Kun Yu

List of Publications by Year
in descending order

55 papers	1,251 citations	361045 20 h-index	377514 34 g-index
55 all docs	55 docs citations	55 times ranked	1158 citing authors

#	Article	IF	Citations
1	Effects of microstructure on the electrochemical discharge behavior of Mg-6wt%Al-1wt%Sn alloy as anode for Mg-air primary battery. Journal of Alloys and Compounds, 2017, 708, 652-661.	2.8	115
2	Investigation on the microstructure, mechanical properties, in vitro degradation behavior and biocompatibility of newly developed Zn-0.8%Li-(Mg, Ag) alloys for guided bone regeneration. Materials Science and Engineering C, 2019, 99, 1021-1034.	3.8	87
3	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. Journal of Alloys and Compounds, 2017, 693, 1277-1289.	2.8	82
4	In vitro corrosion behavior and in vivo biodegradation of biomedical Î²-Ca3(PO4)2/Mgâ€“Zn composites. Acta Biomaterialia, 2012, 8, 2845-2855.	4.1	71
5	Effects of Heat Treatment on the Discharge Behavior of Mg-6wt.%Al-1wt.%Sn Alloy as Anode For Magnesium-Air Batteries. Journal of Materials Engineering and Performance, 2017, 26, 2901-2911.	1.2	61
6	Composition optimization and electrochemical properties of Mg-Al-Pb-(Zn) alloys as anodes for seawater activated battery. Electrochimica Acta, 2016, 194, 40-51.	2.6	57
7	In vitro and in vivo assessment of the effect of biodegradable magnesium alloys on osteogenesis. Acta Biomaterialia, 2022, 141, 454-465.	4.1	47
8	Improvement of the mechanical properties and corrosion resistance of biodegradable Î²-Ca 3 (PO 4) 2 /Mg-Zn composites prepared by powder metallurgy: the adding Î²-Ca 3 (PO 4) 2, hot extrusion and aging treatment. Materials Science and Engineering C, 2017, 74, 582-596.	3.8	46
9	Effects of alloying elements on the electrochemical behaviors of Al-Mg-Ga-In based anode alloys. International Journal of Hydrogen Energy, 2019, 44, 12073-12084.	3.8	46
10	Microstructures and properties of Alâ€“50%SiC composites for electronic packaging applications. Transactions of Nonferrous Metals Society of China, 2016, 26, 2647-2652.	1.7	45
11	Mechanical strengthening mechanism of Zn-Li alloy and its mini tube as potential absorbable stent material. Materials Letters, 2019, 235, 220-223.	1.3	43
12	Effect of T5 and T6 Tempers on a Hot-Rolled WE43 Magnesium Alloy. Materials Transactions, 2008, 49, 1818-1821.	0.4	38
13	Discharge behavior and electrochemical properties of Mgâ€“Alâ€“Sn alloy anode for seawater activated battery. Transactions of Nonferrous Metals Society of China, 2015, 25, 1234-1240.	1.7	37
14	LOC103691336/miRâ€138â€5p/BMPR2 axis modulates Mgâ€mediated osteogenic differentiation in rat femoral fracture model and rat primary bone marrow stromal cells. Journal of Cellular Physiology, 2019, 234, 21316-21330.	2.0	36
15	Selective Laser Melting and Remelting of Pure Tungsten. Advanced Engineering Materials, 2020, 22, 1901352.	1.6	35
16	Effects of Al and Sn on microstructure, corrosion behavior and electrochemical performance of Mgâ€“Al-based anodes for magnesium-air batteries. Journal of Alloys and Compounds, 2021, 859, 157755.	2.8	26
17	Mechanical and structural characterization of diopside scaffolds reinforced with graphene. Journal of Alloys and Compounds, 2016, 655, 86-92.	2.8	25
18	Microstructure, Mechanical Properties and Corrosion Behavior of Porous Mg-6Âwt.% Zn Scaffolds for Bone Tissue Engineering. Journal of Materials Engineering and Performance, 2018, 27, 970-984.	1.2	25

