Ling-fei Cao

List of Publications by Year
in descending order

66 papers	1,790 citations	257101 24 h-index	288905 40 g-index
67 all docs	67 docs citations	67 times ranked	1178 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	Investigation on microstructure and mechanical properties of Al-Zn-Mg-Cu alloys with various Zn/Mg ratios. Journal of Materials Science and Technology, 2021, 85, 106-117.	5.6	127
3	Hot deformation and dynamic recrystallization in Al-Mg-Si alloy. Materials Characterization, 2021, 173, 110976.	1.9	83
4	Clustering behaviour in an Alâ€“Mgâ€“Siâ€“Cu alloy during natural ageing and subsequent under-ageing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 559, 257-261.	2.6	80
5	Investigation on formation mechanism of T1 precipitate in an Al-Cu-Li alloy. Journal of Alloys and Compounds, 2017, 723, 661-666.	2.8	72
6	Effect of retrogression treatments on microstructure, hardness and corrosion behaviors of aluminum alloy 7085. Journal of Alloys and Compounds, 2020, 814, 152264.	2.8	69
7	The influence of Mg/Si ratio and Cu content on the stretch formability of 6xxx aluminium alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 651, 688-697.	2.6	68
8	Quantifying the grain boundary segregation strengthening induced by post-ECAP aging in an Al-5Cu alloy. Acta Materialia, 2018, 155, 199-213.	3.8	62
9	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
10	Effect of trace Er on the microstructure and properties of Alâ€“Znâ€“Mgâ€“Cuâ€“Zr alloys during heat treatments. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 792, 139807.	2.6	58
11	Effect of pre-ageing and natural ageing on the paint bake response of alloy AA6181A. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 571, 77-82.	2.6	45
12	Size and shape effects on Curie temperature of ferromagnetic nanoparticles. Transactions of Nonferrous Metals Society of China, 2007, 17, 1451-1455.	1.7	43
13	Effect of ageing temperature on microstructure, mechanical property and corrosion behavior of aluminum alloy 7085. Journal of Alloys and Compounds, 2020, 823, 153792.	2.8	43
14	A highly [001]-textured Sb₂Se₃ photocathode for efficient photoelectrochemical water reduction. Nanoscale, 2019, 11, 22871-22879.	2.8	41
15	Effect of Ag on aging precipitation behavior and mechanical properties of aluminum alloy 7075. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 804, 140515.	2.6	39
16	The microstructure and formation mechanism of face-centered cubic Ti in commercial pure Ti foils during tensile deformation at room temperature. Materials Characterization, 2018, 136, 257-263.	1.9	34
17	Effect of Ag on age-hardening response of Al-Zn-Mg-Cu alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 754, 265-268.	2.6	33
18	The effect of pre-ageing/stretching on the ageing-hardening behavior of Alâ€“Znâ€“Mgâ€“Cu alloys correlated with Zn/Mg ratio. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 830, 142331.	2.6	30

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19	Thermal stability of Fe, Co, Ni metal nanoparticles. Physica Status Solidi (B): Basic Research, 2006, 243, 2745-2755.	0.7	29
20	Improvement of strength and ductility of Al-Cu-Li alloy through cryogenic rolling followed by aging. Transactions of Nonferrous Metals Society of China, 2017, 27, 1920-1927.	1.7	29
21	A simplified model to calculate the higher surface energy of free-standing nanocrystals. Physica Status Solidi (B): Basic Research, 2005, 242, R76-R78.	0.7	28
22	Thermal stability of indium nanocrystals: A theoretical study. Materials Chemistry and Physics, 2006, 96, 418-421.	2.0	28
23	Simultaneously enhanced strength and ductility of 6xxx Al alloys via manipulating meso-scale and nano-scale structures guided with phase equilibrium. Journal of Materials Science and Technology, 2020, 41, 139-148.	5.6	28
24	Flow behavior and microstructure evolution of 6A82 aluminium alloy with high copper content during hot compression deformation at elevated temperatures. Transactions of Nonferrous Metals Society of China, 2016, 26, 649-657.	1.7	27
25	The microstructural evolution of aluminum alloy 7055 manufactured by hot thermo-mechanical process. Journal of Alloys and Compounds, 2019, 796, 103-110.	2.8	27
26	Effect of pre-ageing on dynamic strain ageing in Al-Mg-Si alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 687, 323-331.	2.6	25
27	Influence of pre-recovery on the subsequent recrystallization and mechanical properties of a twin-roll cast Al-Mn alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 682, 63-72.	2.6	25
28	Effect of Heat Treatment Condition on the Flow Behavior and Recrystallization Mechanisms of Aluminum Alloy 7055. Materials, 2019, 12, 311.	1.3	25
29	The microstructure and tensile properties of W/Ti multilayer composites prepared by spark plasma sintering. Journal of Alloys and Compounds, 2019, 780, 116-130.	2.8	25
30	Influence of pre-ageing on the stretch formability of Al-Mg-Si automotive sheet alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 697, 79-85.	2.6	21
31	Simulation of low proportion of dynamic recrystallization in 7055 aluminum alloy. Transactions of Nonferrous Metals Society of China, 2021, 31, 1902-1915.	1.7	19
32	Quantitative analysis: How annealing temperature influences recrystallization texture and grain shape in tantalum. International Journal of Refractory Metals and Hard Materials, 2018, 72, 244-252.	1.7	18
33	Influence of Sn on the precipitation and hardening response of natural aged Al-0.4Mg-1.0Si alloy artificial aged at different temperatures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 765, 138250.	2.6	16
34	Hot Deformation Behavior and Microstructure Characterization of an Al-Cu-Li-Mg-Ag Alloy. Crystals, 2020, 10, 416.	1.0	16
35	Effect of quenching rate on strengthening behavior of an Al-Zn-Mg-Cu alloy during natural ageing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 793, 139900.	2.6	16
36	Effect of the natural aging time on the age-hardening response and precipitation behavior of the Al-0.4Mg-1.0Si-(Sn) alloy. Materials and Design, 2021, 198, 109307.	3.3	15

