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List of Publications by Year
in descending order

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Version: 2024-02-01

265 papers	11,635 citations	30047 54 h-index	36008 97 g-index
271 all docs	271 docs citations	271 times ranked	8503 citing authors

#	Article	IF	Citations
1	Effects of proteins on magnesium degradation - static vs. dynamic conditions. Journal of Magnesium and Alloys, 2023, 11, 1332-1342.	5.5	7
2	High-resolution ex vivo analysis of the degradation and osseointegration of Mg-xGd implant screws in 3D. Bioactive Materials, 2022, 13, 37-52.	8.6	18
3	Evaluating metallic artefact of biodegradable magnesium-based implants in magnetic resonance imaging. Bioactive Materials, 2022, 15, 382-391.	8.6	5
4	Revisiting the tolerance limit of Fe impurity in biodegradable magnesium. Scripta Materialia, 2022, 212, 114509.	2.6	3
5	Dynamic in vivo monitoring of fracture healing process in response to magnesium implant with multimodal imaging: pilot longitudinal study in a rat external fixation model. Biomaterials Science, 2022, 10, 1532-1543.	2.6	14
6	Impact of degradable magnesium implants on osteocytes in single and triple cultures. Materials Science and Engineering C, 2022, 134, 112692.	3.8	7
7	In Situ X-ray Synchrotron Radiation Analysis, Tensile- and Biodegradation Testing of Redox-Alloyed and Sintered MgCa-Alloy Parts Produced by Metal Injection Moulding. Metals, 2022, 12, 353.	1.0	2
8	Characterization of the deformation state of magnesium by electrical resistance. Scripta Materialia, 2022, 215, 114712.	2.6	3
9	Slow degrading Mg-based materials induce tumor cell dormancy on an osteosarcoma-fibroblast coculture model. Bioactive Materials, 2022, 16, 320-333.	8.6	9
10	Computational modelling of magnesium degradation in simulated body fluid under physiological conditions. Journal of Magnesium and Alloys, 2022, 10, 965-978.	5.5	6
11	Influence of defects on damage tolerance of Metal-Injection-Molded Î² titanium alloys under static and dynamic loading. Powder Metallurgy, 2022, 65, 354-364.	0.9	1
12	Implant degradation of low-alloyed Mgâ€“Znâ€“Ca in osteoporotic, old and juvenile rats. Acta Biomaterialia, 2022, 147, 427-438.	4.1	16
13	Macrophage-derived oncostatin M/bone morphogenetic protein 6 in response to Mg-based materials influences pro-osteogenic activity of human umbilical cord perivascular cells. Acta Biomaterialia, 2021, 133, 268-279.	4.1	16
14	Pore characterization of PM Mgâ€“0.6Ca alloy and its degradation behavior under physiological conditions. Journal of Magnesium and Alloys, 2021, 9, 686-703.	5.5	12
15	Influence of the amount of intermetallics on the degradation of Mg-Nd alloys under physiological conditions. Acta Biomaterialia, 2021, 121, 695-712.	4.1	39
16	Preclinical in vivo research of magnesium-based implants for fracture treatment: A systematic review of animal model selection and study design. Journal of Magnesium and Alloys, 2021, 9, 351-361.	5.5	31
17	Alloying effect of silver in magnesium on the development of microstructure and mechanical properties by indirect extrusion. Journal of Magnesium and Alloys, 2021, 9, 112-122.	5.5	21
18	Magnesium ions regulate mesenchymal stem cells population and osteogenic differentiation: A fuzzy agent-based modeling approach. Computational and Structural Biotechnology Journal, 2021, 19, 4110-4122.	1.9	12

