Xianhua Chen

List of Publications by Year
in descending order

69 papers	2,767 citations	172457 29 h-index	182427 51 g-index
69 all docs	69 docs citations	69 times ranked	1410 citing authors

#	Article	IF	Citations
1	Corrosion of Mg Alloys. , 2022, , 46-74.		3
2	A reverse design model for high-performance and low-cost magnesium alloys by machine learning. Computational Materials Science, 2022, 201, 110881.	3.0	14
3	Microstructure, texture and mechanical properties of the rolled high modulus Mg-Y-Zn-Al-Li alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 831, 142242.	5.6	19
4	Compressive deformation of as-extruded LPSO-containing Mg alloys at different temperatures. Journal of Materials Research and Technology, 2022, 16, 944-959.	5.8	14
5	Optimization in strength-ductility of heterogeneous Mg-13Gd alloy via small extrusion ratio combined with pre-aging. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 833, 142540.	5.6	22
6	Effect of micron-Ti particles on microstructure and mechanical properties of Mgâ€“3Alâ€“1Zn based composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 833, 142526.	5.6	45
7	A review of the design, processes, and properties of Mg-based composites. Nanotechnology Reviews, 2022, 11, 712-730.	5.8	27
8	Effect of interfacial structure on grain refinement and strength of Ti particles reinforced AZ31 composites. Vacuum, 2022, 203, 111287.	3.5	13
9	First-principles study on the thermodynamic, electronic and mechanical properties of Mgâ€“Alâ€“Si ternary compounds. Journal of Materials Research and Technology, 2022, 19, 2848-2862.	5.8	7
10	Microstructure, mechanical properties and wear resistance of Ti particles reinforced AZ31 magnesium matrix composites. Journal of Magnesium and Alloys, 2022, 10, 2266-2279.	11.9	53
11	Microstructure and mechanical properties of LPSO dominant Mg-2Y-Cu-TM (TM=Cu, Zn, Co, Ni) alloys. Materials Characterization, 2022, 191, 112111.	4.4	9
12	Effect of Zenerâ€“Hollomon Parameter on High-Temperature Deformation Behaviors of Mgâ€“6Znâ€“1.5Yâ€“0.5Ceâ€“0.4Zr Alloy. Acta Metallurgica Sinica (English Letters), 2021, 34, 606-616.	2.9	6
13	Work hardening behavior of Ti particle reinforced AZ91 composite prepared by spark plasma sintering. Vacuum, 2021, 183, 109833.	3.5	20
14	Temperature Effect on Strain Hardening Behaviors of Asâ€Extruded Binary Magnesium Alloys. Advanced Engineering Materials, 2021, 23, 2001104.	3.5	0
15	Effect of Mn Addition on Melt Purification and Fe Tolerance in Mg Alloys. Jom, 2021, 73, 892-902.	1.9	24
16	New high-modulus and high-strength Mg-Gd-Ag-Mn-Ge alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 805, 140559.	5.6	27
17	Size effect of the width of beta-Li phase on the ductility of magnesiumâ€“lithium dual-phase alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 814, 141217.	5.6	8
18	Improving Strength and Electromagnetic Shielding Effectiveness of Mgâ€“Snâ€“Znâ€“Caâ€“Ce Alloy by Sn Addition. Advanced Engineering Materials, 2021, 23, 2100166.	3.5	15

