

Yi-Ping Lu

List of Publications by Year in descending order

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102
papers

7,546
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66315

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docs citations

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times ranked

2531
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	Directly cast bulk eutectic and near-eutectic high entropy alloys with balanced strength and ductility in a wide temperature range. <i>Acta Materialia</i> , 2017, 124, 143-150.	3.8	747
3	Microstructural origins of high strength and high ductility in an AlCoCrFeNi _{2.1} eutectic high-entropy alloy. <i>Acta Materialia</i> , 2017, 141, 59-66.	3.8	501
4	Promising properties and future trend of eutectic high entropy alloys. <i>Scripta Materialia</i> , 2020, 187, 202-209.	2.6	308
5	A promising new class of irradiation tolerant materials: Ti ₂ ZrHfV _{0.5} Mo _{0.2} high-entropy alloy. <i>Journal of Materials Science and Technology</i> , 2019, 35, 369-373.	5.6	266
6	Microstructure and mechanical properties of multi-component AlCrFeNiMox high-entropy alloys. <i>Journal of Alloys and Compounds</i> , 2013, 573, 96-101.	2.8	229
7	Effect of vanadium addition on the microstructure and properties of AlCoCrFeNi high entropy alloy. <i>Materials & Design</i> , 2014, 57, 67-72.	5.1	222
8	Effects of electro-negativity on the stability of topologically close-packed phase in high entropy alloys. <i>Intermetallics</i> , 2014, 52, 105-109.	1.8	210
9	A new strategy to design eutectic high-entropy alloys using mixing enthalpy. <i>Intermetallics</i> , 2017, 91, 124-128.	1.8	203
10	A novel bulk eutectic high-entropy alloy with outstanding as-cast specific yield strengths at elevated temperatures. <i>Scripta Materialia</i> , 2021, 204, 114132.	2.6	192
11	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
12	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
13	A multi-component AlCrFe ₂ Ni ₂ alloy with excellent mechanical properties. <i>Materials Letters</i> , 2016, 169, 62-64.	1.3	150
14	Microstructures and mechanical properties of Co ₂ MoxNi ₂ VW _x eutectic high entropy alloys. <i>Materials and Design</i> , 2016, 109, 539-546.	3.3	132
15	Effects of Ta addition on the microstructures and mechanical properties of CoCrFeNi high entropy alloy. <i>Materials Chemistry and Physics</i> , 2018, 210, 43-48.	2.0	127
16	Annealing effects on the microstructure and properties of bulk high-entropy CoCrFeNiTi _{0.5} alloy casting ingot. <i>Intermetallics</i> , 2014, 44, 37-43.	1.8	125
17	Tribological behavior of an AlCoCrFeNi _{2.1} eutectic high entropy alloy sliding against different counterfaces. <i>Tribology International</i> , 2021, 153, 106599.	3.0	112
18	A novel Cu-bearing high-entropy alloy with significant antibacterial behavior against corrosive marine biofilms. <i>Journal of Materials Science and Technology</i> , 2020, 46, 201-210.	5.6	108

