Zhi-Hong Jia

List of Publications by Year
in descending order

49 papers	1,479 citations	361045 20 h-index	329751 37 g-index
49 all docs	49 docs citations	49 times ranked	747 citing authors

#	Article	IF	Citations
1	The structural and compositional evolution of precipitates in Al-Mg-Si-Cu alloy. Acta Materialia, 2018, 145, 437-450.	3.8	197
2	The natural aging and precipitation hardening behaviour of Al-Mg-Si-Cu alloys with different Mg/Si ratios and Cu additions. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 627, 119-126.	2.6	139
3	Effect of homogenization and alloying elements on recrystallization resistance of Alâ€“Zrâ€“Mn alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 444, 284-290.	2.6	80
4	Effect of Ag addition on the precipitation evolution and interfacial segregation for Alâ€“Mgâ€“Si alloy. Acta Materialia, 2019, 180, 301-316.	3.8	76
5	The intergranular corrosion behavior of 6000-series alloys with different Mg/Si and Cu content. Applied Surface Science, 2017, 405, 489-496.	3.1	68
6	Effect of Ag and Cu additions on natural aging and precipitation hardening behavior in Al-Mg-Si alloys. Journal of Alloys and Compounds, 2017, 695, 2444-2452.	2.8	65
7	The influence of Cu addition and pre-straining on the natural aging and bake hardening response of Al-Mg-Si alloys. Journal of Alloys and Compounds, 2016, 688, 362-367.	2.8	62
8	The Influence of Composition on the Clustering and Precipitation Behavior of Al-Mg-Si-Cu Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 459-473.	1.1	60
9	Formation of precipitates and recrystallization resistance in Alâ€“Scâ€“Zr alloys. Transactions of Nonferrous Metals Society of China, 2012, 22, 1866-1871.	1.7	53
10	Optimization of the pre-aging treatment for an AA6022 alloy at various temperatures and holding times. Journal of Alloys and Compounds, 2015, 647, 238-244.	2.8	47
11	Precipitation behaviour of Al3Zr precipitate in Alâ€“Cuâ€“Zr and Alâ€“Cuâ€“Zrâ€“Tiâ€“V alloys. Transactions of Nonferrous Metals Society of China, 2012, 22, 1860-1865.	1.7	42
12	Influence of interrupted quenching and pre-aging on the bake hardening of Alâ€“Mgâ€“Si Alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 651, 991-998.	2.6	39
13	Special segregation of Cu on the habit plane of lath-like Î²â€² and QP2 precipitates in Al-Mg-Si-Cu alloys. Scripta Materialia, 2018, 151, 33-37.	2.6	38
14	Microstructure and mechanical properties of 2195 alloys prepared by traditional casting and spray forming. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 784, 139337.	2.6	36
15	Clustering behavior during natural aging and artificial aging in Al-Mg-Si alloys with different Ag and Cu addition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 732, 273-283.	2.6	35
16	Combined effect of pre-aging and Ag/Cu addition on the natural aging and bake hardening in Al-Mg-Si alloys. Progress in Natural Science: Materials International, 2018, 28, 363-370.	1.8	32
17	The disordered structure of Qâ€² and C phases in Alâ€“Mgâ€“Siâ€“Cu alloy. Scripta Materialia, 2016, 118, 55-59.	2.6	30
18	Hafnium in Aluminum Alloys: A Review. Acta Metallurgica Sinica (English Letters), 2016, 29, 105-119.	1.5	23

