

Zhiqiang Cao

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9705865/publications.pdf>

Version: 2024-02-01

44
papers

3,219
citations

257101

24
h-index

264894

42
g-index

46
all docs

46
docs citations

46
times ranked

1783
citing authors

#	ARTICLE	IF	CITATIONS
1	A Promising New Class of High-Temperature Alloys: Eutectic High-Entropy Alloys. <i>Scientific Reports</i> , 2014, 4, 6200.	1.6	998
2	Promising properties and future trend of eutectic high entropy alloys. <i>Scripta Materialia</i> , 2020, 187, 202-209.	2.6	308
3	A new strategy to design eutectic high-entropy alloys using mixing enthalpy. <i>Intermetallics</i> , 2017, 91, 124-128.	1.8	203
4	Effect of Niobium on Microstructure and Properties of the CoCrFeNb x Ni High Entropy Alloys. <i>Journal of Materials Science and Technology</i> , 2017, 33, 712-717.	5.6	180
5	A new strategy to design eutectic high-entropy alloys using simple mixture method. <i>Materials and Design</i> , 2018, 142, 101-105.	3.3	172
6	Annealing effects on the microstructure and properties of bulk high-entropy CoCrFeNiTi0.5 alloy casting ingot. <i>Intermetallics</i> , 2014, 44, 37-43.	1.8	125
7	Effect of Eu addition on the microstructures and mechanical properties of A356 aluminum alloys. <i>Journal of Alloys and Compounds</i> , 2015, 650, 896-906.	2.8	106
8	Microstructure and Mechanical Properties of a CoFeNi2V0.5Nb0.75 Eutectic High Entropy Alloy in As-cast and Heat-treated Conditions. <i>Journal of Materials Science and Technology</i> , 2016, 32, 245-250.	5.6	94
9	Effects of Nb addition on structural evolution and properties of the CoFeNi2V0.5 high-entropy alloy. <i>Applied Physics A: Materials Science and Processing</i> , 2015, 119, 291-297.	1.1	93
10	Phase Evolution and Properties of Al2CrFeNiMo x High-Entropy Alloys Coatings by Laser Cladding. <i>Journal of Thermal Spray Technology</i> , 2015, 24, 1333-1340.	1.6	76
11	Evolution of dendrite morphology of a binary alloy under an applied electric current: An <i>in situ</i> observation. <i>Physical Review E</i> , 2010, 81, 042601.	0.8	75
12	Mechanical Properties Improvement of AlCrFeNi2Ti0.5 High Entropy Alloy through Annealing Design and its Relationship with its Particle-reinforced Microstructures. <i>Journal of Materials Science and Technology</i> , 2015, 31, 397-402.	5.6	58
13	Microstructure Evolution and Wear Behavior of the Laser Cladded CoFeNi2V0.5Nb0.75 and CoFeNi2V0.5Nb High-Entropy Alloy Coatings. <i>Journal of Thermal Spray Technology</i> , 2016, 25, 806-814.	1.6	54
14	Microstructure and tribological properties of AlCrFe2Ni2W0.2Mo0.75 high-entropy alloy coating prepared by laser cladding in seawater, NaCl solution and deionized water. <i>Surface and Coatings Technology</i> , 2020, 400, 126214.	2.2	54
15	The microstructure and property of Al-Si alloy and Al-Mn alloy bimetal prepared by continuous casting. <i>Materials Letters</i> , 2012, 67, 21-23.	1.3	51
16	Nanoparticle-Decorated Ultrathin La2O3 Nanosheets as an Efficient Electrocatalysis for Oxygen Evolution Reactions. <i>Nano-Micro Letters</i> , 2020, 12, 49.	14.4	51
17	A novel Co-free Al0.75CrFeNi eutectic high entropy alloy with superior mechanical properties. <i>Journal of Alloys and Compounds</i> , 2022, 902, 163814.	2.8	51
18	A promising structure for fabricating high strength and high electrical conductivity copper alloys. <i>Scientific Reports</i> , 2016, 6, 20799.	1.6	50

