Yi-Ping Lu

List of Publications by Citations

99 papers	4,153 citations	33 h-index	64 g-index
102 ext. papers	5,821 ext. citations	4.9 avg, IF	5.92 L-index

#	Paper	IF	Citations
99	A promising new class of high-temperature alloys: eutectic high-entropy alloys. *Scientific Reports*, **2014**, 4, 6200	4.9	604
98	Directly cast bulk eutectic and near-eutectic high entropy alloys with balanced strength and ductility in a wide temperature range. *Acta Materialia*, **2017**, 124, 143-150	8.4	483
97	Microstructural origins of high strength and high ductility in an AlCoCrFeNi2.1 eutectic high-entropy alloy. *Acta Materialia*, **2017**, 141, 59-66	8.4	266
96	Microstructure and mechanical properties of multi-component AlCrFeNiMox high-entropy alloys. *Journal of Alloys and Compounds*, **2013**, 573, 96-101	5.7	160
95	Effect of vanadium addition on the microstructure and properties of AlCoCrFeNi high entropy alloy. *Materials & Design*, **2014**, 57, 67-72		159
94	A promising new class of irradiation tolerant materials: Ti2ZrHfV0.5Mo0.2 high-entropy alloy. *Journal of Materials Science and Technology*, **2019**, 35, 369-373	9.1	145
93	Effects of electro-negativity on the stability of topologically close-packed phase in high entropy alloys. *Intermetallics*, **2014**, 52, 105-109	3.5	137
92	Promising properties and future trend of eutectic high entropy alloys. *Scripta Materialia*, **2020**, 187, 202-209	3.7	126
91	A new strategy to design eutectic high-entropy alloys using mixing enthalpy. *Intermetallics*, **2017**, 91, 124-128	3.5	124
90	Effect of Niobium on Microstructure and Properties of the CoCrFeNbxNi High Entropy Alloys. *Journal of Materials Science and Technology*, **2017**, 33, 712-717	9.1	108
89	A new strategy to design eutectic high-entropy alloys using simple mixture method. *Materials and Design*, **2018**, 142, 101-105	8.1	95
88	Microstructures and mechanical properties of Co2MoxNi2VWx eutectic high entropy alloys. *Materials and Design*, **2016**, 109, 539-546	8.1	89
87	A multi-component AlCrFe2Ni2 alloy with excellent mechanical properties. *Materials Letters*, **2016**, 169, 62-64	3.3	86
86	Annealing effects on the microstructure and properties of bulk high-entropy CoCrFeNiTi0.5 alloy casting ingot. *Intermetallics*, **2014**, 44, 37-43	3.5	86
85	Effects of Ta addition on the microstructures and mechanical properties of CoCrFeNi high entropy alloy. *Materials Chemistry and Physics*, **2018**, 210, 43-48	4.4	82
84	Effects of Nb addition on structural evolution and properties of the CoFeNi2V0.5 high-entropy alloy. *Applied Physics A: Materials Science and Processing*, **2015**, 119, 291-297	2.6	67
83	Microstructure and Mechanical Properties of a CoFeNi2V0.5Nb0.75 Eutectic High Entropy Alloy in As-cast and Heat-treated Conditions. *Journal of Materials Science and Technology*, **2016**, 32, 245-250	9.1	66

