

Zhaoping Lu

List of Publications by Citations

Source: <https://exaly.com/author-pdf/3191743/zhaoping-lu-publications-by-citations.pdf>

Version: 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

127
papers

5,429
citations

32
h-index

72
g-index

134
ext. papers

7,080
ext. citations

6.4
avg, IF

5.79
L-index

#	Paper	IF	Citations
127	A precipitation-hardened high-entropy alloy with outstanding tensile properties. <i>Acta Materialia</i> , 2016 , 102, 187-196	8.4	1020
126	Effects of Al addition on structural evolution and tensile properties of the FeCoNiCrMn high-entropy alloy system. <i>Acta Materialia</i> , 2014 , 62, 105-113	8.4	687
125	Enhanced strength and ductility in a high-entropy alloy via ordered oxygen complexes. <i>Nature</i> , 2018 , 563, 546-550	50.4	516
124	Bulk metallic glass composites with transformation-mediated work-hardening and ductility. <i>Advanced Materials</i> , 2010 , 22, 2770-3	24	369
123	Phase-Transformation Ductilization of Brittle High-Entropy Alloys via Metastability Engineering. <i>Advanced Materials</i> , 2017 , 29, 1701678	24	280
122	Stacking fault energy of face-centered-cubic high entropy alloys. <i>Intermetallics</i> , 2018 , 93, 269-273	3.5	174
121	Precipitation behavior and its effects on tensile properties of FeCoNiCr high-entropy alloys. <i>Intermetallics</i> , 2016 , 79, 41-52	3.5	145
120	Metallic liquids and glasses: atomic order and global packing. <i>Physical Review Letters</i> , 2010 , 105, 155501	7.4	130
119	Short-range ordering and its effects on mechanical properties of high-entropy alloys. <i>Journal of Materials Science and Technology</i> , 2021 , 62, 214-220	9.1	80
118	Transformation-induced plasticity in bulk metallic glass composites evidenced by in-situ neutron diffraction. <i>Acta Materialia</i> , 2017 , 124, 478-488	8.4	72
117	Ultra-high-strength and ductile superlattice alloys with nanoscale disordered interfaces. <i>Science</i> , 2020 , 369, 427-432	33.3	72
116	Formation, structure and properties of biocompatible TiZrHfNbTa high-entropy alloys. <i>Materials Research Letters</i> , 2019 , 7, 225-231	7.4	65
115	Development of a novel high-entropy alloy with eminent efficiency of degrading azo dye solutions. <i>Scientific Reports</i> , 2016 , 6, 34213	4.9	64
114	Atomistic mechanism for nanocrystallization of metallic glasses. <i>Acta Materialia</i> , 2008 , 56, 2760-2769	8.4	60
113	Experimental determination and thermodynamic calculation of phase equilibria in the FeMnAl system. <i>Journal of Phase Equilibria and Diffusion</i> , 2006 , 27, 54-62	1	56
112	Transformation-reinforced high-entropy alloys with superior mechanical properties via tailoring stacking fault energy. <i>Journal of Alloys and Compounds</i> , 2019 , 792, 444-455	5.7	53
111	Ordered clusters and free volume in a ZrNi metallic glass. <i>Applied Physics Letters</i> , 2008 , 93, 011911	3.4	53

110	High thermal stability and sluggish crystallization kinetics of high-entropy bulk metallic glasses. <i>Journal of Applied Physics</i> , 2016 , 119, 245112	2.5	53
109	Nanoporous silver with tunable pore characteristics and superior surface enhanced Raman scattering. <i>Corrosion Science</i> , 2014 , 84, 159-164	6.8	49
108	Development of advanced materials via entropy engineering. <i>Scripta Materialia</i> , 2019 , 165, 164-169	5.6	47
107	Microstructural Control via Copious Nucleation Manipulated by In Situ Formed Nucleants: Large-Sized and Ductile Metallic Glass Composites. <i>Advanced Materials</i> , 2016 , 28, 8156-8161	24	46
106	Microstructural Evolution of Alloy Powder for Electronic Materials with Liquid Miscibility Gap. <i>Journal of Electronic Materials</i> , 2009 , 38, 2-9	1.9	46
105	Flexible Honeycombed Nanoporous/Glassy Hybrid for Efficient Electrocatalytic Hydrogen Generation. <i>Advanced Materials</i> , 2019 , 31, e1904989	24	44
104	Solving the strength-ductility tradeoff in the medium-entropy NiCoCr alloy via interstitial strengthening of carbon. <i>Intermetallics</i> , 2019 , 106, 77-87	3.5	44
103	Formation mechanism and characterization of nanoporous silver with tunable porosity and promising capacitive performance by chemical dealloying of glassy precursor. <i>Acta Materialia</i> , 2016 , 105, 367-377	8.4	43
102	Self-organization of core-shell and core-shell-corona structures in small liquid droplets. <i>Applied Physics Letters</i> , 2011 , 98, 204106	3.4	41
101	Strain-induced ferromagnetism enhancement in Co:ZnO films. <i>Journal of Applied Physics</i> , 2008 , 103, 093911	2.5	41
100	Designing Bulk Metallic Glass Composites with Enhanced Formability and Plasticity. <i>Journal of Materials Science and Technology</i> , 2014 , 30, 566-575	9.1	40
99	Enhancement of electrical and ferromagnetic properties by additional Al doping in Co:ZnO thin films. <i>Journal of Physics Condensed Matter</i> , 2007 , 19, 296208	1.8	34
98	Effects of Sn addition on phase formation and mechanical properties of TiCu-based bulk metallic glass composites. <i>Intermetallics</i> , 2013 , 42, 68-76	3.5	33
97	Unusual relation between glass-forming ability and thermal stability of high-entropy bulk metallic glasses. <i>Materials Research Letters</i> , 2018 , 6, 495-500	7.4	32
96	Fully epitaxial (Zn,Co)O/ZnO/(Zn,Co)O junction and its tunnel magnetoresistance. <i>Applied Physics Letters</i> , 2007 , 91, 042106	3.4	32
95	Cooling rate effect on Young's modulus and hardness of a Zr-based metallic glass. <i>Journal of Alloys and Compounds</i> , 2011 , 509, 3269-3273	5.7	30
94	Effects of cooling rates on the mechanical properties of a Ti-based bulk metallic glass. <i>Science China: Physics, Mechanics and Astronomy</i> , 2010 , 53, 394-398	3.6	30
93	High-performance hybrid electrode decorated by well-aligned nanoglass arrays for glucose sensing. <i>Biosensors and Bioelectronics</i> , 2018 , 102, 288-295	11.8	27