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19	Tissue responses after implantation of biodegradable Mg alloys evaluated by multimodality 3D microâ€bioimaging in vivo. Journal of Biomedical Materials Research - Part A, 2021, 109, 1521-1529.	2.1	10
20	Mesenchymal Stem Cell and Oxygen Modulate the Cocultured Endothelial Cells in the Presence of Magnesium Degradation Products. ACS Applied Bio Materials, 2021, 4, 2398-2407.	2.3	2
21	Degradation of Titanium Sintered with Magnesium: Effect of Hydrogen Uptake. Metals, 2021, 11, 527.	1.0	2
22	Exploring key ionic interactions for magnesium degradation in simulated body fluid â€“ A data-driven approach. Corrosion Science, 2021, 182, 109272.	3.0	22
23	Mg Biodegradation Mechanism Deduced from the Local Surface Environment under Simulated Physiological Conditions. Advanced Healthcare Materials, 2021, 10, e2100053.	3.9	17
24	Utilizing Synchrotron Radiation for the Characterization of Biodegradable Magnesium Alloysâ€”From Alloy Development to the Application as Implant Material. Advanced Engineering Materials, 2021, 23, 2100197.	1.6	19
25	Capturing shrinkage and neck growth with phase field simulations of the solid state sintering. Modelling and Simulation in Materials Science and Engineering, 2021, 29, 075008.	0.8	12
26	Anti-tumour activity of Mg-6%Ag and Mg-10%Gd alloys in mice with inoculated melanoma. Materials Science and Engineering C, 2021, 130, 112464.	3.8	8
27	In Vitro Investigation on Degradable Mg-Based Biomaterial under the Impact of the Serum Glycoprotein Fetuin. Materials, 2021, 14, 5005.	1.3	3
28	Degradation Analysis of Thin Mg-xAg Wires Using X-ray Near-Field Holotomography. Metals, 2021, 11, 1422.	1.0	10
29	Multimodal ex vivo methods reveal that Gd-rich corrosion byproducts remain at the implant site of biodegradable Mg-Gd screws. Acta Biomaterialia, 2021, 136, 582-591.	4.1	8
30	X-ray diffraction tomography as a tool to study the influence of biodegradable metal implant on the bone in 3D. , 2021, , .		1
31	Assessing the microstructure and in vitro degradation behavior of Mg-xGd screw implants using ÂµCT. Journal of Magnesium and Alloys, 2021, 9, 2207-2222.	5.5	20
32	Superior fatigue endurance exempt from high processing cleanliness of Metal-Injection-Molded Î² Ti-Nb-Zr for bio-tolerant applications. Materials and Design, 2021, 211, 110141.	3.3	10
33	Deteriorated corrosion performance of micro-alloyed Mg-Zn alloy after heat treatment and mechanical processing. Journal of Materials Science and Technology, 2021, 92, 214-224.	5.6	11
34	Evaluating the morphology of the degradation layer of pure magnesium via 3D imaging at resolutions below 40Ânm. Bioactive Materials, 2021, 6, 4368-4376.	8.6	11
35	Scaling the U-net: segmentation of biodegradable bone implants in high-resolution synchrotron radiation microtomograms. Scientific Reports, 2021, 11, 24237.	1.6	9
36	Cytotoxicity of biodegradable magnesium alloy WE43 to tumor cells in vitro: Bioresorbable implants with antitumor activity?. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2020, 108, 167-173.	1.6	24

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37	Hypoxia influences the effects of magnesium degradation products on the interactions between endothelial and mesenchymal stem cells. Acta Biomaterialia, 2020, 101, 624-636.	4.1	12
38	Analysis of the bone ultrastructure around biodegradable Mgâ€“xGd implants using small angle X-ray scattering and X-ray diffraction. Acta Biomaterialia, 2020, 101, 637-645.	4.1	29
39	The impact of brain cell metabolism and extracellular matrix on magnesium degradation. Acta Biomaterialia, 2020, 116, 426-437.	4.1	9