82	A novel bulk eutectic high-entropy alloy with outstanding as-cast specific yield strengths at elevated temperatures. *Scripta Materialia*, **2021**, 204, 114132	5.6	57
81	A novel Cu-bearing high-entropy alloy with significant antibacterial behavior against corrosive marine biofilms. *Journal of Materials Science and Technology*, **2020**, 46, 201-210	9.1	53
80	A Criterion for Topological Close-Packed Phase Formation in High Entropy Alloys. *Entropy*, **2015**, 17, 2355-2366	2.1	53
79	Effect of carbon addition on the microstructure and mechanical properties of CoCrFeNi high entropy alloy. *Science China Technological Sciences*, **2018**, 61, 117-123	3.5	47
78	Direct solidification of bulk ultrafine-microstructure eutectic high-entropy alloys with outstanding thermal stability. *Scripta Materialia*, **2019**, 165, 145-149	5.6	47
77	The superior hydrogen-generation performance of multi-component Al alloys by the hydrolysis reaction. *International Journal of Hydrogen Energy*, **2019**, 44, 3527-3537	6.7	47
76	Effects of annealing treatment on microstructure and hardness of bulk AlCrFeNiMo0.2 eutectic high-entropy alloy. *Materials and Design*, **2015**, 82, 91-97	8.1	46
75	A novel high-entropy alloy composite coating with core-shell structures prepared by plasma cladding. *Vacuum*, **2021**, 184, 109905	3.7	46
74	Deformation mechanism during high-temperature tensile test in an eutectic high-entropy alloy AlCoCrFeNi2.1. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2018**, 724, 148-155	5.3	45
73	Mechanical Properties Improvement of AlCrFeNi2Ti0.5 High Entropy Alloy through Annealing Design and its Relationship with its Particle-reinforced Microstructures. *Journal of Materials Science and Technology*, **2015**, 31, 397-402	9.1	43
72	A promising structure for fabricating high strength and high electrical conductivity copper alloys. *Scientific Reports*, **2016**, 6, 20799	4.9	39
71	The interaction and migration of deformation twin in an eutectic high-entropy alloy AlCoCrFeNi2.1. *Journal of Materials Science and Technology*, **2019**, 35, 902-906	9.1	36
70	Tribological behavior of an AlCoCrFeNi2.1 eutectic high entropy alloy sliding against different counterfaces. *Tribology International*, **2021**, 153, 106599	4.9	35
69	Preparing bulk ultrafine-microstructure high-entropy alloys via direct solidification. *Nanoscale*, **2018**, 10, 1912-1919	7.7	33
68	Effects of Tungsten on Microstructure and Mechanical Properties of CrFeNiV0.5W x and CrFeNi2V0.5W x High-Entropy Alloys. *Journal of Materials Engineering and Performance*, **2015**, 24, 4594-4600	1.6	33
67	Microstructure and tribological properties of AlCrFe2Ni2W0.2Mo0.75 high-entropy alloy coating prepared by laser cladding in seawater, NaCl solution and deionized water. *Surface and Coatings Technology*, **2020**, 400, 126214	4.4	33
66	Effect of minor B addition on microstructure and properties of AlCoCrFeNi multi-compenent alloy. *Transactions of Nonferrous Metals Society of China*, **2015**, 25, 2958-2964	3.3	32
65	Fabrication process and bending properties of carbon fibers reinforced Al-alloy matrix composites. *Journal of Materials Processing Technology*, **2016**, 231, 366-373	5.3	29

