Ming-Hung Tsai

List of Publications by Year in Descending Order

48 papers	6,268 citations	32 h-index	49 g-index
49 ext. papers	7,752 ext. citations	4.4 avg, IF	6.46 L-index

#	Paper	IF	Citations
48	On the phase constituents of three CoCrFeNiX (X = Cr, Mo, W) high-entropy alloys after prolonged annealing. *Materials Chemistry and Physics*, **2022**, 276, 125431	4.4	1
47	On the phase constituents of three CoCrFeNiX (X□+□B, Al, Ga) high-entropy alloys after prolonged annealing. *Journal of Alloys and Compounds*, **2022**, 900, 163388	5.7	
46	Effect of Cu on the interfacial reaction between Sn-based solders and FeCoNiCu alloys. *Intermetallics*, **2022**, 144, 107530	3.5	2
45	Quantitative prediction of solid solubility limit in single phase high-entropy alloys. *Applied Physics Letters*, **2021**, 119, 141906	3.4	2
44	Mechanical and thermodynamic data-driven design of Al-Co-Cr-Fe-Ni multi-principal element alloys. *Materials Today Communications*, **2021**, 26, 102096	2.5	5
43	Lattice distortion and atomic ordering of the sigma precipitates in CoCrFeNiMo high-entropy alloy. *Journal of Alloys and Compounds*, **2021**, 851, 156909	5.7	12
42	Refractory high entropy superalloys (RSAs). *Scripta Materialia*, **2020**, 187, 445-452	5.6	43
41	On the phase constituents of three CoCrFeNiX (X = V, Nb, Ta) high-entropy alloys after prolonged annealing. *Journal of Alloys and Compounds*, **2020**, 823, 153524	5.7	18
40	On the phase constituents of four CoCrFeNiX (X = Y, Ti, Zr, Hf) high-entropy alloys after prolonged annealing. *Journal of Materials Research and Technology*, **2020**, 9, 11231-11243	5.5	2
39	Theories for predicting simple solid solution high-entropy alloys: Classification, accuracy, and important factors impacting accuracy. *Scripta Materialia*, **2020**, 188, 80-87	5.6	27
38	Corrosion mechanism of annealed equiatomic AlCoCrFeNi tri-phase high-entropy alloy in 0.5 M H2SO4 aerated aqueous solution. *Corrosion Science*, **2019**, 157, 462-471	6.8	34
37	Intermetallic Phases in High-Entropy Alloys: Statistical Analysis of their Prevalence and Structural Inheritance. *Metals*, **2019**, 9, 247	2.3	33
36	Reply to comments on "Sluggish diffusion in Co-Cr-Fe-Mn-Ni high-entropy alloys" by K.Y. Tsai, M.H. Tsai and J.W. Yeh, Acta Materialia 61 (2013) 4887-4897. *Scripta Materialia*, **2017**, 135, 158-159	5.6	19
35	Effect of atomic size difference on the type of major intermetallic phase in arc-melted CoCrFeNiX high-entropy alloys. *Journal of Alloys and Compounds*, **2017**, 695, 1479-1487	5.7	46
34	Incorrect predictions of simple solid solution high entropy alloys: Cause and possible solution. *Scripta Materialia*, **2017**, 127, 6-9	5.6	41
33	Simultaneously increasing the strength and ductility of a refractory high-entropy alloy via grain refining. *Materials Letters*, **2016**, 184, 200-203	3.3	89
32	Atomic-scale homogenization in an fcc-based high-entropy alloy via severe plastic deformation. *Journal of Alloys and Compounds*, **2016**, 686, 15-23	5.7	15