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37	The annealing characteristics of pure molybdenum bars manufactured by a modified technique. Journal of Alloys and Compounds, 2008, 462, 386-391.	2.8	13
38	The effect of HIPping pressure on phase transformations in Tiâ€“5Alâ€“5Moâ€“5Vâ€“3Cr. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 598, 207-216.	2.6	13
39	Strain accommodation of <110>-normal direction-oriented grains in micro-shear bands of high-purity tantalum. Journal of Materials Science, 2018, 53, 12543-12552.	1.7	13
40	SYNTHESIS OF AN IONIC LIQUID-BASED MAGNETORHEOLOGICAL FLUID DISPERSINGFe₈₄Nb₃V₄B<sub>9</sub POWDERS. International Journal of Modern Physics B, 2010, 24, 1227-1234.	1.0	11
41	Keeping gallium metal to liquid state under the freezing point by using silica nanoparticles. Applied Physics Letters, 2011, 99, .	1.5	11
42	The evolution of shear bands in Ta-2.5W alloy during cold rolling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 726, 259-273.	2.6	11
43	Aging precipitation behavior and properties of Alâ€“Znâ€“Mgâ€“Cuâ€“Zrâ€“Er alloy at different quenching rates. Transactions of Nonferrous Metals Society of China, 2022, 32, 1070-1082.	1.7	11
44	Microstructure characterization of Al-cladded Alâ€“Znâ€“Mgâ€“Cu sheet in different hot deformation conditions. Transactions of Nonferrous Metals Society of China, 2017, 27, 1689-1697.	1.7	10
45	Effect of cold rolling on properties and microstructures of dispersion strengthened copper alloys. Transactions of Nonferrous Metals Society of China, 2008, 18, 333-339.	1.7	8
46	Effect of ageing temperature on precipitation of Al-Cu-Li-Mn-Zr alloy. Journal of Central South University, 2018, 25, 1340-1349.	1.2	8
47	Orientation-dependent grain boundary characteristics in tantalum upon the change of strain path. Materials Characterization, 2019, 154, 277-284.	1.9	8
48	Microstructure and Its Effect on the Intergranular Corrosion Properties of 2024-T3 Aluminum Alloy. Crystals, 2022, 12, 395.	1.0	8
49	The evolution of dislocation microstructure in electron beam melted Ta-2.5W alloy during cold rolling. International Journal of Refractory Metals and Hard Materials, 2016, 61, 136-146.	1.7	7
50	Tailoring the microstructure and mechanical properties of the final Al-Mn foils by different intermediate annealing process. Journal of Materials Science and Technology, 2017, 33, 961-970.	5.6	7
51	Simulation of dynamic recrystallization in an Al-Mg-Si alloy during inhomogeneous hot deformation. Materials Today Communications, 2021, 29, 102810.	0.9	7
52	Thermal behavior and structure of Fe84Nb7B9 nanocrystalline powders. Transactions of Nonferrous Metals Society of China, 2006, 16, 299-303.	1.7	6
53	On the Role of C Addition on Î± Precipitation in a Î² Titanium Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 1089-1095.	1.1	6
54	The microstructure and property of W/Ti multilayer composites prepared by spark plasma sintering. International Journal of Refractory Metals and Hard Materials, 2019, 79, 138-144.	1.7	5

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55	Crystallographic analysis of nucleation for random orientations in high-purity tantalum. Journal of Materials Research, 2018, 33, 1755-1763.	1.2	4
56	Micro porosity and its effect on fatigue performance of 7050 aluminum thick plates. Journal of Central South University, 2022, 29, 912-923.	1.2	4
57	Effect of Nb Content on Microstructure and Mechanical Properties of K4169-Type Superalloy. Journal of Materials Engineering and Performance, 2022, 31, 4204-4213.	1.2	3
58	MELTING-THERMODYNAMIC CHARACTERISTICS OF Fe, Co, Ni MAGNETIC NANOCRYSTALS. Modern Physics Letters B, 2005, 19, 1253-1260.	1.0	2
59	Effect of pre-recovery on subsequent recrystallization kinetics in moderately deformed and supersaturated Al-Mn alloys. Journal of Central South University, 2018, 25, 534-542.	1.2	2
60	Analysis of atomic distribution near grain boundary in Zr Sn Nb Fe-(Cu) alloys by atom probe tomography. Journal of Nuclear Materials, 2019, 515, 135-139.	1.3	2
61	In-situ micro-compression of single-crystal aluminum alloy 6063. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 775, 138974.	2.6	2
62	Effect of Initial Microstructure on the Hot Deformation Behavior and Microstructure Evolution of Aluminum Alloy AA2060. Metals and Materials International, 2022, 28, 1561-1574.	1.8	2
63	Study on the Grain Rotation of High-Purity Tantalum during Compression Deformation. Crystals, 2022, 12, 676.	1.0	2
64	Reply to â€œComment on â€˜A simplified model to calculate the higher surface energy of free-standing nanocrystalsâ€™â€•[phys. stat. sol. (b)242, No. 15, R129-R130 (2005)]. Physica Status Solidi (B): Basic Research, 2005, 242, R131-R133.	0.7	1
65	Preface to the special issue on aluminum alloys for transportation. Journal of Central South University, 2022, 29, 741-743.	1.2	1
66	Effect of platform temperature on microstructure and corrosion resistance of selective laser melted Al-Mg-Sc alloy plate. Journal of Central South University, 2022, 29, 999-1014.	1.2	0