#	ARTICLE	IF	CITATIONS
19	Effects of Tungsten on Microstructure and Mechanical Properties of CrFeNiV _{0.5} W _x and CrFeNi ₂ V _{0.5} W _x High-Entropy Alloys. <i>Journal of Materials Engineering and Performance</i> , 2015, 24, 4594-4600.	1.2	46
20	Synthesis and Characterization of AlCoCrFeNiNbx High-Entropy Alloy Coatings by Laser Cladding. <i>Crystals</i> , 2019, 9, 56.	1.0	46
21	Microstructures and Wear Resistance of AlCrFeNi ₂ W _{0.2} Nbx High-Entropy Alloy Coatings Prepared by Laser Cladding. <i>Journal of Thermal Spray Technology</i> , 2019, 28, 1318-1329.	1.6	31
22	Application of synchrotron radiation X-ray computed tomography to investigate the agglomerating behavior of TiB ₂ particles in aluminum. <i>Journal of Alloys and Compounds</i> , 2015, 622, 831-836.	2.8	29
23	Microstructures and Wear Resistance of CoCrFeNi ₂ V _{0.5} Tix High-Entropy Alloy Coatings Prepared by Laser Cladding. <i>Crystals</i> , 2020, 10, 352.	1.0	29
24	Anomalous microstructure and tribological evaluation of AlCrFeNiW _{0.2} Ti _{0.5} high-entropy alloy coating manufactured by laser cladding in seawater. <i>Journal of Materials Science and Technology</i> , 2021, 85, 224-234.	5.6	26
25	Microstructure and Mechanical Properties Investigation of the CoCrFeNiNbx High Entropy Alloy Coatings. <i>Crystals</i> , 2018, 8, 409.	1.0	22
26	Effects of Ta Addition on the Microstructure and Mechanical Properties of CoCu _{0.5} FeNi High-Entropy Alloy. <i>Journal of Materials Engineering and Performance</i> , 2019, 28, 7642-7648.	1.2	21
27	Real time investigation of the grain refinement dynamics in zinc alloy by synchrotron microradiography. <i>Journal of Alloys and Compounds</i> , 2015, 630, 60-67.	2.8	19
28	Effect of strontium addition on silicon phase and mechanical properties of Zn-27Al-3Si alloy. <i>Journal of Alloys and Compounds</i> , 2015, 622, 871-879.	2.8	17
29	In situ observation on the solidification of Sn-10Cu hyperperitectic alloy under direct current field by synchrotron microradiography. <i>Journal of Alloys and Compounds</i> , 2017, 721, 126-133.	2.8	17
30	Modification of the silicon phase and mechanical properties in Al-40Zn-6Si alloy with Eu addition. <i>Materials and Design</i> , 2020, 186, 108268.	3.3	17
31	The interaction between Eu and P in high purity Al-7Si alloys. <i>Materials Characterization</i> , 2016, 120, 129-142.	1.9	13
32	A promising new class of plasticine: Metallic plasticine. <i>Journal of Materials Science and Technology</i> , 2018, 34, 344-348.	5.6	13
33	Real time observation on the solidification of strontium-modified zinc-aluminum-silicon alloys by synchrotron microradiography. <i>Journal of Alloys and Compounds</i> , 2014, 608, 343-351.	2.8	12
34	Effects of Ni on the nucleation and growth behavior of Cu ₆ Sn ₅ in Sn-8.5Cu alloy: An in situ observation. <i>Journal of Alloys and Compounds</i> , 2021, 862, 158603.	2.8	12
35	Effect of Eu on the silicon phase in Al-40Zn-5Si alloys. <i>Journal of Alloys and Compounds</i> , 2017, 722, 116-130.	2.8	9
36	The Influence of Holding Time on the Microstructure Evolution of Mg-10Zn-6.8Gd-4Y Alloy during Semi-Solid Isothermal Heat Treatment. <i>Metals</i> , 2019, 9, 420.	1.0	8

#	ARTICLE	IF	CITATIONS
37	Microstructures and Mechanical Properties of Multi-component $\text{Al}_x\text{CrFe}_2\text{Ni}_2\text{Mo}_{0.2}$ High-Entropy Alloys. <i>Acta Metallurgica Sinica (English Letters)</i> , 2020, 33, 1135-1144.	1.5	8
38	Microstructure and Wear Behavior of In Situ ZA27/TiB ₂ Composites. <i>Metals</i> , 2020, 10, 1663.	1.0	6
39	Effect of Sr addition on the characteristics of as-cast and rolled 3003/4004 clad aluminum. <i>Journal of Alloys and Compounds</i> , 2016, 678, 201-211.	2.8	5
40	Grain nucleation and growth behavior of $(\text{Cu}, \text{Ni})_6\text{Sn}_5$ in $\text{Sn}-10\text{Cu}-1\text{Ni}$ alloy under pulse current: An in situ observation. <i>Materials Characterization</i> , 2019, 158, 109969.	1.9	5
41	Different Influences of Rare Earth Eu Addition on Primary Si Refinement in Hypereutectic $\text{Al}-\text{Si}$ Alloys with Varied Purity. <i>Materials</i> , 2019, 12, 3505.	1.3	5
42	Effect of CeO ₂ Nanoparticles on Interface of Cu/Al ₂ O ₃ Ceramic Clad Composites. <i>Materials</i> , 2020, 13, 1240.	1.3	3
43	Bidirectional pulsed current effect on the precipitation behavior of Cu_6Sn_5 : An in situ observation. <i>Materials Today Communications</i> , 2021, 29, 102825.	0.9	1
44	Synchrotron radiation micro-beam analysis of the effect of strontium on primary silicon in $\text{Zn}-27\text{Al}-3\text{Si}$ alloy. <i>Journal of Alloys and Compounds</i> , 2018, 749, 575-579.	2.8	0