Dejiang Li

List of Publications by Year in descending order

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69 papers	1,928 citations	257450 24 h-index	276875 41 g-index
71 all docs	71 docs citations	71 times ranked	1197 citing authors

#	Article	IF	Citations
1	First-principles study of structural and electronic properties of C14-type Laves phase Al2Zr and Al2Hf. Computational Materials Science, 2014, 83, 27-34.	3.0	198
2	Microstructure evolution of Mgâ€“10Gdâ€“3Yâ€“1.2Znâ€“0.4Zr alloy during heat-treatment at 773K. Journal of Alloys and Compounds, 2009, 468, 164-169.	5.5	122
3	Mechanical and thermodynamic properties of Al3Sc and Al3Li precipitates in Alâ€“Liâ€“Sc alloys from first-principles calculations. Physica B: Condensed Matter, 2013, 427, 85-90.	2.7	100
4	First-principles investigation of structural and electronic properties of MgCu2 Laves phase under pressure. Intermetallics, 2012, 31, 257-263.	3.9	97
5	Effect of solute atoms and second phases on the thermal conductivity of Mg-RE alloys: A quantitative study. Journal of Alloys and Compounds, 2018, 747, 431-437.	5.5	86
6	Low cycle fatigue of a rare-earth containing extruded magnesium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 575, 65-73.	5.6	80
7	Effect of rare earth elements on deformation behavior of an extruded Mgâ€“10Gdâ€“3Yâ€“0.5Zr alloy during compression. Materials & Design, 2013, 46, 411-418.	5.1	70
8	Hydrogen Storage Properties of a Mgâ€“Ni Nanocomposite Coprecipitated from Solution. Journal of Physical Chemistry C, 2014, 118, 18401-18411.	3.1	66
9	Basal-plane stacking-fault energies of Mg alloys: A first-principles study of metallic alloying effects. Journal of Materials Science and Technology, 2018, 34, 1773-1780.	10.7	62
10	Room temperature deformation of LPSO structures by non-basal slip. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 682, 354-358.	5.6	59
11	Microstructure evolution and mechanical properties of an Mgâ€“Gd alloy subjected to surface mechanical attrition treatment. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 630, 146-154.	5.6	58
12	Mechanical, electronic and thermodynamic properties of C14-type AMg2 (A=Ca, Sr and Ba) compounds from first principles calculations. Computational Materials Science, 2015, 97, 75-85.	3.0	41
13	Effect of Nd content and heat treatment on the thermal conductivity of Mg Nd alloys. Journal of Alloys and Compounds, 2016, 685, 114-121.	5.5	40
14	First-principles Calculations of Strengthening Compounds in Magnesium Alloy: A General Review. Journal of Materials Science and Technology, 2016, 32, 1222-1231.	10.7	38
15	Twinning behavior and lattice rotation in a Mgâ€“Gdâ€“Yâ€“Zr alloy under ballistic impact. Journal of Alloys and Compounds, 2015, 650, 622-632.	5.5	33
16	Low cycle fatigue of an extruded Mgâ€“3Ndâ€“0.2Znâ€“0.5Zr magnesium alloy. Materials & Design, 2014, 64, 63-73.	5.1	32
17	Solid solution strengthening mechanism in high pressure die casting Alâ€“Ceâ€“Mg alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 812, 141109.	5.6	32
18	Effect of strain ratio on cyclic deformation behavior of a rare-earth containing extruded magnesium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 588, 250-259.	5.6	31