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19	Direct solidification of bulk ultrafine-microstructure eutectic high-entropy alloys with outstanding thermal stability. <i>Scripta Materialia</i> , 2019, 165, 145-149.	2.6	104
20	Faceted Kurdjumov-Sachs interface-induced slip continuity in the eutectic high-entropy alloy, AlCoCrFeNi _{2.1} . <i>Journal of Materials Science and Technology</i> , 2021, 65, 216-227.	5.6	95
21	Microstructure and Mechanical Properties of a CoFeNi ₂ V _{0.5} Nb _{0.75} 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
22	A novel high-entropy alloy composite coating with core-shell structures prepared by plasma cladding. <i>Vacuum</i> , 2021, 184, 109905.	1.6	94
23	Effects of Nb addition on structural evolution and properties of the CoFeNi ₂ V _{0.5} high-entropy alloy. <i>Applied Physics A: Materials Science and Processing</i> , 2015, 119, 291-297.	1.1	93
24	Deformation mechanism during high-temperature tensile test in an eutectic high-entropy alloy AlCoCrFeNi _{2.1} . <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 724, 148-155.	2.6	90
25	Effect of carbon addition on the microstructure and mechanical properties of CoCrFeNi high entropy alloy. <i>Science China Technological Sciences</i> , 2018, 61, 117-123.	2.0	79
26	A Criterion for Topological Close-Packed Phase Formation in High Entropy Alloys. <i>Entropy</i> , 2015, 17, 2355-2366.	1.1	77
27	The interaction and migration of deformation twin in an eutectic high-entropy alloy AlCoCrFeNi _{2.1} . <i>Journal of Materials Science and Technology</i> , 2019, 35, 902-906.	5.6	67
28	Effects of annealing treatment on microstructure and hardness of bulk AlCrFeNiMo _{0.2} eutectic high-entropy alloy. <i>Materials and Design</i> , 2015, 82, 91-97.	3.3	66
29	The superior hydrogen-generation performance of multi-component Al alloys by the hydrolysis reaction. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 3527-3537.	3.8	63
30	A novel ZrNbMoTaW refractory high-entropy alloy with in-situ forming heterogeneous structure. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 827, 142061.	2.6	59
31	Mechanical Properties Improvement of AlCrFeNi ₂ Ti _{0.5} 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
32	Ductile and ultrahigh-strength eutectic high-entropy alloys by large-volume 3D printing. <i>Journal of Materials Science and Technology</i> , 2022, 126, 15-21.	5.6	57
33	Microstructure and tribological properties of AlCrFe ₂ Ni ₂ W _{0.2} Mo _{0.75} 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
34	Microstructure and mechanical properties of C Hf _{0.25} NbTaW _{0.5} refractory high-entropy alloys at room and high temperatures. <i>Journal of Materials Science and Technology</i> , 2022, 97, 229-238.	5.6	52
35	Preparing bulk ultrafine-microstructure high-entropy alloys <i>via</i> direct solidification. <i>Nanoscale</i> , 2018, 10, 1912-1919.	2.8	51
36	The mechanical and oxidation properties of novel B2-ordered Ti ₂ ZrHf _{0.5} VNb _{0.5} Al _x refractory high-entropy alloys. <i>Materials Characterization</i> , 2021, 178, 111287.	1.9	51

