA composites. 2020 , 111, 621-631	0
80	Corrosion-wear behavior of a biocompatible magnesium matrix composite in simulated body fluid. 2020 , 1	2

79	Recent Developments in Magnesium Metal-Matrix Composites for Biomedical Applications: A Review. 2020 , 6, 4748-4773	21
78	The Effect of Ca on In Vitro Behavior of Biodegradable Zn-Fe Alloy in Simulated Physiological Environments. 2020 , 10, 1624	7
77	Biofunctional magnesium coated Ti6Al4V scaffold enhances osteogenesis and angiogenesis and for orthopedic application. 2020 , 5, 680-693	38
76	Development of Mg based biomaterial with improved mechanical and degradation properties using powder metallurgy. 2020 , 8, 883-898	21
75	Addressing the slow corrosion rate of biodegradable Fe-Mn: Current approaches and future trends. 2020 , 24, 100822	21
74	Bio-inspired biomaterial Mg-Zn-Ca: a review of the main mechanical and biological properties of Mg-based alloys. 2020 , 6, 042001	4
73	Role of Sn as a Process Control Agent on Mechanical Alloying Behavior of Nanocrystalline Titanium Based Powders. 2020 , 13,	4
72	Mg-Alloys for Forging Applications-A Review. 2020 , 13,	27
71	ZnMg0.8Ca0.2 (wt%) biodegradable alloy □The influence of thermal treatment and extrusion on microstructural and mechanical characteristics. 2020 , 162, 110230	11
70	The Functional Properties of Mg-Zn-X Biodegradable Magnesium Alloys. 2020 , 13,	9
69	Comparison of modified injection molding and conventional machining in biodegradable behavior of perforated cannulated magnesium hip stents. 2021 , 63, 145-160	11
68	The influence of Ca and Cu additions on the microstructure, mechanical and degradation properties of Zn-Ca-Cu alloys for absorbable wound closure device applications. 2021 , 6, 1436-1451	17
67	Degradation behavior of the MgO/HA surface ceramic nano-composites in the simulated body fluid and its use as a potential bone implant. 2021 , 258, 123965	5
66	Magnesium alloys for biomedical application: Advanced corrosion control through surface coating. 2021 , 405, 126521	15
65	Toward Tailoring the Degradation Rate of Magnesium-Based Biomaterials for Various Medical Applications: Assessing Corrosion, Cytocompatibility and Immunological Effects. 2021 , 22,	4
64	Schematic review of plasma arc oxidation process for Mg Alloy Bio Implants. 2021 , 1017, 012011	3
63	Comparative Electrochemical Study of Pure Magnesium Behavior in Ringer's and Hank's Solutions. 2021 , 57, 168-180	1
62	Mg-Based Composites for Biomedical Applications.	