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19	A homogenous microstructural Mg-based matrix model for orthopedic application with generating uniform and smooth corrosion product layer in Ringer's solution: Study on biodegradable behavior of Mg-Zn alloys prepared by powder metallurgy as a case. Journal of Magnesium and Alloys, 2021, 9, 225-240.	5.5	23
20	Microstructure Evolution and Mechanical Properties Improvement in Liquid-Phase-Sintered Hydroxyapatite by Laser Sintering. Materials, 2015, 8, 1162-1175.	1.3	21
21	Effects of chitosan coating on biocompatibility of Mgâ€“6%Znâ€“10%Ca3(PO4)2 implant. Transactions of Nonferrous Metals Society of China, 2015, 25, 824-831.	1.7	20
22	Mgâ€“Znâ€“Mn alloy extract induces the angiogenesis of human umbilical vein endothelial cells via FGF/FGFR signaling pathway. Biochemical and Biophysical Research Communications, 2019, 514, 618-624.	1.0	20
23	Corrosion and Discharge Behaviors of Al-Mg-Sn-Ga-In in Different Solutions. Journal of Materials Engineering and Performance, 2016, 25, 3456-3464.	1.2	19
24	In vivo biocompatibility and biodegradation of a Mg-15%Ca3(PO4)2 composite as an implant material. Materials Letters, 2013, 98, 22-25.	1.3	17
25	In vitro and in vivo evaluation of novel biodegradable Mgâ€Agâ€Y alloys for use as resorbable bone fixation implant. Journal of Biomedical Materials Research - Part A, 2018, 106, 2059-2069.	2.1	15
26	Mechanical properties and microstructure of as-cast and extruded Mg-(Ce, Nd)-Zn-Zr alloys. Central South University, 2005, 12, 499-502.	0.5	14
27	Production and Properties of a Spray Formed 70%Si-Al Alloy for Electronic Packaging Applications. Materials Transactions, 2008, 49, 685-687.	0.4	14
28	A Potential Biodegradable Mg-Y-Ag Implant with Strengthened Antimicrobial Properties in Orthopedic Applications. Metals, 2018, 8, 948.	1.0	14
29	Effects of Heat Treatment on Microstructure, Mechanical Properties, Corrosion Resistance and Cytotoxicity of ZM21 Magnesium Alloy as Biomaterials. Journal of Materials Engineering and Performance, 2019, 28, 33-43.	1.2	13
30	Enhanced osteoinductivity and corrosion resistance of dopamine/gelatin/rhBMP-2â€coated Î²-TCP/Mg-Zn orthopedic implants: An in vitro and in vivo study. PLoS ONE, 2020, 15, e0228247.	1.1	13
31	Biodegradation performance of a chitosan coated magnesium-zinc-tricalcium phosphate composite as an implant. Biointerphases, 2014, 9, 031004.	0.6	12
32	Effect of Sc and Zr on Al₆(Mn,Fe) Phase in Alâ€“Mgâ€“Mn Alloys. Materials Transactions, 2019, 60, 737-742.	0.4	12
33	Influence of Ga Content on Electrochemical Behavior of Mg-5 at%Hg Anode Materials. Materials Transactions, 2008, 49, 1077-1080.	0.4	11
34	Evaluation of the mechanisms and effects of Mgâ€“Agâ€“Y alloy on the tumor growth and metastasis of the MG63 osteosarcoma cell line. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2019, 107, 2537-2548.	1.6	11
35	Effects of polycaprolactone coating on the biodegradable behavior and cytotoxicity of Mg-6%Zn-10%Ca 3 (PO 4) 2 composite in simulated body fluid. Materials Letters, 2017, 198, 118-120.	1.3	10
36	Constitutive analysis of AZ31 magnesium alloy plate. Central South University, 2010, 17, 7-12.	0.5	9