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37	A novel Co-free Al _{0.75} CrFeNi eutectic high entropy alloy with superior mechanical properties. <i>Journal of Alloys and Compounds</i> , 2022, 902, 163814.	2.8	51
38	A promising structure for fabricating high strength and high electrical conductivity copper alloys. <i>Scientific Reports</i> , 2016, 6, 20799.	1.6	50
39	Extraordinary ductility and strain hardening of Cr ₂₆ Mn ₂₀ Fe ₂₀ Co ₂₀ Ni ₁₄ TWIP high-entropy alloy by cooperative planar slipping and twinning. <i>Materialia</i> , 2019, 8, 100485.	1.3	49
40	Effect of minor B addition on microstructure and properties of AlCoCrFeNi multi-component alloy. <i>Transactions of Nonferrous Metals Society of China</i> , 2015, 25, 2958-2964.	1.7	46
41	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
42	Effects of Tungsten Addition on the Microstructure and Mechanical Properties of Near-Eutectic AlCoCrFeNi ₂ High-Entropy Alloy. <i>Journal of Materials Engineering and Performance</i> , 2018, 27, 109-115.	1.2	45
43	Simultaneously enhanced strength-ductility of AlCoCrFeNi _{2.1} eutectic high-entropy alloy via additive manufacturing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 830, 142327.	2.6	45
44	A Novel Series of Refractory High-Entropy Alloys Ti ₂ ZrHf _{0.5} VNb _x with High Specific Yield Strength and Good Ductility. <i>Acta Metallurgica Sinica (English Letters)</i> , 2019, 32, 925-931.	1.5	42
45	Effect of Ti content on microstructure and properties of Ti _x ZrVNb refractory high-entropy alloys. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2020, 27, 1318-1325.	2.4	41
46	The Exceptional Strong Face-centered Cubic Phase and Semi-coherent Phase Boundary in a Eutectic Dual-phase High Entropy Alloy AlCoCrFeNi. <i>Scientific Reports</i> , 2018, 8, 14910.	1.6	39
47	Effects of Mo on microstructure and mechanical properties of Fe ₂ Ni ₂ CrMox eutectic high entropy alloys. <i>Materials Chemistry and Physics</i> , 2021, 260, 124175.	2.0	36
48	Hot deformation behavior and microstructure evolution of non-equimolar Ti ₂ ZrHfV _{0.5} Ta _{0.2} refractory high-entropy alloy. <i>Intermetallics</i> , 2022, 146, 107586.	1.8	35
49	Fabrication process and bending properties of carbon fibers reinforced Al-alloy matrix composites. <i>Journal of Materials Processing Technology</i> , 2016, 231, 366-373.	3.1	34
50	Surface modification for AlCoCrFeNi _{2.1} eutectic high-entropy alloy via laser remelting technology and subsequent aging heat treatment. <i>Journal of Alloys and Compounds</i> , 2022, 894, 162380.	2.8	34
51	Enhanced antibacterial behavior of a novel Cu-bearing high-entropy alloy. <i>Journal of Materials Science and Technology</i> , 2022, 117, 158-166.	5.6	33
52	Effect of Zr on the as-cast microstructure and mechanical properties of lightweight Ti ₂ VNbMoZrx refractory high-entropy alloys. <i>International Journal of Refractory Metals and Hard Materials</i> , 2022, 103, 105762.	1.7	32
53	Microstructures and Wear Resistance of AlCrFeNi ₂ W _{0.2} Nb _x High-Entropy Alloy Coatings Prepared by Laser Cladding. <i>Journal of Thermal Spray Technology</i> , 2019, 28, 1318-1329.	1.6	31
54	Effect of plasma remelting on microstructure and properties of a CoCrCuNiAl _{0.5} high-entropy alloy prepared by spark plasma sintering. <i>Journal of Materials Science</i> , 2021, 56, 5878-5898.	1.7	31