64	Extraordinary ductility and strain hardening of Cr26Mn20Fe20Co20Ni14 TWIP high-entropy alloy by cooperative planar slipping and twinning. *Materialia*, **2019**, 8, 100485	3.2	27
63	Faceted Kurdjumov-Sachs interface-induced slip continuity in the eutectic high-entropy alloy, AlCoCrFeNi2.1. *Journal of Materials Science and Technology*, **2021**, 65, 216-227	9.1	26
62	The Exceptional Strong Face-centered Cubic Phase and Semi-coherent Phase Boundary in a Eutectic Dual-phase High Entropy Alloy AlCoCrFeNi. *Scientific Reports*, **2018**, 8, 14910	4.9	26
61	Effects of Tungsten Addition on the Microstructure and Mechanical Properties of Near-Eutectic AlCoCrFeNi2 High-Entropy Alloy. *Journal of Materials Engineering and Performance*, **2018**, 27, 109-115	1.6	24
60	A Novel Series of Refractory High-Entropy Alloys Ti2ZrHf0.5VNbx with High Specific Yield Strength and Good Ductility. *Acta Metallurgica Sinica (English Letters)*, **2019**, 32, 925-931	2.5	23
59	Liquid rolling of woven carbon fibers reinforced Al5083-matrix composites. *Materials and Design*, **2016**, 95, 89-96	8.1	22
58	Effect of electromagnetic stirring on microstructure and properties of Al0.5CoCrCuFeNi alloy. *Procedia Engineering*, **2012**, 27, 1129-1134		22
57	Fabrication of woven carbon fibers reinforced Al□Mg (95□ wt%) matrix composites by an electromagnetic casting process. *Journal of Materials Processing Technology*, **2015**, 226, 78-84	5.3	20
56	Composition, Microstructure, Phase Constitution and Fundamental Physicochemical Properties of Low-Melting-Point Multi-Component Eutectic Alloys. *Journal of Materials Science and Technology*, **2017**, 33, 131-154	9.1	19
55	Effect of plasma remelting on microstructure and properties of a CoCrCuNiAl0.5 high-entropy alloy prepared by spark plasma sintering. *Journal of Materials Science*, **2021**, 56, 5878-5898	4.3	17
54	Effects of Fe Content on Microstructures and Properties of AlCoCrFe x Ni High-Entropy Alloys. *Arabian Journal for Science and Engineering*, **2015**, 40, 3657-3663		16
53	Microstructures and Wear Resistance of AlCrFeNi2W0.2Nbx High-Entropy Alloy Coatings Prepared by Laser Cladding. *Journal of Thermal Spray Technology*, **2019**, 28, 1318-1329	2.5	16
52	Effects of Mo on microstructure and mechanical properties of Fe2Ni2CrMox eutectic high entropy alloys. *Materials Chemistry and Physics*, **2021**, 260, 124175	4.4	16
51	Effects of Ta Addition on the Microstructure and Mechanical Properties of CoCu0.5FeNi High-Entropy Alloy. *Journal of Materials Engineering and Performance*, **2019**, 28, 7642-7648	1.6	13
50	Novel (CoFe2NiV0.5Mo0.2)100−xNbx Eutectic High-Entropy Alloys with Excellent Combination of Mechanical and Corrosion Properties. *Acta Metallurgica Sinica (English Letters)*, **2020**, 33, 1046-1056	2.5	12
49	The transition of alpha-Ni phase morphology in highly undercooled eutectic Ni 78.6 Si 21.4 alloy. *Europhysics Letters*, **2006**, 74, 281-286	1.6	12
48	Directional solidification of highly undercooled eutectic Ni78.6Si21.4 alloy. *Materials Letters*, **2005**, 59, 1558-1562	3.3	12
47	Effect of Ti content on microstructure and properties of TixZrVNb refractory high-entropy alloys. *International Journal of Minerals, Metallurgy and Materials*, **2020**, 27, 1318-1325	3.1	12