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19	Microstructure and mechanical properties of Mgâ€“6Gdâ€“3Yâ€“0.5Zr alloy processed by high-vacuum die-casting. Transactions of Nonferrous Metals Society of China, 2014, 24, 3769-3776.	4.2	29
20	Cyclic Deformation Behavior of a Rare-Earth Containing Extruded Magnesium Alloy: Effect of Heat Treatment. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 1168-1187.	2.2	29
21	Microstructure and Mechanical Properties of Mg-7Al-2Sn Alloy Processed by Super Vacuum Die-Casting. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 4788-4799.	2.2	28
22	Structural, electronic and thermodynamic properties of BiF3-type Mg3Gd compound: A first-principle study. Physica B: Condensed Matter, 2014, 432, 33-39.	2.7	26
23	Quantitative Study of Microstructure-Dependent Thermal Conductivity in Mg-4Ce-xAl-0.5Mn Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 1970-1984.	2.2	26
24	Effect of Al Content on Hot-Tearing Susceptibility of Mg-10Zn-xAl Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 1897-1910.	2.2	25
25	Predictions of the structural, electronic and thermodynamic properties of the anti-fluorite-type Mg₂Sn under pressure from first principles. Physica Scripta, 2013, 88, 045302.	2.5	24
26	Microstructure and mechanical properties of Mg-4.0Zn alloy reinforced by NiO-coated CNTs. Journal of Materials Science and Technology, 2017, 33, 452-460.	10.7	24
27	Dry Sliding Wear Behavior of Mg-Zn-Gd Alloy before and after Cryogenic Treatment. Tribology Transactions, 2014, 57, 275-282.	2.0	23
28	Enhanced ductility in high-pressure die casting Mg-4Ce-xAl-0.5Mn alloys via modifying second phase. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 773, 138870.	5.6	22
29	Study of age hardening in a Mgâ€“2.2 wt%Nd alloy by in situ synchrotron X-ray diffraction and mechanical tests. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 708, 319-328.	5.6	21
30	A modified Johnson-Cook constitutive relationship for a rare-earth containing magnesium alloy. Journal of Rare Earths, 2013, 31, 1202-1207.	4.8	20
31	First principles calculations on the influence of solute elements and chlorine adsorption on the anodic corrosion behavior of Mg (0001) surface. Surface Science, 2018, 672-673, 68-74.	1.9	20
32	Effect of heat treatment on microstructures and mechanical properties of high vacuum die casting Mgâ€“8Gdâ€“3Yâ€“0.4Zr magnesium alloy. Transactions of Nonferrous Metals Society of China, 2014, 24, 3762-3768.	4.2	19
33	A hot tearing criterion based on solidification microstructure in cast alloys. Journal of Materials Science and Technology, 2022, 105, 68-80.	10.7	19
34	Influence of heat treatment on microstructure and mechanical properties of Mg-10Gd-3Y-1.2Zn-0.4Zr alloy. Transactions of Nonferrous Metals Society of China, 2008, 18, s117-s121.	4.2	18
35	High temperature compressive deformation behavior of an extruded Mgâ€“8Gdâ€“3Yâ€“0.5Zr (wt.%) alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 526, 150-155.	5.6	18
36	First principles investigation of Î²â€²-short and Î²â€²-long in Mgâ€“Gd alloy. Journal of Alloys and Compounds, 2016, 671, 177-183.	5.5	18

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37	Theoretical predictions of the structural and thermodynamic properties of MgZn2 Laves phase under high pressure. Applied Physics A: Materials Science and Processing, 2014, 115, 323-331.	2.3	17
38	Formation of a new incoherent twin boundary in a Mgâ€“3Gd alloy. Scripta Materialia, 2016, 112, 136-139.	5.2	17
39	Hot Tearing Behavior in Double Ternary Eutectic Alloy System: Al-Mg-Si Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 789-805.	2.2	17
40	Ignition-proof properties of a high-strength Mg-Gd-Ag-Zr alloy. Journal of Shanghai Jiaotong University (Science), 2012, 17, 643-647.	0.9	16
41	Lowâ€cycle fatigue behavior of a newly developed cast aluminum alloy for automotive applications. Fatigue and Fracture of Engineering Materials and Structures, 2019, 42, 1912-1926.	3.4	16
42	Microstructure and High Temperature Tensile Properties of Mgâ€“10Gdâ€“5Yâ€“0.5Zr Alloy after Thermo-Mechanical Processing. Metals, 2018, 8, 980.	2.3	14
43	Cyclic deformation behavior of a high zinc-containing cast magnesium alloy. International Journal of Fatigue, 2019, 125, 1-10.	5.7	14
44	Theoretical Analysis of the Galvanic Corrosion Behavior of Mg-Ge Binary Alloy. Journal of the Electrochemical Society, 2019, 166, C421-C427.	2.9	13
45	Effect of Al content on microstructure, thermal conductivity, and mechanical properties of Mgâ€“Laâ€“Alâ€“Mn alloys. Journal of Materials Research, 2021, 36, 3145-3154.	2.6	13
46	Hot Tearing Behavior in Double Ternary Eutectic Alloy System: Mg-Ce-Al Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 6658-6669.	2.2	12
47	Characterization on the formation of porosity and tensile properties prediction in die casting Mg alloys. Journal of Magnesium and Alloys, 2022, 10, 1857-1867.	11.9	12
48	Study on hydrogenation behaviors of a Mg-13Y alloy. International Journal of Hydrogen Energy, 2014, 39, 8303-8310.	7.1	11
49	Hot deformation behavior and workability of pre-extruded ZK60A magnesium alloy. Transactions of Nonferrous Metals Society of China, 2015, 25, 1822-1830.	4.2	11
50	Deformation mechanism and dynamic precipitation in a Mg-7Al-2Sn alloy processed by surface mechanical attrition treatment. Journal of Materials Science and Technology, 2019, 35, 1473-1478.	10.7	11
51	HRTEM studies of aging precipitate phases in the Mg-10Gd-3Y-0.4Zr alloy. Journal of Rare Earths, 2016, 34, 441-446.	4.8	10
52	Atomic relaxation, stability and electronic properties of Mg2Sn (100) surfaces from ab-initio calculations. Journal of Magnesium and Alloys, 2016, 4, 62-67.	11.9	10
53	Hot compressive deformation behaviors of Mgâ€“10Gdâ€“3Yâ€“0.5Zr alloy. Progress in Natural Science: Materials International, 2016, 26, 78-84.	4.4	9
54	A first-principles study on structural stability and mechanical properties of polar intermetallic phases CaZn₂and SrZn₂. Philosophical Magazine, 2014, 94, 3945-3959.	1.6	8

