Yu-Ying Wu

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Quantitative comparison of three Ni-containing phases to the elevated-temperature properties of Alâ€“Si piston alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 7132-7137.	5.6	168
2	Morphological evolution of TiC from octahedron to cube induced by elemental nickel. CrystEngComm, 2012, 14, 2213.	2.6	65
3	Supportive strengthening role of Cr-rich phase on Alâ€“Si multicomponent piston alloy at elevated temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 4427-4430.	5.6	59
4	Unveiling the Semicoherent Interface with Definite Orientation Relationships between Reinforcements and Matrix in Novel Al₃BC/Al Composites. ACS Applied Materials & Interfaces, 2016, 8, 28194-28201.	8.0	53
5	Effects of grain refinement and boron treatment on electrical conductivity and mechanical properties of AA1070 aluminum. Materials and Design, 2015, 86, 397-403.	7.0	47
6	Study on the improvement of electrical conductivity and mechanical properties of low alloying electrical aluminum alloys. Composites Part B: Engineering, 2017, 110, 381-387.	12.0	47
7	Controlled synthesis of different morphologies of TiB2 microcrystals by aluminum melt reaction method. Materials Research Bulletin, 2013, 48, 2044-2048.	5.2	41
8	The improvement of electrical conductivity of hypoeutectic Al-Si alloys achieved by composite melt treatment. Journal of Alloys and Compounds, 2019, 788, 1322-1328.	5.5	21
9	The improvement of boron treatment efficiency and electrical conductivity of AA1070Al achieved by trace Ti assistant. Journal of Alloys and Compounds, 2018, 735, 62-67.	5.5	19
10	Fabrication of hypoeutectic Al-4Si alloy with high electrical conductivity, high plasticity and medium strength by the dual treatment of Al matrix and eutectic Si microstructure. Journal of Alloys and Compounds, 2021, 885, 161117.	5.5	17
11	Fabrication of titanium diborideâ€“carbon coreâ€“shell structure particles and their application as high-efficiency grain refiners of wrought aluminum alloys. Scripta Materialia, 2013, 68, 789-792.	5.2	16
12	Synthesis of Boron Nanosheets in Copper Medium. Scientific Reports, 2019, 9, 17337.	3.3	15
13	Growth of single crystalline boron nanotubes in a Cu alloy. CrystEngComm, 2017, 19, 4510-4518.	2.6	14
14	Absorbing formation mechanism of AlP on TiB2 substrate and their application as high-efficiency nucleating agent in Al-45Si alloy. Journal of Alloys and Compounds, 2017, 693, 853-858.	5.5	13
15	Eutectic nucleation in Al-25wt.%Si alloy through DSC. Rare Metals, 2010, 29, 62-65.	7.1	12
16	In situ formation of nano-scale Cuâ€“Cu2O composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 1544-1547.	5.6	12
17	Growth mechanisms of alpha-boron and beta-boron in a copper melt at ambient pressure and its stabilities. CrystEngComm, 2017, 19, 3947-3954.	2.6	12
18	Evolution and Strengthening Effects of the Heat-Resistant Phases in Alâ€“Si Piston Alloys with Different Fe/Ni Ratios. Materials, 2019, 12, 2506.	2.9	11

#	Article	IF	Citations
19	In situ formation of superhard Cuâ€“B based composite by reducing reaction. Journal of Alloys and Compounds, 2012, 527, 184-187.	5.5	10
20	Superhard Copper Matrix Composite Reinforced by Ultrafine Boron for Wear-Resistant Bearings. ACS Applied Nano Materials, 2018, 1, 5382-5388.	5.0	10
21	In-situ formation of Al-CaB6 composites with low resistivity. Rare Metals, 2012, 31, 578-581.	7.1	9
22	The Effect of Mg Adding Order on the Liquid Structure and Solidified Microstructure of the Al-Si-Mg-P Alloy: An Experiment and ab Initio Study. Metals, 2015, 5, 40-51.	2.3	9
23	The dispersive orientated-precipitation of AlP on alumina film and its effect on the primary Si gathering behavior in the Alâ€“Si alloy surface layer. CrystEngComm, 2014, 16, 5583.	2.6	7
24	A simple method to prepare boron spheres in Cu alloy. Materials Letters, 2017, 205, 24-27.	2.6	6
25	Surface modification of A390 alloy with CaB6 composite coating. Journal of Materials Research and Technology, 2020, 9, 1405-1411.	5.8	6
26	Effect of AlB2 on the P-threshold in Al-Si alloy. Results in Physics, 2018, 9, 734-739.	4.1	4
27	Evolution of a novel Si-18Mn-16Ti-11P alloy in Al-Si melt and its influence on microstructure and properties of high-Si Al-Si alloy. Results in Physics, 2016, 6, 737-745.	4.1	3
28	The evolution mechanism of boron nanoparticles from sphere into petal-like morphologies in copper melts. Materials Letters, 2017, 189, 240-242.	2.6	3
29	Evolution of amorphous boron transformed into crystal nanospheres under electron beam irradiation. Results in Physics, 2020, 16, 102841.	4.1	3
30	Relationship of Ca, B, and AlP in Alâ€“12.6Si alloy. Rare Metals, 2013, 32, 247-251.	7.1	2
31	Growth mechanisms of fiber-like and dendrite-like boron in a Cu melt. CrystEngComm, 2018, 20, 1970-1977.	2.6	2
32	Effect of Mn on growth mechanism and morphology evolution of CrB2 in Al melt. Materials Letters, 2019, 238, 229-232.	2.6	2
33	Influence of the evolution of heat-resistant phases on elevated-temperature strengthening mechanism and deformation behavior in Alâ€“Si multicomponent alloys. Current Applied Physics, 2022, 39, 239-247.	2.4	2
34	Study on spheroidization and the growth mechanism of eutectic boron in Cuâ€“B alloys. CrystEngComm, 2020, 22, 6993-7001.	2.6	1
35	Duplex Nucleation and Its Effect on the Grain Size and Properties of Near Eutectic Al-Si Alloys. Materials, 2022, 15, 2507.	2.9	1
36	A Simple Grinding Method for Preparing Ultra-Thin Boron Nanosheets. Nanomaterials, 2022, 12, 1784.	4.1	0