46	Effect of Sc and Y addition on the microstructure and properties of HCP-structured high-entropy alloys. *Applied Physics A: Materials Science and Processing*, **2019**, 125, 1	2.6	11
45	Infiltration behavior and mechanism in semi-solid rolling of carbon fibers reinforced Al-matrix composite. *Materials and Design*, **2019**, 182, 108102	8.1	10
44	The formation of quasiregular microstructure in highly undercooled Ni70.2Si29.8 eutectic alloy. *Journal of Applied Physics*, **2008**, 104, 013535	2.5	10
43	Tungsten-containing high-entropy alloys: a focused review of manufacturing routes, phase selection, mechanical properties, and irradiation resistance properties. *Tungsten*, **2021**, 3, 181-196	4.6	10
42	Cu-bearing high-entropy alloys with excellent antiviral properties. *Journal of Materials Science and Technology*, **2021**, 84, 59-64	9.1	10
41	A novel ZrNbMoTaW refractory high-entropy alloy with in-situ forming heterogeneous structure. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2021**, 827, 142061	5.3	9
40	Microstructure and mechanical properties of CxHf0.25NbTaW0.5 refractory high-entropy alloys at room and high temperatures. *Journal of Materials Science and Technology*, **2022**, 97, 229-238	9.1	9
39	Composite growth in highly undercooled Ni70.2Si29.8 eutectic alloy. *Applied Physics Letters*, **2006**, 89, 241902	3.4	8
38	The mechanical and oxidation properties of novel B2-ordered Ti2ZrHf0.5VNb0.5Alx refractory high-entropy alloys. *Materials Characterization*, **2021**, 178, 111287	3.9	8
37	Effect of Electromagnetic Field on Microstructure and Properties of Bulk AlCrFeNiMo0.2 High-Entropy Alloy. *Journal of Materials Engineering and Performance*, **2015**, 24, 4475-4481	1.6	7
36	A promising new class of plasticine: Metallic plasticine. *Journal of Materials Science and Technology*, **2018**, 34, 344-348	9.1	7
35	Microstructure and Mechanical Properties of Al-8 pct Si Alloy Prepared by Direct Chill Casting Under Electromagnetic and Ultrasonic Fields. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2014**, 45, 2014-2022	2.3	7
34	Controllable 3D morphology and growth mechanism of quasicrystalline phase in directionally solidified AlMnBe alloy. *Journal of Materials Research*, **2014**, 29, 2547-2555	2.5	7
33	Simultaneously enhanced strength-ductility of AlCoCrFeNi2.1 eutectic high-entropy alloy via additive manufacturing. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2022**, 830, 142327	5.3	7
32	Electroless nickel plating and spontaneous infiltration behavior of woven carbon fibers. *Materials and Design*, **2020**, 186, 108301	8.1	7
31	Novel as-cast AlCrFe2Ni2Ti05 high-entropy alloy with excellent mechanical properties. *International Journal of Minerals, Metallurgy and Materials*, **2020**, 27, 1312-1317	3.1	7
30	Microstructure and mechanical properties of Ti3V2NbAl Ni low-density refractory multielement alloys. *Intermetallics*, **2021**, 133, 107187	3.5	5
29	Microstructure and Mechanical Properties of (hbox {CoCrFeNi}_{2}hbox {Al}_{1{-}{x}}hbox {W}_{{x}}) High Entropy Alloys. *Arabian Journal for Science and Engineering*, **2019**, 44, 803-808	2.5	5