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55	Effect of electromagnetic stirring on microstructure and properties of Al _{0.5} CoCrCuFeNi alloy. <i>Procedia Engineering</i> , 2012, 27, 1129-1134.	1.2	28
56	Composition, Microstructure, Phase Constitution and Fundamental Physicochemical Properties of Low-Melting-Point Multi-Component Eutectic Alloys. <i>Journal of Materials Science and Technology</i> , 2017, 33, 131-154.	5.6	28
57	Novel (CoFe ₂ NiV _{0.5} Mo _{0.2}) _{100-x} Nb _x Eutectic High-Entropy Alloys with Excellent Combination of Mechanical and Corrosion Properties. <i>Acta Metallurgica Sinica (English Letters)</i> , 2020, 33, 1046-1056.	1.5	28
58	Liquid rolling of woven carbon fibers reinforced Al5083-matrix composites. <i>Materials and Design</i> , 2016, 95, 89-96.	3.3	27
59	Fabrication of woven carbon fibers reinforced Al-Mg (95 wt%) matrix composites by an electromagnetic casting process. <i>Journal of Materials Processing Technology</i> , 2015, 226, 78-84.	3.1	26
60	Effect of Sc and Y addition on the microstructure and properties of HCP-structured high-entropy alloys. <i>Applied Physics A: Materials Science and Processing</i> , 2019, 125, 1.	1.1	26
61	Tungsten-containing high-entropy alloys: a focused review of manufacturing routes, phase selection, mechanical properties, and irradiation resistance properties. <i>Tungsten</i> , 2021, 3, 181-196.	2.0	26
62	Effects of Fe Content on Microstructures and Properties of AlCoCrFe x Ni High-Entropy Alloys. <i>Arabian Journal for Science and Engineering</i> , 2015, 40, 3657-3663.	1.1	24
63	Cu-bearing high-entropy alloys with excellent antiviral properties. <i>Journal of Materials Science and Technology</i> , 2021, 84, 59-64.	5.6	22
64	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
65	Tuning deformation mechanisms of face-centered-cubic high-entropy alloys via boron doping. <i>Journal of Alloys and Compounds</i> , 2022, 911, 165103.	2.8	19
66	Antibacterial activities of a novel Cu-bearing high-entropy alloy against multi-drug-resistant <i>Acinetobacter baumannii</i> and <i>Staphylococcus aureus</i> . <i>Rare Metals</i> , 2022, 41, 570-579.	3.6	17
67	Microstructure and mechanical properties of Ti ₃ V ₂ NbAl Ni low-density refractory multielement alloys. <i>Intermetallics</i> , 2021, 133, 107187.	1.8	16
68	Infiltration behavior and mechanism in semi-solid rolling of carbon fibers reinforced Al-matrix composite. <i>Materials and Design</i> , 2019, 182, 108102.	3.3	15
69	Electroless nickel plating and spontaneous infiltration behavior of woven carbon fibers. <i>Materials and Design</i> , 2020, 186, 108301.	3.3	15
70	Novel as-cast AlCrFe ₂ Ni ₂ Ti _{0.5} high-entropy alloy with excellent mechanical properties. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2020, 27, 1312-1317.	2.4	14
71	The transition of alpha-Ni phase morphology in highly undercooled eutectic Ni 78.6 Si 21.4 alloy. <i>Europhysics Letters</i> , 2006, 74, 281-286.	0.7	13
72	A promising new class of plasticine: Metallic plasticine. <i>Journal of Materials Science and Technology</i> , 2018, 34, 344-348.	5.6	13

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73	Microstructure and Mechanical Properties of $\text{CoCrFeNi}_{2-x}\text{Al}_{1-x}$. Arabian Journal for Science and Engineering, 2019, 44, 803-808.	1.7	13
74	Grouping strategy via d-orbit energy level to design eutectic high-entropy alloys. Applied Physics Letters, 2021, 119, .	1.5	13
75	Directional solidification of highly undercooled eutectic Ni _{78.6} Si _{21.4} alloy. Materials Letters, 2005, 59, 1558-1562.	1.3	12
76	Effect of Electromagnetic Field on Microstructure and Properties of Bulk AlCrFeNiMo _{0.2} High-Entropy Alloy. Journal of Materials Engineering and Performance, 2015, 24, 4475-4481.	1.2	12
77	The formation of quasiregular microstructure in highly undercooled Ni _{70.2} Si _{29.8} eutectic alloy. Journal of Applied Physics, 2008, 104, 013535.	1.1	11
78	Effect of Ti and Nb Contents on Microstructure and Mechanical Properties of HfZrVTaMoW _{1-x} Nb _y Refractory High-Entropy Alloys. Advanced Engineering Materials, 2021, 23, 2100225.	1.6	11
79	Composite growth in highly undercooled Ni _{70.2} Si _{29.8} eutectic alloy. Applied Physics Letters, 2006, 89, 241902.	1.5	9
80	Effects of deformation and annealing on the microstructures and properties of a nonequiatomic Co ₂₉ Cr ₂₉ Fe ₂₉ Ni _{12.5} W _{0.5} high-entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 805, 140548.	2.6	9
81	Microstructure evolution and mechanical properties of CrFeNi _x V _{0.64} Ta _{0.36} eutectic high-entropy alloys. Materials Characterization, 2021, 181, 111449.	1.9	9
82	Controllable 3D morphology and growth mechanism of quasicrystalline phase in directionally solidified Al _{1-x} Mn _x Be alloy. Journal of Materials Research, 2014, 29, 2547-2555.	1.2	8
83	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.	1.1	8
84	Microstructure and Fabrication of Cu-Pb-Sn/Q235 Laminated Composite by Semi-Solid Rolling. Metals, 2018, 8, 722.	1.0	7
85	Novel Fe ₂ CoNi(AlSi) _x high-entropy alloys with attractive soft magnetic and mechanical properties. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	1.1	7
86	Electromagnetic modification of faceted-faceted Ni ₃₁ Si ₁₂ -Ni ₂ Si eutectic alloy. Science Bulletin, 2012, 57, 1595-1599.	1.7	5
87	A novel as-cast precipitation-strengthened Al _{0.5} V _{0.1} FeCrMnNi _{0.9} high-entropy alloy with high strength and plasticity. Science China Technological Sciences, 2021, 64, 1920-1926.	2.0	5
88	Evolution of Microstructure and Mechanical Properties of As-Cast Al _x CrFe ₂ Ni ₂ High-Entropy Alloys with Al Content. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 1850-1860.	1.1	4
89	Criteria for laves-phase formation in refractory high-entropy alloys. Philosophical Magazine Letters, 2022, 102, 161-177.	0.5	4
90	3D Morphology and Formation Process of the Icosahedral Quasicrystalline Phase in Rapidly Solidified Al _{1-x} Mn Alloy. Acta Metallurgica Sinica (English Letters), 2016, 29, 28-31.	1.5	3