61	Corrosion resistance and tribological behavior of ZK30 magnesium alloy coated by plasma electrolytic oxidation. 2021 , 410, 126983	7
60	Preparation and properties of FHA coatings on micro-arc oxidised AZ91D magnesium alloy with different deposition times. 2021 , 99, 203-209	1
59	Tube equal channel angular extrusion (tECAE) of Mg ₃ Al ₂ Zn alloy. 2021 , 814, 141236	1
58	Evaluation of MgZnCa Alloys Fabricated Via Powder Metallurgy for Manufacturing Biodegradable Surgical Implants. 2021 , 73, 2403-2412	0
57	An assessment of magnesium AZ31 coronary stents manufacture. 2021 , 8, 075403	0
56	Sacrificial protection of Mg-based resorbable implant alloy by magnetron sputtered Mg5Gd alloy coating: A short-term study. 2021 , 189, 109590	2
55	Influence of the pre-exposure of a Zn-0.8Mg-0.2Sr absorbable alloy in bovine serum albumin containing media on its surface changes and their impact on the cytocompatibility of the material. 2021 , 28, 102556	1
54	Research status of biodegradable metals designed for oral and maxillofacial applications: A review. 2021 , 6, 4186-4208	16
53	In Vitro Macrophage Immunomodulation by Poly(ϵ -caprolactone) Based-Coated AZ31 Mg Alloy. 2021 , 22,	5
52	Biodegradable Mg-Ca-Zn alloys synthesized by powder metallurgy. 2021 ,	
51	Insights into the Role of Magnesium Ions in Affecting Osteogenic Differentiation of Mesenchymal Stem Cells. 2021 , 199, 559-567	17
50	Microstructure and mechanical and corrosion properties of hot-extruded Mg ₂ Zn ₃ Ca(Mn) biodegradable alloys. 2020 , 9, 1428-1428	13
49	Bioresorbable metals in cardiovascular stents: Material insights and progress. 2020 , 12, 100727	11
48	Engineering of biodegradable magnesium alloy scaffolds to stabilize biological myocardial grafts. 2017 , 62, 493-504	2
47	Recent advancements in magnesium implants for orthopedic application and associated infections. 2016 , 1, 138	2
46	Microstructure, corrosion rate, and mechanical properties of unidirectionally and cross-rolled Mg-0.375Ga and Mg-0.750Ga alloys. 2021 ,	1
45	Surface Engineering Techniques and Applications. 2014 , 73-101	
44	Mechanical properties. 2014 , 79-102	

43	Corrosion Protection of Magnesium Alloys by Functional Coatings. 2016 , 1-33	
42	Evaluation of In Vitro Fatigue Properties of Biodegradable Mg0.3at.%Ca Alloy. 2017 , 533-535	1
41	Transition and Prospect of Biomedical and Healthcare Materials from the Viewpoint of Tissue Regeneration. 2017 , 56, 220-224	
40	Effect of Extrusion Temperature on Microstructure and Biodegradation Behavior of Mg-5Zn-1Y-1Ca Alloy. 2017 , 8, 299-304	0
39	In vivo evaluation of bending strengths and degradation rates of different magnesium pin designs for oral stapler. 2020 , 18, 2280800019836400	2
38	The effect of carboxylate compounds on Volta potential and corrosion inhibition of Mg containing different levels of iron. 2021 , 194, 109937	0
37	Anticorrosion and Cytocompatibility Assessment of Graphene-Doped Hybrid Silica and Plasma Electrolytic Oxidation Coatings for Biomedical Applications. 2021 ,	1
36	Degradation Behavior of Ternary Mg-Zn-Se and Mg-Zn-Cu Alloys as Biomaterials. <i>Journal of Biomimetics, Biomaterials, and Tissue Engineering</i> , 2013 , 18,	3
35	Corrosion behavior of AZ31 magnesium alloys coated with PMMA/HA as biodegradable implants. 2021 ,	0
34	Comparison of Hot-rolled Unalloyed Magnesium and Magnesium Alloys in terms of Biodegradability and Mechanical Properties.	1
33	Rationale for Processing of a Mg-Zn-Ca Alloy by Equal-Channel Angular Pressing for Use in Biodegradable Implants for Osteoreconstruction. 2021 , 11, 1381	2
32	Factors affecting biocompatibility and biodegradation of magnesium based alloys. 2021 ,	1
31	In vitro bio-corrosion behaviors of biodegradable AZ31B magnesium alloy under static stresses of different forms and magnitudes. 2021 ,	1
30	Zinc-nutrient element based alloys for absorbable wound closure devices fabrication: Current status, challenges, and future prospects.. 2021 , 280, 121301	1
29	On the Corrosion Fatigue of Magnesium Alloys Aimed at Biomedical Applications: New Insights from the Influence of Testing Frequency and Surface Modification of the Alloy ZK60.. 2022 , 15,	4
28	MgO as corrosion inhibitor. 2022 , 183-210	0
27	Electrochemical Corrosion Behaviour Analysis of Mg-Alloys Used for Orthopaedics and Vascular Implants. 2022 , 1225, 012063	
26	Optimisation of Corrosion behaviour and hardness of Ni-B4C Composite coated AZ31 Mg alloy using RSM. 2022 , 10, 015033	