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37	Effects of the Intermetallic Phases on Microstructure and Properties of Biodegradable Magnesium Matrix and Zinc Matrix Prepared by Powder Metallurgy. Materials Transactions, 2018, 59, 1837-1844.	0.4	8
38	Effects of Interface Structures on the Application Properties of Ni/Al Clad Composite. Composite Interfaces, 2011, 18, 399-406.	1.3	7
39	In vitro corrosion behavior and cytotoxicity property of magnesium matrix composite with chitosan coating. Journal of Central South University, 2015, 22, 829-834.	1.2	7
40	Recrystallization Behavior in an Al–Cu–Mg–Fe–Ni Alloy with Trace Scandium and Zirconium. Materials Transactions, JIM, 2000, 41, 358-361.	0.9	5
41	Effects of Al and Sn on electrochemical properties of Mg-6%Al-1%Sn (mass fraction) magnesium alloy as anode in 3.5%NaCl solution. Journal of Central South University, 2014, 21, 4409-4414.	1.2	5
42	Plastic deformation behavior of ZK60 magnesium alloy with addition of neodymium. Central South University, 2008, 15, 434-437.	0.5	4
43	Electrochemical behavior of Mg-Al-Pb alloy in 3.5% NaCl solution. Journal of Central South University, 2016, 23, 2475-2482.	1.2	4
44	Application of digital modeling and three-dimensional printing of titanium mesh for reconstruction of thyroid cartilage in partial laryngectomy. Acta Oto-Laryngologica, 2022, 142, 363-368.	0.3	4
45	Microstructure, Corrosion Behaviors in Different Simulated Body Fluids and Cytotoxicity of Znâ€“Li Alloy as Biodegradable Material. Materials Transactions, 2019, 60, 583-586.	0.4	3
46	Microstructure, biodegradable behavior in different simulated body fluids, antibacterial effect on different bacteria and cytotoxicity of rolled Znâ€“Liâ€“Ag alloy. Materials Research Express, 2020, 7, 055403.	0.8	3
47	Mechanical properties and biodegradable behavior of Mgâ€“6%Znâ€“Ca₃(PO₄)₂ metal matrix composites in Ringer's solution. International Journal of Materials Research, 2012, 103, 723-728.	0.1	2
48	Research on corrosion behavior and biocompatibility of a porous Mgâ€“3%Zn/5%Î²-Ca₃(PO₄)₂ composite scaffold for bone tissue engineering. Journal of Applied Biomaterials and Functional Materials, 2019, 17, 228080001985706.	0.7	2
49	Biodegradable behavior and antibacterial activities of a novel Zn-0.5%Li-(Ag) alloys. Materials Research Express, 2021, 8, 055405.	0.8	2
50	Effect of SiC_p particle size and anneal on properties of Al/SiC composites prepared by powder liquid -phase sintering. , 2015, , .		1
51	The effects of rolling deformation on Al-27%Si alloys prepared by powder metallurgy for electronic packaging applications. , 2015, , .		1
52	Microstructure and Mechanical Properties of AA1235 Aluminum Foil Stocks Produced Directly from Electrolytic Aluminum Melt. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2016, 47, 731-739.	1.0	1
53	Manufacturing process and electrochemical properties of an Mgâ€“Gaâ€“Hg anode sheet. International Journal of Materials Research, 2012, 103, 1030-1034.	0.1	1
54	Effects of Extrusion and Rolling Processes on the Microstructure and Mechanical Properties of Zn-Li-Ag Alloys. Metals, 2022, 12, 520.	1.0	1

#	Article	IF	Citations
55	Synthesis of Ag-La0.8Sr0.2MnO3 (LSM-Ag) Composite Powder and Its Application in Magnesium Air Battery. Metals, 2021, 11, 633.	1.0	0