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19	Determination of ultra-trace levels of titanium in human serum using inductively coupled plasma tandem mass spectrometry based on O2/H2 reaction gas. Analytica Chimica Acta, 2021, 1165, 338564.	5.4	3
20	Altered age-hardening behavior in the ultrafine-grained surface layer of Mg-Zn-Y-Ce-Zr alloy processed by sliding friction treatment. Journal of Materials Science and Technology, 2021, 78, 20-29.	10.7	13
21	Large strain hardening of magnesium containing <i>in situ</i> nanoparticles. Nanotechnology Reviews, 2021, 10, 1018-1030.	5.8	8
22	A review on electromagnetic shielding magnesium alloys. Journal of Magnesium and Alloys, 2021, 9, 1906-1921.	11.9	75
23	A simultaneous increase of elastic modulus and ductility by Al and Li additions in Mg-Gd-Zn-Zr-Ag alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 771, 138576.	5.6	27
24	Effect of impurity reduction on dynamic recrystallization, texture evolution and mechanical anisotropy of rolled AZ31 alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 773, 138741.	5.6	7
25	Review of Mg alloy corrosion rates. Journal of Magnesium and Alloys, 2020, 8, 989-998.	11.9	212
26	The effects of Ca and Mn on the microstructure, texture and mechanical properties of Mg-4 Zn alloy. Journal of Magnesium and Alloys, 2020, , .	11.9	59
27	Microstructure and compressive properties of Mgâ€“9Al composite reinforced with Ni-coated graphene nanosheets. Vacuum, 2020, 181, 109629.	3.5	23
28	Effect of micro-alloying Ca on microstructure, texture and mechanical properties of Mgâ€“Znâ€“Yâ€“Ce alloys. Progress in Natural Science: Materials International, 2020, 30, 213-220.	4.4	10
29	Microstructural evolution in the ultrafine-grained surface layer of Mg-Zn-Y-Ce-Zr alloy processed by sliding friction treatment. Materials Characterization, 2020, 166, 110423.	4.4	12
30	Microstructure and mechanical properties with various pre-treatment and Zn content in Mg-Gd-Y-Zn alloys. Journal of Alloys and Compounds, 2020, 831, 154873.	5.5	19
31	Development of a novel Mgâ€“Yâ€“Znâ€“Alâ€“Li alloy with high elastic modulus and damping capacity. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 790, 139744.	5.6	41
32	Microstructure, creep behavior and corrosion resistance in the ultrafine-grained surface layer of Mg-6Zn-0.2Y-0.4Ce-0.5Zr alloy processed by surfacing friction treatment. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 776, 138995.	5.6	10
33	Effects of Gd on the microstructure and mechanical properties of Mgâ€“Li dual-phase alloys. International Journal of Materials Research, 2020, 111, 432-438.	0.3	0
34	Microstructure and mechanical properties of rolled Mgâ€“Gdâ€“Znâ€“Zrâ€“Agâ€“Alâ€“Li alloys. International Journal of Materials Research, 2020, 111, 645-653.	0.3	2
35	Effect of Heat Treatment on Microstructure and Mechanical Properties of Extruded Mg-4Zn-1.5Al-2Sn Alloy. Journal of Materials Engineering and Performance, 2019, 28, 4565-4573.	2.5	0
36	Effect of Sn Addition on Microstructure and Corrosion Behavior of As-Extruded Mgâ€“5Znâ€“4Al Alloy. Materials, 2019, 12, 2069.	2.9	14

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37	Simultaneously improving elastic modulus and damping capacity of extruded Mg-Gd-Y-Zn-Mn alloy via alloying with Si. Journal of Alloys and Compounds, 2019, 810, 151857.	5.5	43
38	Microstructures and mechanical properties of nano carbides reinforced CoCrFeMnNi high entropy alloys. Journal of Alloys and Compounds, 2019, 792, 170-179.	5.5	58
39	Alloy Design Strategies of the Native Anti-corrosion Magnesium Alloy. Minerals, Metals and Materials Series, 2019, , 169-173.	0.4	4
40	Strain Hardening Behavior in Mgâ€"Al Alloys at Room Temperature. Advanced Engineering Materials, 2019, 21, 1801062.	3.5	14
41	Strain hardening behavior of Mgâ€"Y alloys after extrusion process. Journal of Magnesium and Alloys, 2019, 7, 672-680.	11.9	65
42	Strain hardening of as-extruded Mg-xZn (xâ€‰=â€‰1, 2, 3 and 4 wt%) alloys. Journal of Materials Science and Technology, 2019, 35, 142-150.	10.7	105
43	Effects of Y and Zn additions on electrical conductivity and electromagnetic shielding effectiveness of Mg-Y-Zn alloys. Journal of Materials Science and Technology, 2019, 35, 1074-1080.	10.7	67
44	Effect of secondary phase on the electromagnetic shielding effectiveness of magnesium alloy. Scientific Reports, 2018, 8, 1625.	3.3	33
45	Effect of Sn content on strain hardening behavior of as-extruded Mg-Sn alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 713, 244-252.	5.6	115
46	Thermal conductivity and mechanical properties of Sm-containing Mg-Zn-Zr alloys. Materials Science and Technology, 2018, 34, 138-144.	1.6	13
47	Microstructure and Mechanical Properties of Mgâ€"6Alâ€"1Snâ€"0.3Mn Alloy Sheet Fabricated through Extrusion Combined with Rolling. Crystals, 2018, 8, 356.	2.2	6
48	Enhanced mechanical properties of Mg-Gd-Y-Zn-Mn alloy by tailoring the morphology of long period stacking ordered phase. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 733, 267-275.	5.6	71
49	Microstructure and Electromagnetic Shielding Properties of Mg-Zn-Ce-Y-Zr Alloys. Journal of Materials Engineering and Performance, 2018, 27, 4722-4731.	2.5	8
50	The effect of Y addition on recrystallization and mechanical properties of Mgâ€"6Znâ€"xYâ€"0.5Ceâ€"0.4Zr alloys. Vacuum, 2018, 155, 445-455.	3.5	39
51	Effect of Nd on microstructure and mechanical properties of as-extruded Mg-Y-Zr-Nd alloy. Journal of Materials Science and Technology, 2017, 33, 926-934.	10.7	52
52	Effects of Sm addition on electromagnetic interference shielding property of Mgâ€"Znâ€"Zr alloys. Applied Physics A: Materials Science and Processing, 2017, 123, 1.	2.3	14
53	Effects of Sn addition on microstructure and mechanical properties of Mg-Zn-Al alloys. Progress in Natural Science: Materials International, 2017, 27, 695-702.	4.4	35
54	A Review on Casting Magnesium Alloys: Modification of Commercial Alloys and Development of New Alloys. Journal of Materials Science and Technology, 2016, 32, 1211-1221.	10.7	400

