Che Wei Tsai

List of Publications by Year
in descending order

59 papers	5,444 citations	117453 34 h-index	138251 58 g-index
61 all docs	61 docs citations	61 times ranked	2828 citing authors

#	Article	IF	Citations
1	Fatigue behavior of Al0.5CoCrCuFeNi high entropy alloys. Acta Materialia, 2012, 60, 5723-5734.	3.8	646
2	Microstructure and texture evolution during annealing of equiatomic CoCrFeMnNi high-entropy alloy. Journal of Alloys and Compounds, 2014, 587, 544-552.	2.8	413
3	Enhanced mechanical properties of HfMoTaTiZr and HfMoNbTaTiZr refractory high-entropy alloys. Intermetallics, 2015, 62, 76-83.	1.8	407
4	Fatigue behavior of a wrought Al0.5CoCrCuFeNi two-phase high-entropy alloy. Acta Materialia, 2015, 99, 247-258.	3.8	355
5	Criterion for Sigma Phase Formation in Cr- and V-Containing High-Entropy Alloys. Materials Research Letters, 2013, 1, 207-212.	4.1	280
6	Deformation and annealing behaviors of high-entropy alloy Al0.5CoCrCuFeNi. Journal of Alloys and Compounds, 2009, 486, 427-435.	2.8	263
7	Effect of temperature on mechanical properties of Al0.5CoCrCuFeNi wrought alloy. Journal of Alloys and Compounds, 2010, 490, 160-165.	2.8	241
8	Effect of Al addition on mechanical properties and microstructure of refractory AlxHfNbTaTiZr alloys. Journal of Alloys and Compounds, 2015, 624, 100-107.	2.8	201
9	Simultaneously increasing the strength and ductility of a refractory high-entropy alloy via grain refining. Materials Letters, 2016, 184, 200-203.	1.3	168
10	Thermal Stability and Performance of NbSiTaTiZr High-Entropy Alloy Barrier for Copper Metallization. Journal of the Electrochemical Society, 2011, 158, H1161.	1.3	166
11	Tensile deformation behavior and deformation twinning of an equimolar CoCrFeMnNi high-entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 689, 122-133.	2.6	166
12	Solution strengthening of ductile refractory HfMo x NbTaTiZr high-entropy alloys. Materials Letters, 2016, 175, 284-287.	1.3	144
13	Grain growth and Hall-Petch relationship in a refractory HfNbTaZrTi high-entropy alloy. Journal of Alloys and Compounds, 2019, 795, 19-26.	2.8	123
14	Effect of heavy cryo-rolling on the evolution of microstructure and texture during annealing of equiatomic CoCrFeMnNi high entropy alloy. Intermetallics, 2016, 69, 1-9.	1.8	108
15	Experiments and Model for Serration Statistics in Low-Entropy, Medium-Entropy and High-Entropy Alloys. Scientific Reports, 2015, 5, 16997.	1.6	103
16	On microstructure and mechanical performance of AlCoCrFeMo0.5Nix high-entropy alloys. Intermetallics, 2013, 32, 401-407.	1.8	92
17	A light-weight high-entropy alloy Al20Be20Fe10Si15Ti35. Science China Technological Sciences, 2018, 61, 184-188.	2.0	89
18	Alloying behavior of binary to octonary alloys based on Cuâ€“Niâ€“Alâ€“Coâ€“Crâ€“Feâ€“Tiâ€“Mo during mechanical alloying. Journal of Alloys and Compounds, 2009, 477, 696-705.	2.8	85

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19	Superior Oxidation Resistance of (Al_{0.34}Cr_{0.22}Nb_{0.11}Si_{0.11}Ti_{0.22})₅₀N₅₀ Nitride. Journal of the Electrochemical Society, 2013, 160, C531-C535.	3.1	89
20	Morphology, structure and composition of precipitates in Al0.3CoCrCu0.5FeNi high-entropy alloy. Intermetallics, 2013, 32, 329-336.	1.8	82
21	Strong amorphization of high-entropy AlBCrSiTi nitride film. Thin Solid Films, 2012, 520, 2613-2618.	0.8	79
22	Amorphization of equimolar alloys with HCP elements during mechanical alloying. Journal of Alloys and Compounds, 2010, 506, 210-215.	2.8	78
23	Effects of Mo, Nb, Ta, Ti, and Zr on Mechanical Properties of Equiatomic Hf-Mo-Nb-Ta-Ti-Zr Alloys. Entropy, 2019, 21, 15.	1.1	78
24	Effect of the substitution of Co by Mn in Al-Cr-Cu-Fe-Co-Ni high-entropy alloys. European Journal of Control, 2006, 31, 685-698.	1.6	77
25	Temperature Effects on Deformation and Serration Behavior of High-Entropy Alloys (HEAs). Jom, 2014, 66, 2002-2008.	0.9	72
26	Fatigue behavior of high-entropy alloys: A review. Science China Technological Sciences, 2018, 61, 168-178.	2.0	71
27	On the Solidification and Phase Stability of a Co-Cr-Fe-Ni-Ti High-Entropy Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 184-190.	1.1	62
28	Compressive deformation behavior of CrMnFeCoNi high-entropy alloy. Metals and Materials International, 2016, 22, 982-986.	1.8	59
29	Portevin-Le Chatelier mechanism in face-centered-cubic metallic alloys from low to high entropy. International Journal of Plasticity, 2019, 122, 212-224.	4.1	51
30	Intrinsic surface hardening and precipitation kinetics of Al0.3CrFe1.5MnNi0.5 multi-component alloy. Journal of Alloys and Compounds, 2013, 551, 12-18.	2.8	50
31	Heterogeneous structure-induced strength-ductility synergy by partial recrystallization during friction stir welding of a high-entropy alloy. Materials and Design, 2021, 197, 109238.	3.3	46
32	Microstructure and aging behaviour of Al₅Cr₃₂Fe₃₅Ni₂₂Ti₆ high entropy alloy. Materials Science and Technology, 2015, 31, 1165-1170.	0.8	42
33	The effect of heating rate on microstructure and texture formation during annealing of heavily cold-rolled equiatomic CoCrFeMnNi high entropy alloy. Journal of Alloys and Compounds, 2016, 688, 752-761.	2.8	41
34	Effect of cellular structure on the mechanical property of Al0.2Co1.5CrFeNi1.5Ti0.3 high-entropy alloy. Materials Chemistry and Physics, 2018, 210, 103-110.	2.0	38
35	Effects of silicon content on the structure and mechanical properties of (AlCrTaTiZr)â€“Si_xâ€“N coatings by reactive RF magnetron sputtering. Journal Physics D: Applied Physics, 2011, 44, 205405.	1.3	36
36	Effect of Atomic Size Difference on the Microstructure and Mechanical Properties of High-Entropy Alloys. Entropy, 2018, 20, 967.	1.1	34