40	Fibrinogen and magnesium combination biomaterials modulate macrophage phenotype, NF-kB signaling and crosstalk with mesenchymal stem/stromal cells. Acta Biomaterialia, 2020, 114, 471-484.	4.1	42
41	Microstructure-corrosion behaviour relationship of micro-alloyed Mg-0.5Zn alloy with the addition of Ca, Sr, Ag, In and Cu. Materials and Design, 2020, 195, 108980.	3.3	34
42	Optimizing an Osteosarcoma-Fibroblast Coculture Model to Study Antitumoral Activity of Magnesium-Based Biomaterials. International Journal of Molecular Sciences, 2020, 21, 5099.	1.8	10
43	Effects of Intermetallic Microstructure on Degradation of Mg-5Nd Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 5498-5515.	1.1	10
44	Nanotomographic evaluation of precipitate structure evolution in a Mgâ€“Znâ€“Zr alloy during plastic deformation. Scientific Reports, 2020, 10, 16101.	1.6	4
45	Influence of the Molecular Weight and the Presence of Calcium Ions on the Molecular Interaction of Hyaluronan and DPPC. Molecules, 2020, 25, 3907.	1.7	6
46	Effects of degradable magnesium on paracrine signaling between human umbilical cord perivascular cells and peripheral blood mononuclear cells. Biomaterials Science, 2020, 8, 5969-5983.	2.6	8
47	Surface Functionalization of Biomedical Ti-6Al-7Nb Alloy by Liquid Metal Dealloying. Nanomaterials, 2020, 10, 1479.	1.9	19
48	Lipid-Iron Nanoparticle with a Cell Stress Release Mechanism Combined with a Local Alternating Magnetic Field Enables Site-Activated Drug Release. Cancers, 2020, 12, 3767.	1.7	11
49	The Effect of Equal-Channel Angular Pressing on Microstructure, Mechanical Properties, and Biodegradation Behavior of Magnesium Alloyed with Silver and Gadolinium. Crystals, 2020, 10, 918.	1.0	10
50	Tensile toughening of powder-injection-molded Î² Ti-Nb-Zr biomaterials by adjusting TiC particle distribution from aligned to dispersed pattern. Applied Materials Today, 2020, 19, 100630.	2.3	8
51	Proteins and medium-flow conditions: how they influence the degradation of magnesium. Surface Innovations, 2020, 8, 224-233.	1.4	8
52	Alloying and Processing Effects on the Microstructure, Mechanical Properties, and Degradation Behavior of Extruded Magnesium Alloys Containing Calcium, Cerium, or Silver. Materials, 2020, 13, 391.	1.3	14
53	Time-sequential corrosion behaviour observation of micro-alloyed Mg-0.5Zn-0.2Ca alloy via a quasi-in situ approach. Corrosion Science, 2019, 158, 108096.	3.0	38
54	In vitro evaluation of the ZX11 magnesium alloy as potential bone plate: Degradability and mechanical integrity. Acta Biomaterialia, 2019, 97, 608-622.	4.1	86

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55	Wide Range Mechanical Customization of Mg-Gd Alloys With Low Degradation Rates by Extrusion. Frontiers in Materials, 2019, 6, .	1.2	19
56	Influence of high hydrostatic pressure on solid supported DPPC bilayers with hyaluronan in the presence of Ca2+ ions. Soft Matter, 2019, 15, 7295-7304.	1.2	4
57	Loading Psoralen into liposomes to enhance its stimulatory effect on the proliferation and differentiation of mouse calvarias osteoblasts. Journal of Dispersion Science and Technology, 2019, 40, 1531-1538.	1.3	2
58	Acetic Acid Etching of Mg-xGd Alloys. Metals, 2019, 9, 117.	1.0	9
59	Elemental mapping of biodegradable magnesium-based implants in bone and soft tissue by means of Î¼ X-ray fluorescence analysis. Journal of Analytical Atomic Spectrometry, 2019, 34, 356-365.	1.6	7