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91	Re-rolling technology and alloying-element distribution of carbon fibers reinforced Al-matrix composite. <i>Journal of Materials Processing Technology</i> , 2020, 281, 116617.	3.1	3
92	Entropy as a selection rule for crystal growth in undercooled binary eutectic melts. <i>Science Bulletin</i> , 2009, 54, 1012-1018.	4.3	2
93	Microstructural refinement and performance improvement of Cu-36wt% Zn alloy by Al ₂ O ₃ nanoparticles coupling electromagnetic stirring. <i>Rare Metals</i> , 2022, 41, 3560-3565.	3.6	2
94	Constructing Bi ₂ WO ₆ -decorated TiO ₂ composite films for photocathodic protection of 304 stainless steel. <i>Journal of Iron and Steel Research International</i> , 2021, 28, 1054-1063.	1.4	2
95	Preface to the special issue on high entropy materials and tungsten-based nuclear materials. <i>Tungsten</i> , 2021, 3, 117-118.	2.0	1
96	Brittle-to-ductile transition in Ti-Pt intermetallic compounds. <i>Science Bulletin</i> , 2021, 66, 2281-2287.	4.3	1
97	A Novel Series of Fe _{8.25} CoCrNiMnNb _{0.1} Mox Multi-Component Alloys with Excellent Combined Strength and Ductility. <i>Journal of Materials Engineering and Performance</i> , 2022, 31, 5374-5381.	1.2	1
98	MICROSTRUCTURAL EVOLUTION OF HIGHLY UNDERCOOLED EUTECTIC Ni _{78.6} Si _{21.4} ALLOY. <i>Acta Metallurgica Sinica (English Letters)</i> , 2006, 19, 43-50.	1.5	0
99	Microstructure evolution and non-equilibrium solidification of undercooled Ni-29.8at% Si eutectic alloy melts. <i>Science China Technological Sciences</i> , 2010, 53, 1043-1048.	2.0	0
100	Microstructures and Mechanical Properties of Ni _x CoCrFeMo _{0.1} Multi-component Alloys. , 2018, , 293-300.		0
101	Effects of Iron on Microstructure and Properties of CoCrFe _x Ni Multi-principal Element Alloys. , 2018, , 253-258.		0
102	Preface to the Special Issue: High-Entropy Alloys. <i>Acta Metallurgica Sinica (English Letters)</i> , 2020, 33, 1031-1032.	1.5	0