- 25 Corrosion Behavior of an MgSn Alloy.. **2022**, 15, 0
- 24 Bio-corrosion assessment and surface study of hydroxyapatite-coated AZ31 Mg alloy pre-treated with vinyl tri-ethoxy silane. **2022**, 126147 1
- 23 Tailoring Biodegradation of Mg-Ca Alloy by Acid Pickling and Polydioxanone/n-Hydroxyapatite Composite Coating for Temporary Implant Applications. 1
- 22 In Vitro Electrochemical Corrosion Assessment of Magnesium Nanocomposites Reinforced with Samarium(III) Oxide and Silicon Dioxide Nanoparticles. **2022**, 6, 154 1
- 21 Current Status and Outlook of Temporary Implants (Magnesium/Zinc) in Cardiovascular Applications. **2022**, 12, 999 3
- 20 Effects of heat treatment on the corrosion behavior and mechanical properties of biodegradable Mg alloys. **2022**, 2
- 19 Nanoparticle-modified coatings by electrophoretic deposition for corrosion protection of magnesium. 1-10 2
- 18 Research progress of biodegradable magnesium-based biomedical materials: A review. **2022**, 923, 166377 0
- 17 Improved corrosion resistance and mechanical properties of biodegradable Mg₉₂Zn₈Sr alloys: Effects of heat treatment, Sr additions, and multi-directional forging. **2022**, 0
- 16 MgB₂-based biodegradable materials for orthopedic implants. **2022**, 20, 1399-1413 1
- 15 Evaluation of mechanical and corrosion properties of Mg-9Li-Zn alloy in simulated body fluid (SBF) solution as a biodegradable implant material. **2022**, 0
- 14 Effects of Mg-Nd-Gd-Sr alloy on bone marrow mesenchymal stem cell function derived from SD rats. **2022**, 20, 1721727X2211209 0
- 13 Advances in the Study of Magnesium Alloys and Their Use in Bone Implant Material. **2022**, 12, 1500 0
- 12 Effect of extrusion parameters on degradation of magnesium alloys for bioimplant applications: A review. **2022**, 32, 2787-2813 0
- 11 Recent progress in low-dimensional nanomaterials filled multifunctional metal matrix nanocomposites. **2023**, 132, 101034 0
- 10 Biodegradable magnesium materials regulate ROS-RNS balance in pro-inflammatory macrophage environment. **2023**, 23, 261-273 0
- 9 Magnesium and barium in two substructures: BaTMg₂ (T=Fe, Pd, Ag, Pt, Au) and the isotypic cadmium compound BaAuCd₂ with MgCuAl₂ type structure. **2022**, 1
- 8 Investigations into Mechanical and Corrosion Properties of Mg-Based Biomaterial Sintered Using a Customized Die Setup Coupled with a Tube Furnace. 0

- 7 Stabilizing A Vascularized Autologous Matrix with Flexible Magnesium Scaffolds to Reconstruct Dysfunctional Left Ventricular Myocardium in a Large-Animal Feasibility Study. **2023**, 14, 73 ○
- 6 The Biocompatibility and Antibacterial Properties of the CNTs-Doped Magnesium Based Composite Implants in a Long-Term Biodegradation Process. **2023**, 2023, 1-17 ○
- 5 Metals and Alloys Choice for Implants. **2023**, 23-48 ○
- 4 Sustained release of magnesium and zinc ions synergistically accelerates wound healing. **2023**, 26, 88-101 ○
- 3 Attaining High Functional Performance in Biodegradable Mg-Alloys: An Overview of Challenges and Prospects for the Mg-Zn-Ca System. **2023**, 16, 1324 ○
- 2 Recent research advances on corrosion mechanism and protection, and novel coating materials of magnesium alloys: a review. **2023**, 13, 8427-8463 ○
- 1 Production of WE43 magnesium alloy by powder metallurgy and the effect of glucose on wear resistance in biocorrosive wear. **2023**, 18, 021002 ○