60	Systematically Designed Periodic Electrophoretic Deposition for Decorating 3D Carbon-Based Scaffolds with Bioactive Nanoparticles. ACS Biomaterials Science and Engineering, 2019, 5, 4393-4404.	2.6	10
61	Magnetron sputtered freestanding MgAg films with ultra-low corrosion rate. Acta Biomaterialia, 2019, 98, 81-87.	4.1	9
62	Mechanical properties and degradation behavior of binary magnesium-silver alloy sheets. Journal of Physics and Chemistry of Solids, 2019, 133, 142-150.	1.9	12
63	Simulation of neck growth and shrinkage for realistic temperature profiles â€“ Determination of diffusion coefficients in a practical oriented procedure. Scripta Materialia, 2019, 168, 108-113.	2.6	5
64	Proteome analysis of human mesenchymal stem cells undergoing chondrogenesis when exposed to the products of various magnesium-based materials degradation. Bioactive Materials, 2019, 4, 168-188.	8.6	10
65	The Interface Between Degradable Mg and Tissue. Jom, 2019, 71, 1447-1455.	0.9	30
66	Effect of magnesium-degradation products and hypoxia on the angiogenesis of human umbilical vein endothelial cells. Acta Biomaterialia, 2019, 98, 269-283.	4.1	45
67	Different effects of single protein vs. protein mixtures on magnesium degradation under cell culture conditions. Acta Biomaterialia, 2019, 98, 256-268.	4.1	51
68	The Effect of Equal-Channel Angular Pressing on the Microstructure, the Mechanical and Corrosion Properties and the Anti-Tumor Activity of Magnesium Alloyed with Silver. Materials, 2019, 12, 3832.	1.3	20
69	The role of individual components of simulated body fluid on the corrosion behavior of commercially pure Mg. Corrosion Science, 2019, 147, 81-93.	3.0	97
70	Powder metal injection moulding and heat treatment of AZ81 Mg alloy. Journal of Materials Processing Technology, 2019, 267, 241-246.	3.1	16
71	Degradation behaviour of Mg-4Ag and Mg-5Gd alloys under in-vitro conditions and different time-frames. Journal of Alloys and Compounds, 2019, 774, 980-987.	2.8	11
72	A load frame for in situ tomography at PETRA III. , 2019, , .		6

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73	Quantitative characterization of degradation processes in situ by means of a bioreactor coupled flow chamber under physiological conditions using timeâ€lapse SRÂµCT. Materials and Corrosion - Werkstoffe Und Korrosion, 2018, 69, 298-306.	0.8	28
74	Magnesium degradation under physiological conditions â€“ Best practice. Bioactive Materials, 2018, 3, 174-185.	8.6	177
75	Visualization of Implant Failure by Synchrotron Tomography. Minerals, Metals and Materials Series, 2018, , 275-284.	0.3	5
76	Microstructure and Mechanical Properties of Mg-Gd Alloys as Biodegradable Implant Materials. Minerals, Metals and Materials Series, 2018, , 253-262.	0.3	3
77	Exploring the effects of organic molecules on the degradation of magnesium under cell culture conditions. Corrosion Science, 2018, 132, 35-45.	3.0	42
78	InÂvitro biodegradation testing of Mg-alloy EZK400 and manufacturing of implant prototypes using PM (powder metallurgy) methods. Bioactive Materials, 2018, 3, 213-217.	8.6	12
79	Open porous dealloying-based biomaterials as a novel biomaterial platform. Materials Science and Engineering C, 2018, 88, 95-103.	3.8	60
80	A simple model for longâ€time degradation of magnesium under physiological conditions. Materials and Corrosion - Werkstoffe Und Korrosion, 2018, 69, 191-196.	0.8	12
81	Surface topography and cytocompatibility of metal injection molded Tiâ€“22Nb alloy as biomaterial. Transactions of Nonferrous Metals Society of China, 2018, 28, 1342-1350.	1.7	8
