Kai Li

List of Publications by Year
in descending order

38 papers	1,145 citations	489802 18 h-index	445137 33 g-index
39 all docs	39 docs citations	39 times ranked	1095 citing authors

#	Article	IF	Citations
1	Discovery of a bulk C36-type MgZn2 structure step by step transformed from the C14 prototype laves phase structure. Journal of Materials Science, 2022, 57, 2999-3009.	1.7	4
2	Developing Alâ€“Feâ€“Si alloys with high thermal stability through tuning Fe, Si contents and cooling rates. Intermetallics, 2022, 144, 107505.	1.8	13
3	Self-accommodated defect structures modifying the growth of Laves phase. Journal of Materials Science and Technology, 2021, 62, 203-213.	5.6	14
4	Quantified effect of sample size and gas environment on precipitation of an aged Al-Mg-Si alloy. Materials Characterization, 2021, 172, 110829.	1.9	1
5	Formation of amorphous precipitates in a corroded over-aged Al-Mg-Si alloy. Applied Surface Science, 2021, 549, 149329.	3.1	4
6	Shearing and rotation of Î²â€³ and Î²Ê¹ precipitates in an Al-Mg-Si alloy under tensile deformation: In-situ and ex-situ studies. Acta Materialia, 2021, 220, 117310.	3.8	46
7	Generalized Synthetic Strategy for Amorphous Transition Metal Oxidesâ€Based 2D Heterojunctions with Superb Photocatalytic Hydrogen and Oxygen Evolution. Advanced Functional Materials, 2021, 31, 2009230.	7.8	97
8	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
9	Quantified contribution of Î²â€³ and Î²â€² precipitates to the strengthening of an aged Alâ€“Mgâ€“Si alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 774, 138776.	2.6	84
10	Atomic scale investigation of the crystal structure and interfaces of the Bâ€² precipitate in Al-Mg-Si alloys. Acta Materialia, 2020, 185, 193-203.	3.8	72
11	Effects of Cr3C2, VC, and TaC on Microstructure, WC Morphology and Mechanical Properties of Ultrafine WCâ€“10 wt. % Co Cemented Carbides. Metals, 2020, 10, 1211.	1.0	10
12	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si2.svg"><mml:msup><mml:mrow><mml:mi>Î²</mml:mi></mml:mrow><mml:mrow><mml:mtext>'</mml:mtext><mml:mtext> needle-shape precipitate formation in Al-Mg-Si alloy: Phase field simulation and experimental verification. Computational Materials Science, 2020, 184, 109878.	1.4	18
13	Type-II/type-II band alignment to boost spatial charge separation: a case study of g-C₃N₄ quantum dots/a-TiO₂/r-TiO₂ for highly efficient photocatalytic hydrogen and oxygen evolution. Nanoscale, 2020, 12, 6037-6046.	2.8	79
14	Effects of Î¸â€² precipitates on the mechanical performance and fracture behavior of an Alâ€“Cu alloy subjected to overaged condition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 762, 138091.	2.6	13
15	Mechanical properties and oxidation resistance of chemically vapor deposited TiSiN nanocomposite coating with thermodynamically designed compositions. International Journal of Refractory Metals and Hard Materials, 2019, 80, 30-39.	1.7	18
16	Preparation of millimeter scale second phase particles in aluminum alloys and determination of their mechanical properties. Journal of Alloys and Compounds, 2019, 784, 68-75.	2.8	24
17	Effect of electron beam irradiation in TEM on the microstructure and composition of nanoprecipitates in Al-Mg-Si alloys. Micron, 2019, 116, 116-123.	1.1	7
18	On the atomic model of Guinier-Preston zones in Al-Mg-Si-Cu alloys. Journal of Alloys and Compounds, 2018, 745, 644-650.	2.8	18

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19	The Evolution of Second-Phase Particles in 6111 Aluminum Alloy Processed by Hot and Cold Rolling. Journal of Materials Engineering and Performance, 2018, 27, 1130-1137.	1.2	5
20	Phase-field simulation of the solidified microstructure in a new commercial 6Ã—Ã—Ã— aluminum alloy ingot supported by experimental measurements. International Journal of Materials Research, 2018, 109, 91-98.	0.1	7
21	Transformation of fracture mode of an Al-Mg-Si-Cu alloy subject to aging treatment. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 735, 201-207.	2.6	12
22	Effect of stamping deformation on microstructure and properties evolution of an Alâ€“Mgâ€“Siâ€“Cu alloy for automotive panels. Journal of Materials Science, 2017, 52, 5569-5581.	1.7	8
23	Microstructure evolution of WC grains in WCâ€“Coâ€“Niâ€“Al alloys: Effect of binder phase composition. Journal of Alloys and Compounds, 2017, 710, 338-348.	2.8	36
24	Influence of deformation microstructure on the precipitation behaviors of an Al-4Mg-0.3Cu alloy. Journal of Alloys and Compounds, 2017, 695, 2238-2245.	2.8	16
25	Texture, Microstructure and Mechanical Properties of 6111 Aluminum Alloy Subject to Rolling Deformation. Materials Research, 2017, 20, 1360-1368.	0.6	35
26	Developing Cemented Carbides Through ICME. Minerals, Metals and Materials Series, 2017, , 155-167.	0.3	0
27	Microstructure and composition of segregation layers at WC/Co interfaces in ultrafine-grained cemented carbides co-doped with Cr and V. International Journal of Refractory Metals and Hard Materials, 2016, 58, 68-73.	1.7	25
28	Quantitative measurement for the microstructural parameters of nano-precipitates in Al-Mg-Si-Cu alloys. Materials Characterization, 2016, 118, 352-362.	1.9	41
29	Experimental investigation of phase equilibria in the Coâ€“Hf system. Journal of Alloys and Compounds, 2015, 627, 251-260.	2.8	20
30	Effect of nanoprecipitates on the transformation behavior and functional properties of a Tiâ€“50.8 at.% Ni alloy with micron-sized grains. Acta Materialia, 2015, 82, 224-233.	3.8	118
31	Atomistic structure of Cu-containing Î²â€³ precipitates in an Alâ€“Mgâ€“Siâ€“Cu alloy. Scripta Materialia, 2014, 75, 86-89.	2.6	63
32	R-phase transition and related mechanical properties controlled by low-temperature aging treatment in a Tiâ€“50.8at.% Ni thin wire. Scripta Materialia, 2014, 72-73, 21-24.	2.6	50
33	Microstructure and composition of the grain/binder interface in WCâ€“Ni3Al composites. International Journal of Refractory Metals and Hard Materials, 2014, 44, 88-93.	1.7	18
34	Investigation of the as-solidified microstructure of an Alâ€“Mgâ€“Siâ€“Cu alloy. Journal of Alloys and Compounds, 2014, 602, 312-321.	2.8	14
35	Effects of Cu content on the precipitation process of Alâ€“Znâ€“Mg alloys. Journal of Materials Science, 2012, 47, 8174-8187.	1.7	34
36	Effects of Cu and Al on the crystal structure and composition of Î· (MgZn2) phase in over-aged Alâ€“Znâ€“Mgâ€“Cu alloys. Journal of Materials Science, 2012, 47, 5419-5427.	1.7	64

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37	A thermodynamic reassessment of the Siâ€“Sr system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2011, 35, 594-600.	0.7	12
38	Simulation of the electron diffraction patterns from needle/rod-like precipitates in Alâ€“Mgâ€“Si alloys. Materials Characterization, 2011, 62, 894-903.	1.9	17