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19	Effect of minor Sc and Zr addition on microstructure and properties of ultra-high strength aluminum alloy. Transactions of Nonferrous Metals Society of China, 2014, 24, 3866-3871.	1.7	21
20	The morphology and orientation relationship variations of Qâ€² phase in Alâ€“Mgâ€“Siâ€“Cu alloy. Materials Characterization, 2016, 118, 279-283.	1.9	21
21	Microstructure Evolution and Recrystallization Resistance of a 7055 Alloy Fabricated by Spray Forming Technology and by Conventional Ingot Metallurgy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 5378-5388.	1.1	21
22	Microstructure characterization and quasi-static failure behavior of resistance spot welds of AA6111-T4 aluminum alloy. Transactions of Nonferrous Metals Society of China, 2014, 24, 3879-3885.	1.7	19
23	The multiple orientation relationships and morphology of Î²' phase in Al-Mg-Si-Cu alloy. Journal of Alloys and Compounds, 2018, 767, 81-89.	2.8	17
24	Study of the Qâ€² (Q)-phase precipitation in Alâ€“Mgâ€“Siâ€“Cu alloys by quantification of atomic-resolution transmission electron microscopy images and atom probe tomography. Journal of Materials Science, 2019, 54, 7943-7952.	1.7	17
25	Effect of heat treatment and extrusion processing on the microstructure and mechanical properties of spray formed 7055 alloy. Materials Characterization, 2022, 183, 111619.	1.9	17
26	Thermo-mechanically affected zone in AA6111 resistance spot welds. Journal of Materials Processing Technology, 2017, 249, 463-470.	3.1	15
27	Microstructure and mechanical properties of foundry Al-Si-Cu-Hf alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 722, 197-205.	2.6	15
28	Low cycle fatigue behaviour at 300â€¯Â°C and microstructure of Al-Si-Mg casting alloys with Zr and Hf additions. Journal of Alloys and Compounds, 2018, 765, 1253-1262.	2.8	15
29	Effect of Zr and Er on the microstructure, mechanical and electrical properties of Al-0.4Fe alloy. Journal of Alloys and Compounds, 2021, 857, 157611.	2.8	15
30	Effects of high temperature pre-straining on natural aging and bake hardening response of Alâ€“Mgâ€“Si alloys. Transactions of Nonferrous Metals Society of China, 2016, 26, 924-929.	1.7	14
31	Quantitative study of dissolution of Mg2Si during solution treatment in AA6014 alloy. Journal of Alloys and Compounds, 2017, 703, 272-279.	2.8	13
32	Effects of Sn/In additions on natural and artificial ageing of Alâ€“Mgâ€“Si alloys. Materials Science and Technology, 2018, 34, 2136-2144.	0.8	13
33	Effect of combined addition of Ag and Cu on the precipitation behavior for an Al-Mg-Si alloy. Materials Characterization, 2021, 171, 110736.	1.9	13
34	Effect of Sn contents on natural aging and precipitation hardening in Al-Mg-Si alloys. Materials Characterization, 2021, 179, 111383.	1.9	13
35	Optimizing mechanical property of spray formed Al-Zn-Mg-Cu alloy by combination of homogenization and warm-rolling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 846, 143248.	2.6	12
36	Effect of In addition on the precipitation behavior and mechanical property for Al-Mg-Si alloys. Journal of Alloys and Compounds, 2022, 895, 162685.	2.8	11

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37	The interactive effect of alloy composition and pre-straining on the precipitation behavior of Alâ€“Mgâ€“Siâ€“Cu alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 849, 143495.	2.6	10
38	Effects of Alloying Atoms on Antiphase Boundary Energy and Yield Stress Anomaly of L12 Intermetallics: First-Principles Study. Crystals, 2018, 8, 96.	1.0	9
39	Microstructure of Alâ€“Siâ€“Mg alloy with Zr/Hf additions during solidification and solution treatment. Rare Metals, 2019, 38, 1033-1042.	3.6	9
40	Growth Directions of Precipitates in the Alâ€“Siâ€“Mgâ€“Hf Alloy Using Combined EBSD and FIB 3D-Reconstruction Techniques. Microscopy and Microanalysis, 2015, 21, 588-593.	0.2	8
41	The orientation relationships of nanobelt-like Si₂Hf precipitates in an Alâ€“Siâ€“Mgâ€“Hf alloy. Journal of Applied Crystallography, 2016, 49, 1223-1230.	1.9	7
42	Effects of pre-aging and natural aging on the clusters, strength and hemming performance of AA6014 alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 782, 139206.	2.6	7
43	Effect of pre-straining on structure and formation mechanism of precipitates in Alâ€“Mgâ€“Siâ€“Cu alloy. Transactions of Nonferrous Metals Society of China, 2022, 32, 436-447.	1.7	7
44	Dispersoid characteristics and elevated temperature creep resistance of Alâ€“Siâ€“Mg cast alloy with Zr addition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 836, 142570.	2.6	6
45	Atomic scale analysis of Hf-containing precipitates in an Al-Si-Mg-Hf alloy. Journal of Alloys and Compounds, 2018, 741, 1070-1079.	2.8	4
46	Microstructure Characteristics and Elevated-Temperature Tensile Properties of Al-7Si-0.3Mg Alloys with Zr and Hf Addition. Journal of Materials Engineering and Performance, 2021, 30, 9059-9066.	1.2	3
47	Precipitation of (Si2â^'xAlx)Hf in an Alâ€“Siâ€“Mgâ€“Hf Alloy. Microscopy and Microanalysis, 2017, 23, 724-729.	0.2	2
48	Understanding the Role of Short-Range Order in the Nucleation and Transformation of the Bâ€²/Qâ€² Precipitates in Al-Mg-Si(-Cu) Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 3366.	1.1	2
49	Interactive transformation mechanisms of multiple metastable precipitates in a Si-rich Al-Mg-Si alloy. Philosophical Magazine, 0, , 1-26.	0.7	1