82	Adsorption of Proteins on Degradable Magnesiumâ€”Which Factors are Relevant?. ACS Applied Materials & Interfaces, 2018, 10, 42175-42185.	4.0	33
83	The Effect of Surface Treatments on the Degradation of Biomedical Mg Alloysâ€”A Review Paper. Materials, 2018, 11, 2561.	1.3	38
84	Understanding Protein Networks using Vesterâ€™s Sensitivity Model. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2018, 17, 1-1.	1.9	1
85	In vitro degradation behavior of Mg scaffolds with three-dimensional interconnected porous structures for bone tissue engineering. Corrosion Science, 2018, 144, 301-312.	3.0	36
86	An elementary simulation model for neck growth and shrinkage during solid phase sintering. Materialia, 2018, 3, 338-346.	1.3	6
87	Local pH and Its Evolution Near Mg Alloy Surfaces Exposed to Simulated Body Fluids. Advanced Materials Interfaces, 2018, 5, 1800169.	1.9	63
88	Polyolefinâ€Magnesium Interactions Performing Powder Injection Molding Process. Advanced Engineering Materials, 2018, 20, 1800530.	1.6	2
89	The effect of osteoblasts on the surface oxidation processes of biodegradable Mg and Mg-Ag alloys studied by synchrotron IR microspectroscopy. Materials Science and Engineering C, 2018, 91, 659-668.	3.8	19
90	Behavior of bone cells in contact with magnesium implant material. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2017, 105, 165-179.	1.6	33

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91	Lubrication synergy: Mixture of hyaluronan and dipalmitoylphosphatidylcholine (DPPC) vesicles. Journal of Colloid and Interface Science, 2017, 488, 225-233.	5.0	42
92	Bioactive plasma electrolytic oxidation coatings on Mg-Ca alloy to control degradation behaviour. Surface and Coatings Technology, 2017, 315, 454-467.	2.2	87
93	Influence of Dy in solid solution on the degradation behavior of binary Mg-Dy alloys in cell culture medium. Materials Science and Engineering C, 2017, 75, 1351-1358.	3.8	28
94	Fast corroding, thin magnesium coating displays antibacterial effects and low cytotoxicity. Biofouling, 2017, 33, 294-305.	0.8	18
95	Complex solutions under shear and pressure: a rheometer setup for X-ray scattering experiments. Journal of Synchrotron Radiation, 2017, 24, 646-652.	1.0	3
96	Chondrogenic differentiation of ATDC5-cells under the influence of Mg and Mg alloy degradation. Materials Science and Engineering C, 2017, 72, 378-388.	3.8	14
97	Increased levels of sodium chloride directly increase osteoclastic differentiation and resorption in mice and men. Osteoporosis International, 2017, 28, 3215-3228.	1.3	18
98	Differential apoptotic response of MC3T3-E1 pre-osteoblasts to biodegradable magnesium alloys in an in vitro direct culture model. Journal of Materials Science: Materials in Medicine, 2017, 28, 155.	1.7	5
99	Folate receptor targeted bufalin/Î²-cyclodextrin supramolecular inclusion complex for enhanced solubility and anti-tumor efficiency of bufalin. Materials Science and Engineering C, 2017, 78, 609-618.	3.8	22
100	Gadolinium accumulation in organs of Sprague–DawleyÂ® rats after implantation of a biodegradable magnesium-gadolinium alloy. Acta Biomaterialia, 2017, 48, 521-529.	4.1	68
101	Microhardness and In Vitro Corrosion of Heat-Treated Mg–Y–Ag Biodegradable Alloy. Materials, 2017, 10, 55.	1.3	23
102	Influence of the Microstructure and Silver Content on Degradation, Cytocompatibility, and Antibacterial Properties of Magnesium-Silver Alloys In Vitro. Oxidative Medicine and Cellular Longevity, 2017, 2017, 1-14.	1.9	42