28	Grouping strategy via d-orbit energy level to design eutectic high-entropy alloys. *Applied Physics Letters*, **2021**, 119, 071905	3.4	5
27	Electromagnetic modification of faceted-faceted Ni31Si12-Ni2Si eutectic alloy. *Science Bulletin*, **2012**, 57, 1595-1599		4
26	A novel Co-free Al0.75CrFeNi eutectic high entropy alloy with superior mechanical properties. *Journal of Alloys and Compounds*, **2022**, 902, 163814	5.7	4
25	Surface modification for AlCoCrFeNi2.1 eutectic high-entropy alloy via laser remelting technology and subsequent aging heat treatment. *Journal of Alloys and Compounds*, **2022**, 894, 162380	5.7	4
24	Microstructure and Fabrication of Cu-Pb-Sn/Q235 Laminated Composite by Semi-Solid Rolling. *Metals*, **2018**, 8, 722	2.3	4
23	Effect of Zr on the as-cast microstructure and mechanical properties of lightweight Ti2VNbMoZrx refractory high-entropy alloys. *International Journal of Refractory Metals and Hard Materials*, **2022**, 103, 105762	4.1	3
22	Entropy as a selection rule for crystal growth in undercooled binary eutectic melts. *Science Bulletin*, **2009**, 54, 1012-1018	10.6	2
21	Ductile and ultrahigh-strength eutectic high-entropy alloys by large-volume 3D printing. *Journal of Materials Science and Technology*, **2022**,	9.1	2
20	Hot deformation behavior and microstructure evolution of non-equimolar Ti2ZrHfV0.5Ta0.2 refractory high-entropy alloy. *Intermetallics*, **2022**, 146, 107586	3.5	2
19	Constructing Bi2WO6-decorated TiO2 composite films for photocathodic protection of 304 stainless steel. *Journal of Iron and Steel Research International*, **2021**, 28, 1054-1063	1.2	1
18	Evolution of Microstructure and Mechanical Properties of As-Cast AlxCrFe2Ni2 High-Entropy Alloys with Al Content. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2021**, 52, 1850-1860	2.3	1
17	Effect of Ti and Nb Contents on Microstructure and Mechanical Properties of HfZrVTaMoWTixNby Refractory High-Entropy Alloys. *Advanced Engineering Materials*, **2021**, 23, 2100225	3.5	1
16	Effects of deformation and annealing on the microstructures and properties of a nonequiatomic Co29Cr29Fe29Ni12.5W0.5 high-entropy alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 805, 140548	5.3	1
15	Tuning deformation mechanisms of face-centered-cubic high-entropy alloys via boron doping. *Journal of Alloys and Compounds*, **2022**, 165103	5.7	1
14	Re-rolling technology and alloying-element distribution of carbon fibers reinforced Al-matrix composite. *Journal of Materials Processing Technology*, **2020**, 281, 116617	5.3	0
13	3D Morphology and Formation Process of the Icosahedral Quasicrystalline Phase in Rapidly Solidified Al[illegible]Mn Alloy. *Acta Metallurgica Sinica (English Letters)*, **2016**, 29, 28-31	2.5	0
12	Criteria for laves-phase formation in refractory high-entropy alloys. *Philosophical Magazine Letters*,1-17	1	0
11	Novel Fe2CoNi(AlSi)x high-entropy alloys with attractive soft magnetic and mechanical properties. *Applied Physics A: Materials Science and Processing*, **2021**, 127, 1	2.6	0

List of Publications

10	A novel as-cast precipitation-strengthened Al0.5V0.1FeCrMnNi0.9 high-entropy alloy with high strength and plasticity. *Science China Technological Sciences*, **2021**, 64, 1920-1926	3.5	0
9	Antibacterial activities of a novel Cu-bearing high-entropy alloy against multi-drug-resistant Acinetobacter baumannii and Staphylococcus aureus. *Rare Metals*,1	5.5	0
8	Microstructure evolution and mechanical properties of CrFeNixV0.64Ta0.36 eutectic high-entropy alloys. *Materials Characterization*, **2021**, 181, 111449	3.9	0
7	Microstructures and Mechanical Properties of NixCoCrFeMo0.1 Multi-component Alloys **2018**, 293-300		
6	Microstructural refinement and performance improvement of Cu–36 wt% Zn alloy by Al2O3 nanoparticles coupling electromagnetic stirring. *Rare Metals*, **2016**, 1	5.5	
5	Effects of Iron on Microstructure and Properties of CoCrFexNi Multi-principal Element Alloys **2018**, 253-258		
4	Microstructure evolution and non-equilibrium solidification of undercooled Ni-29.8at% Si eutectic alloy melts. *Science China Technological Sciences*, **2010**, 53, 1043-1048	3.5	
3	Preface to the Special Issue: High-Entropy Alloys. *Acta Metallurgica Sinica (English Letters)*, **2020**, 33, 1031-1032	2.5	
2	Brittle-to-ductile transition in TiPt intermetallic compounds. *Science Bulletin*, **2021**, 66, 2281-2287	10.6	
1	A Novel Series of Fe8.25CoCrNiMnNb0.1Mox Multi-Component Alloys with Excellent Combined Strength and Ductility. *Journal of Materials Engineering and Performance*,1	1.6	