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37	Improvement in oxidation behavior of Al0.2Co1.5CrFeNi1.5Ti0.3 high-entropy superalloys by minor Nb addition. Journal of Alloys and Compounds, 2020, 825, 153983.	2.8	32
38	Effect of Ge addition on the microstructure, mechanical properties, and corrosion behavior of CoCrFeNi high-entropy alloys. Intermetallics, 2021, 132, 107167.	1.8	32
39	Peierls barrier characteristic and anomalous strain hardening provoked by dynamic-strain-aging strengthening in a body-centered-cubic high-entropy alloy. Materials Research Letters, 2019, 7, 475-481.	4.1	29
40	Element Effects on High-Entropy Alloy Vacancy and Heterogeneous Lattice Distortion Subjected to Quasi-equilibrium Heating. Scientific Reports, 2019, 9, 14788.	1.6	27
41	New TiC/Co1.5CrFeNi1.5Ti0.5 Cermet with Slow TiC Coarsening During Sintering. Jom, 2014, 66, 2050-2056.	0.9	22
42	Structural evolution during mechanical milling and subsequent annealing of Cuâ€“Niâ€“Alâ€“Coâ€“Crâ€“Feâ€“Ti alloys. Materials Chemistry and Physics, 2009, 118, 354-361.	2.0	21
43	Microstructure and tensile properties of Al_{0.5}CoCrCuFeNi alloys produced by simple rolling and annealing. Materials Science and Technology, 2015, 31, 1178-1183.	0.8	20
44	High-temperature shape memory properties of Cu15Ni35Ti25Hf12.5Zr12.5 high-entropy alloy. Journal of Materials Research and Technology, 2021, 14, 1235-1242.	2.6	17
45	High-temperature martensitic transformation of CuNiHfTiZr high- entropy alloys. Scientific Reports, 2019, 9, 19598.	1.6	14
46	Evolution of microstructure and crystallographic texture in severely cold rolled high entropy equiatomic CoCrFeMnNi alloy during annealing. IOP Conference Series: Materials Science and Engineering, 2015, 82, 012068.	0.3	13
47	Deviatoric deformation kinetics in high entropy alloy under hydrostatic compression. Journal of Alloys and Compounds, 2019, 792, 116-121.	2.8	13
48	Study on the damping behaviour of eutectic high-entropy alloys with lamellar structures. Philosophical Magazine Letters, 2019, 99, 226-234.	0.5	12
49	Design of corrosion-resistant high-entropy alloys through valence electron concentration and new PHACOMP. Journal of Alloys and Compounds, 2021, 883, 160787.	2.8	12
50	Element Effects of Mn and Ge on the Tuning of Mechanical Properties of High-Entropy Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 5023-5028.	1.1	11
51	Microstructure and mechanical properties of medium-entropy alloys with a high-density Î-D024 phase. Materials Characterization, 2022, 185, 111713.	1.9	9
52	Effect of Mo on the Mechanical and Corrosion Behaviors in Non-Equal Molar AlCrFeMnNi BCC High-Entropy Alloys. Materials, 2022, 15, 751.	1.3	6
53	Isothermal Oxidation of Aluminized Coatings on High-Entropy Alloys. Entropy, 2016, 18, 376.	1.1	5
54	Disordering of L1₂ Phase in Highâ€Entropy Alloy Deformed at Cryogenic Temperature. Advanced Engineering Materials, 2021, 23, 2100564.	1.6	5

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55	Effects of rotational speed on the Al0.3CoCrCu0.3FeNi high-entropy alloy by friction stir welding. High Temperature Materials and Processes, 2020, 39, 556-566.	0.6	5
56	An effective and efficient model for temperature and molding appearance analyses for selective laser melting process. Journal of Materials Processing Technology, 2021, 294, 117109.	3.1	4
57	High-Temperature Tribological Behavior of Al0.3Cr0.5Fe1.5Mn0.5Ni High-Entropy Alloys With Addition of Titanium and Carbon. Frontiers in Materials, 2022, 8, .	1.2	2
58	Scanning Nano Beam Electron Diffraction and Applications to Characterization of High Entropy Alloys. Microscopy and Microanalysis, 2013, 19, 720-721.	0.2	0
59	A Two-Step Microwave Annealing Process for PAN Pre-Oxidation through a TM-Mode Cavity. Polymers, 2021, 13, 1476.	2.0	0