103	In vivo and in vitro degradation comparison of pure Mg, Mg-10Gd and Mg-2Ag: a short term study. , 2017, 33, 90-104.		56
104	Biodegradable magnesium-based implants in bone studied by synchrotron radiation microtomography. , 2017, , .		3
105	On the Determination of Magnesium Degradation Rates under Physiological Conditions. Materials, 2016, 9, 627.	1.3	44
106	Comparison of the Influence of Phospholipid-Coated Porous Ti-6Al-4V Material on the Osteosarcoma Cell Line Saos-2 and Primary Human Bone Derived Cells. Metals, 2016, 6, 66.	1.0	2
107	Metal Injection Molding (MIM) of Magnesium and Its Alloys. Metals, 2016, 6, 118.	1.0	29
108	Studying solutions at high shear rates: a dedicated microfluidics setup. Journal of Synchrotron Radiation, 2016, 23, 480-486.	1.0	12

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109	Proteomic profile of mouse fibroblasts exposed to pure magnesium extract. Materials Science and Engineering C, 2016, 69, 522-531.	3.8	9
110	In Vitro Corrosion and Cytocompatibility Properties of Mg-2Gd-X(Ag, Ca) Alloys. , 2016, , 347-351.		1
111	Neutron study of phospholipids 1-palmitoyl-2-oleoyl-sn-glycero-3-phospho-ethanolamine spray coating on titanium implants. Biointerphases, 2016, 11, 011002.	0.6	2
112	Intramedullary Mg2Ag nails augment callus formation during fracture healing in mice. Acta Biomaterialia, 2016, 36, 350-360.	4.1	75
113	Doxorubicin hydrochloride-oleic acid conjugate loaded nanostructured lipid carriers for tumor specific drug release. Colloids and Surfaces B: Biointerfaces, 2016, 145, 95-103.	2.5	38
114	Degradation rates and products of pure magnesium exposed to different aqueous media under physiological conditions. BioNanoMaterials, 2016, 17, .	1.4	26
115	Interaction of a biosurfactant, Surfactin with a cationic Gemini surfactant in aqueous solution. Journal of Colloid and Interface Science, 2016, 481, 201-209.	5.0	29
116	Glioblastoma Cell Type-Specific Loading with Iron Oxide Magnetic Nanoparticles. BioNanoScience, 2016, 6, 297-307.	1.5	1
117	Magnesium degradation observed in situ under flow by synchrotron radiation based microtomography. , 2016, , .		2
118	The influence of hyaluronan on the structure of a DPPCâ€"bilayer under high pressures. Colloids and Surfaces B: Biointerfaces, 2016, 142, 230-238.	2.5	21
119	Degradation testing of Mg alloys in Dulbecco's modified eagle medium: Influence of medium sterilization. Materials Science and Engineering C, 2016, 62, 68-78.	3.8	57
120	Magnesium Powder Injection Molding (MIM) of Orthopedic Implants for Biomedical Applications. Jom, 2016, 68, 1191-1197.	0.9	24
121	Structure of DPPCâ€“hyaluronan interfacial layers â€“ effects of molecular weight and ion composition. Soft Matter, 2016, 12, 729-740.	1.2	36
122	In vitro and in vivo comparison of binary Mg alloys and pure Mg. Materials Science and Engineering C, 2016, 61, 865-874.	3.8	122
123	Baicalin loaded in folate-PEG modified liposomes for enhanced stability and tumor targeting. Colloids and Surfaces B: Biointerfaces, 2016, 140, 74-82.	2.5	73
124	Magnesium degradation influenced by buffering salts in concentrations typical of in vitro and in vivo models. Materials Science and Engineering C, 2016, 58, 817-825.	3.8	61
125	Effects of magnesium degradation products on mesenchymal stem cell fate and osteoblastogenesis. Gene, 2016, 575, 9-20.	1.0	66
126	Evaluation of the degradation behavior of resorbable metal implants for in vivo osteosynthesis by synchrotron radiation based x-ray tomography and histology. Proceedings of SPIE, 2016, , .	0.8	3