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55	Effect of Sm on the Microstructure and Mechanical Property of Mg-xSm-0.4Zn-0.3Zr Alloys. Materials Science Forum, 0, 747-748, 238-244.	0.3	6
56	Cyclic Deformation Behavior of A Heat-Treated Die-Cast Al-Mg-Si-Based Aluminum Alloy. Materials, 2020, 13, 4115.	2.9	6
57	Cyclic Deformation of Rare-Earth Containing Magnesium Alloys. Advanced Materials Research, 0, 891-892, 391-396.	0.3	5
58	Microstructure and Tensile Properties of the Mg-6Zn-4Al-xSn Die Cast Magnesium Alloy. Metals, 2019, 9, 113.	2.3	5
59	Effects of Ce content on the modification of Mg2Si phase in Mg-5Al-2Si alloy. Journal of Magnesium and Alloys, 2023, 11, 2299-2311.	11.9	5
60	Mechanical properties of Mg-6Gd-1Y-0.5Zr alloy processed by low temperature thermo-mechanical treatment. Transactions of Nonferrous Metals Society of China, 2012, 22, 2351-2356.	4.2	4
61	Effects of Heat Treatments on Corrosion Behavior of Mg AT72 Alloy. Materials Science Forum, 0, 747-748, 230-237.	0.3	4
62	Oxidation mechanism of molten Alâ€“5Mgâ€“2Siâ€“Mn alloy. Journal of Materials Science, 2020, 55, 12554-12567.	3.7	3
63	Microstructure characterization and hydrogen desorption behaviors of Mgâ€“Alâ€“H powders prepared by reactive milling in hydrogen. Transactions of Nonferrous Metals Society of China, 2013, 23, 3112-3118.	4.2	2
64	Solidification microstructure evolution in LA42 Mg alloy under various cooling rates. Journal of Materials Science, 2022, 57, 11411-11429.	3.7	2
65	The Effect of Particles on Microstructure and Mechanical Behaviour of Mg-10Gd-3Y-0.4Zr Alloy Processed by ECAP. Materials Science Forum, 2013, 765, 444-448.	0.3	1
66	Effect of Cold Deformation on Microstructure and Mechanical Properties of Mg-8Gd-3Y-0.5Zr Alloy. Materials Science Forum, 0, 706-709, 1297-1302.	0.3	0
67	Dynamic Precipitation Behaviors and Mechanical Properties of Mg-12Gd-3Y-0.5Zr Alloy Processed by Secondary Extrusion. Materials Science Forum, 0, 747-748, 192-197.	0.3	0
68	Isochronal Aging Hardening of the Mg-8Gd-3Y-0.5Zr Alloy after Cold Rolling. Materials Science Forum, 0, 747-748, 333-339.	0.3	0
69	Processing and Microstructures of Î´-Al₂O₃/ AE44 Composite Synthesized by SS-HPDC. Materials Science Forum, 0, 747-748, 198-203.	0.3	0