31	Solution strengthening of ductile refractory HfMo x NbTaTiZr high-entropy alloys. *Materials Letters*, **2016**, 175, 284-287	3.3	97
30	A second criterion for sigma phase formation in high-entropy alloys. *Materials Research Letters*, **2016**, 4, 90-95	7.4	83
29	Three Strategies for the Design of Advanced High-Entropy Alloys. *Entropy*, **2016**, 18, 252	2.8	40
28	High-Entropy Coatings **2016**, 469-491		4
27	Enhanced mechanical properties of HfMoTaTiZr and HfMoNbTaTiZr refractory high-entropy alloys. *Intermetallics*, **2015**, 62, 76-83	3.5	273
26	Microstructure and aging behaviour of Al5Cr32Fe35Ni22Ti6 high entropy alloy. *Materials Science and Technology*, **2015**, 31, 1165-1170	1.5	28
25	Machining Performance of Sputter-Deposited (Al0.34Cr0.22Nb0.11Si0.11Ti0.22)50N50 High-Entropy Nitride Coatings. *Coatings*, **2015**, 5, 312-325	2.9	32
24	Microstructure and tensile properties of Al0.5CoCrCuFeNi alloys produced by simple rolling and annealing. *Materials Science and Technology*, **2015**, 31, 1178-1183	1.5	16
23	High-Entropy Alloys: A Critical Review. *Materials Research Letters*, **2014**, 2, 107-123	7.4	1431
22	Ultrastrong Mg Alloy via Nano-spaced Stacking Faults. *Materials Research Letters*, **2013**, 1, 61-66	7.4	204
21	Intrinsic surface hardening and precipitation kinetics of Al0.3CrFe1.5MnNi0.5 multi-component alloy. *Journal of Alloys and Compounds*, **2013**, 551, 12-18	5.7	32
20	Criterion for Sigma Phase Formation in Cr- and V-Containing High-Entropy Alloys. *Materials Research Letters*, **2013**, 1, 207-212	7.4	196
19	Physical Properties of High Entropy Alloys. *Entropy*, **2013**, 15, 5338-5345	2.8	161
18	Morphology, structure and composition of precipitates in Al0.3CoCrCu0.5FeNi high-entropy alloy. *Intermetallics*, **2013**, 32, 329-336	3.5	64
17	Structure and properties of two AlCrNbSiTi high-entropy nitride coatings. *Surface and Coatings Technology*, **2013**, 221, 118-123	4.4	83
16	Significant hardening due to the formation of a sigma phase matrix in a high entropy alloy. *Intermetallics*, **2013**, 33, 81-86	3.5	112
15	Sluggish diffusion in CoCrFeMnNi high-entropy alloys. *Acta Materialia*, **2013**, 61, 4887-4897	8.4	1049
14	Dislocations with edge components in nanocrystalline bcc Mo. *Journal of Materials Research*, **2013**, 28, 1820-1826	2.5	21

13	Superior Oxidation Resistance of (Al0.34Cr0.22Nb0.11Si0.11Ti0.22)50N50High-Entropy Nitride. *Journal of the Electrochemical Society*, **2013**, 160, C531-C535	3.9	54
12	Effect of nitrogen content and substrate bias on mechanical and corrosion properties of high-entropy films (AlCrSiTiZr)100Nx. *Surface and Coatings Technology*, **2012**, 206, 4106-4112	4.4	104
11	Strong amorphization of high-entropy AlBCrSiTi nitride film. *Thin Solid Films*, **2012**, 520, 2613-2618	2.2	56
10	Effects of substrate bias on the structure and mechanical properties of (Al1.5CrNb0.5Si0.5Ti)Nx coatings. *Thin Solid Films*, **2012**, 520, 6183-6188	2.2	60
9	Thermal Stability and Performance of NbSiTaTiZr High-Entropy Alloy Barrier for Copper Metallization. *Journal of the Electrochemical Society*, **2011**, 158, H1161	3.9	127
8	Microstructure and wear behavior of AlxCo1.5CrFeNi1.5Tiy high-entropy alloys. *Acta Materialia*, **2011**, 59, 6308-6317	8.4	786
7	Effect of temperature on mechanical properties of Al0.5CoCrCuFeNi wrought alloy. *Journal of Alloys and Compounds*, **2010**, 490, 160-165	5.7	193
6	Evolution of structure and properties of multi-component (AlCrTaTiZr)Ox films. *Thin Solid Films*, **2010**, 518, 2732-2737	2.2	59
5	Deformation and annealing behaviors of high-entropy alloy Al0.5CoCrCuFeNi. *Journal of Alloys and Compounds*, **2009**, 486, 427-435	5.7	215
4	Effects of nitrogen flow ratio on the structure and properties of reactively sputtered (AlMoNbSiTaTiVZr)Nxcoatings. *Journal Physics D: Applied Physics*, **2008**, 41, 235402	3	39
3	Thermally stable amorphous (AlMoNbSiTaTiVZr)50N50 nitride film as diffusion barrier in copper metallization. *Applied Physics Letters*, **2008**, 92, 052109	3.4	74
2	Diffusion barrier properties of AlMoNbSiTaTiVZr high-entropy alloy layer between copper and silicon. *Thin Solid Films*, **2008**, 516, 5527-5530	2.2	121
1	Influence of substrate temperature on structure and mechanical, properties of multi-element (AlCrTaTiZr)N coatings. *Surface and Coatings Technology*, **2007**, 201, 6993-6998	4.4	64