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127	The Degradation Interface of Magnesium Based Alloys in Direct Contact with Human Primary Osteoblast Cells. PLoS ONE, 2016, 11, e0157874.	1.1	41
128	Effects of Corroded and Non-Corroded Biodegradable Mg and Mg Alloys on Viability, Morphology and Differentiation of MC3T3-E1 Cells Elicited by Direct Cell/Material Interaction. PLoS ONE, 2016, 11, e0159879.	1.1	14
129	NKCS, a Mutant of the NK-2 Peptide, Causes Severe Distortions and Perforations in Bacterial, But Not Human Model Lipid Membranes. Molecules, 2015, 20, 6941-6958.	1.7	13
130	Influence of Magnesium Alloy Degradation on Undifferentiated Human Cells. PLoS ONE, 2015, 10, e0142117.	1.1	31
131	Influence of various sterilization methods on hardness, grain size and corrosion rate of a Mg6Ag-alloy. BioNanoMaterials, 2015, 16, .	1.4	6
132	The effect of temperature on supported dipalmitoylphosphatidylcholine (DPPC) bilayers: Structure and lubrication performance. Journal of Colloid and Interface Science, 2015, 445, 84-92.	5.0	34
133	Sintering behavior and mechanical properties of a metal injection molded Tiâ€“Nb binary alloy as biomaterial. Journal of Alloys and Compounds, 2015, 640, 393-400.	2.8	59
134	Mechanical properties and corrosion behavior of Mgâ€“Gdâ€“Caâ€“Zr alloys for medical applications. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 47, 38-48.	1.5	46
135	Blood compatibility of magnesium and its alloys. Acta Biomaterialia, 2015, 25, 384-394.	4.1	38
136	Sterically stabilized spongosomes for multidrug delivery of anticancer nanomedicines. Journal of Materials Chemistry B, 2015, 3, 7734-7744.	2.9	68
137	Effects of extracellular magnesium extract on the proliferation and differentiation of human osteoblasts and osteoclasts in coculture. Acta Biomaterialia, 2015, 27, 294-304.	4.1	158
138	Investigation of the inverse piezoelectric effect of trabecular bone on a micrometer length scale using synchrotron radiation. Acta Biomaterialia, 2015, 25, 339-346.	4.1	21
139	Special issue â€œBiodegradable magnesium as implant materialâ€• BioNanoMaterials, 2015, 16, 1-2.	1.4	1
140	Mg and Mg alloys: How comparable are in vitro and in vivo corrosion rates? A review. Acta Biomaterialia, 2015, 13, 16-31.	4.1	378
141	Influence of Testing Environment on the Degradation Behavior of Magnesium Alloys for Bioabsorbable Implants. , 2015, , 499-506.		1
142	Optimization of Cell Adhesion on Mg Based Implant Materials by Pre-Incubation under Cell Culture Conditions. International Journal of Molecular Sciences, 2014, 15, 7639-7650.	1.8	36
143	Comparison of the reaction of bone-derived cells to enhanced MgCl₂-salt concentrations. Biomatter, 2014, 4, e967616.	2.6	38
144	Phosphatidylethanolamine biomimetic coating increases mesenchymal stem cell osteoblastogenesis. Journal of Materials Science: Materials in Medicine, 2014, 25, 2561-2571.	1.7	11

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145	A Porous TiAl6V4 Implant Material for Medical Application. International Journal of Biomaterials, 2014, 2014, 1-8.	1.1	20
146	Effects of extracellular magnesium on the differentiation and function of human osteoclasts. Acta Biomaterialia, 2014, 10, 2843-2854.	4.1	96
147	In vitro mechanical and corrosion properties of biodegradable Mg-Ag alloys. Materials and Corrosion - Werkstoffe Und Korrosion, 2014, 65, 569-576.	0.8	72
148	Preparation and characterization of a nanostructured lipid carrier for a poorly soluble drug. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 455, 36-43.	2.3	36