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55	A novel approach to melt purification of magnesium alloys. Journal of Magnesium and Alloys, 2016, 4, 8-14.	11.9	54
56	A new high-strength Mg-Zn-Ce-Y-Zr magnesium alloy. Journal of Alloys and Compounds, 2016, 688, 537-541.	5.5	52
57	High temperature formability of graphene nanoplatelets-AZ31 composites fabricated by stir-casting method. Journal of Magnesium and Alloys, 2016, 4, 270-277.	11.9	80
58	Microstructure, texture, mechanical properties and electromagnetic shielding effectiveness of Mgâ€"Znâ€"Zrâ€"Ce alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 669, 259-268.	5.6	65
59	Strength improvement in ZK60 magnesium alloy induced by pre-deformation and heat treatment. Journal Wuhan University of Technology, Materials Science Edition, 2016, 31, 393-398.	1.0	13
60	Microstructure and mechanical properties of as-extruded and as-aged Mgâ€"Znâ€"Alâ€"Sn alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 656, 165-173.	5.6	38
61	Effect of Y and Ce additions on microstructure and mechanical properties of Mgâ€"Znâ€"Zr alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 644, 247-253.	5.6	65
62	Microstructure, electromagnetic shielding effectiveness and mechanical properties of Mgâ€"Znâ€"Cuâ€"Zr alloys. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2015, 197, 67-74.	3.5	64
63	Microstructure, electromagnetic shielding effectiveness and mechanical properties of Mgâ€"Znâ€"Yâ€"Zr alloys. Materials & Design, 2015, 65, 360-369.	5.1	91
64	Improved mechanical properties in AZ31 magnesium alloys induced by impurity reduction. Journal Wuhan University of Technology, Materials Science Edition, 2013, 28, 1207-1211.	1.0	6
65	Enhanced electromagnetic interference shielding in ZK60 magnesium alloy by aging precipitation. Journal of Physics and Chemistry of Solids, 2013, 74, 872-878.	4.0	47
66	Effect of heat treatment on electromagnetic shielding effectiveness of ZK60 magnesium alloy. Materials & Design, 2012, 42, 327-333.	5.1	63
67	Effect of impurity reduction on rollability of AZ31 magnesium alloy. Journal of Materials Science, 2012, 47, 514-520.	3.7	13
68	Thermal Stability and Tensile Properties of Electrodeposited Cu-Bi Alloy. Journal of Materials Engineering and Performance, 2011, 20, 481-486.	2.5	10
69	Effect of heat treatment on strain hardening of ZK60 Mg alloy. Materials & Design, 2011, 32, 1526-1530.	5.1	103