149	Titanium carbide precipitation in Tiâ€“22Nb alloy fabricated by metal injection moulding. Powder Metallurgy, 2014, 57, 2-4.	0.9	23
150	Insights into the Interactions among Surfactin, Betaines, and PAM: Surface Tension, Small-Angle Neutron Scattering, and Small-Angle X-ray Scattering Study. Langmuir, 2014, 30, 3363-3372.	1.6	19
151	Mixture of Nonionic/Ionic Surfactants for the Formulation of Nanostructured Lipid Carriers: Effects on Physical Properties. Langmuir, 2014, 30, 6920-6928.	1.6	40
152	Magnesium-based implants: a mini-review. Magnesium Research, 2014, 27, 142-154.	0.4	96
153	Production, characterisation, and cytocompatibility of porous titanium-based particulate scaffolds. Journal of Materials Science: Materials in Medicine, 2013, 24, 2337-2358.	1.7	25
154	Microstructure and mechanical behavior of metal injection molded Tiâ€“Nb binary alloys as biomedical material. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 28, 171-182.	1.5	118
155	Dielectric barrier formation and tunneling magnetoresistance effect in strontium iron molybdate. Technical Physics Letters, 2013, 39, 552-555.	0.2	4
156	Interaction of the Biosurfactant, Surfactin with Betaines in Aqueous Solution. Langmuir, 2013, 29, 10648-10657.	1.6	21
157	X-ray and neutron investigation of self-assembled lipid layers on a titanium surface. Biointerphases, 2013, 8, 21.	0.6	17
158	Microstructure, mechanical and corrosion properties of Mgâ€“Dyâ€“Gdâ€“Zr alloys for medical applications. Acta Biomaterialia, 2013, 9, 8499-8508.	4.1	92
159	Element distribution in the corrosion layer and cytotoxicity of alloy Mgâ€“10Dy during in vitro biodegradation. Acta Biomaterialia, 2013, 9, 8475-8487.	4.1	87
160	Magnesium degradation as determined by artificial neural networks. Acta Biomaterialia, 2013, 9, 8722-8729.	4.1	57
161	Preparation and characterization of 4-dedimethylamino sancycline (CMT-3) loaded nanostructured lipid carrier (CMT-3/NLC) formulations. International Journal of Pharmaceutics, 2013, 450, 225-234.	2.6	31
162	Charge transfer processes and magnetoresistance in strontium ferromolybdate with dielectric barriers. Physica Status Solidi (B): Basic Research, 2013, 250, 825-830.	0.7	2

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163	Effects of corrosion environment and proteins on magnesium corrosion. Corrosion Engineering Science and Technology, 2012, 47, 335-339.	0.7	63
164	Influence of ageing treatment on microstructure, mechanical and bio-corrosion properties of Mgâ€“Dy alloys. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 13, 36-44.	1.5	59
165	Earliest Stage of the Tetrahedral Nanochannel Formation in Cubosome Particles from Unilamellar Nanovesicles. Langmuir, 2012, 28, 16647-16655.	1.6	68
166	Diagnostic and analysis of aggregation stability of magnetic fluids for biomedical applications by small-angle neutron scattering. Journal of Physics: Conference Series, 2012, 345, 012028.	0.3	2
167	Ion release from magnesium materials in physiological solutions under different oxygen tensions. Journal of Materials Science: Materials in Medicine, 2012, 23, 9-24.	1.7	44
168	Mechanical and corrosion properties of binary Mgâ€“Dy alloys for medical applications. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2011, 176, 1827-1834.	1.7	86
169	Reprint of: Improved cytotoxicity testing of magnesium materials. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2011, 176, 1773-1777.	1.7	67
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