92	Bendable nanoporous copper thin films with tunable thickness and pore features. <i>Corrosion Science</i> , 2016 , 104, 227-235	6.8	26
91	Compositional gradient films constructed by sputtering in a multicomponent TiAl(Cr, Fe, Ni) system. <i>Journal of Materials Research</i> , 2018 , 33, 3330-3338	2.5	26
90	IrW nanochannel support enabling ultrastable electrocatalytic oxygen evolution at 2 A cm in acidic media. <i>Nature Communications</i> , 2021 , 12, 3540	17.4	26
89	Effects of Mo additions on the glass-forming ability and magnetic properties of bulk amorphous Fe-C-Si-B-P-Mo alloys. <i>Science China: Physics, Mechanics and Astronomy</i> , 2010 , 53, 430-434	3.6	25
88	Snoek-type damping performance in strong and ductile high-entropy alloys. <i>Science Advances</i> , 2020 , 6, eaba7802	14.3	23
87	A general and scalable approach to produce nanoporous alloy nanowires with rugged ligaments for enhanced electrocatalysis. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 12541-12550	13	22
86	Facile route to bulk ultrafine-grain steels for high strength and ductility. <i>Nature</i> , 2021 , 590, 262-267	50.4	22
85	Microstructure and mechanical properties of FeCoNiCr high-entropy alloy strengthened by nano-Y2O3 dispersion. <i>Science China Technological Sciences</i> , 2018 , 61, 179-183	3.5	21
84	Room temperature ferromagnetism and ferroelectricity in cobalt-doped LiNbO3 film. <i>Applied Physics Letters</i> , 2008 , 92, 262901	3.4	21
83	Reentrant glass transition leading to ultrastable metallic glass. <i>Materials Today</i> , 2020 , 34, 66-77	21.8	21
82	Flexible glassy grid structure for rapid degradation of azo dye. <i>Materials and Design</i> , 2018 , 155, 346-351	8.1	20
81	Experimental Investigation and Thermodynamic Calculation of the Phase Equilibria in the Al-Bi-Sn Ternary System. <i>Journal of Phase Equilibria and Diffusion</i> , 2012 , 33, 9-19	1	20
80	Local chemical fluctuation mediated ductility in body-centered-cubic high-entropy alloys. <i>Materials Today</i> , 2021 , 46, 28-34	21.8	20
79	In situ synchrotron SAXS study of nanocrystallization in Zr65Ni25Ti10 metallic glass. <i>Intermetallics</i> , 2008 , 16, 10-15	3.5	19
78	Interpretable machine-learning strategy for soft-magnetic property and thermal stability in Fe-based metallic glasses. <i>Npj Computational Materials</i> , 2020 , 6,	10.9	19
77	Enhancement of glass-forming ability and plasticity via alloying the elements having positive heat of mixing with Cu in Cu48Zr48Al4 bulk metallic glass. <i>Journal of Alloys and Compounds</i> , 2019 , 777, 382-391	5.7	19
76	Inherent structure length in metallic glasses: simplicity behind complexity. <i>Scientific Reports</i> , 2015 , 5, 12137	4.9	18
75	Beneficial effects of oxygen addition on glass formation in a high-entropy bulk metallic glass. <i>Intermetallics</i> , 2018 , 99, 44-50	3.5	18

74	Effects of cooling rate on the atomic structure of Cu ₆₄ Zr ₃₆ binary metallic glass. <i>Computational Materials Science</i> , 2018 , 141, 59-67	3.2	17
73	Synthesis of well-aligned CuO nanowire array integrated with nanoporous CuO network for oxidative degradation of methylene blue. <i>Corrosion Science</i> , 2017 , 126, 37-43	6.8	17
72	Comparison of the interfacial and electrical properties of HfAlO films on Ge with S and GeO ₂ passivation. <i>Applied Physics Letters</i> , 2011 , 98, 162903	3.4	16
71	Molecular dynamic simulations and atomic structures of amorphous materials. <i>Applied Physics Letters</i> , 2006 , 88, 203115	3.4	16
70	A Modified Model to Predict Self-Diffusion Coefficients in Metastable fcc, bcc and hcp Structures. <i>Journal of Phase Equilibria and Diffusion</i> , 2013 , 34, 17-24	1	14
69	The unification of filament and interfacial resistive switching mechanisms for titanium dioxide based memory devices. <i>Journal of Applied Physics</i> , 2011 , 109, 104504	2.5	14
68	Experimental Investigation of Phase Equilibria in the Cu-Fe-Zr Ternary System. <i>Journal of Phase Equilibria and Diffusion</i> , 2013 , 34, 438-446	1	13
67	Thermodynamic Assessments of the Bi-Tb and Bi-Y Systems. <i>Journal of Phase Equilibria and Diffusion</i> , 2011 , 32, 441-446	1	12
66	Effects of Nitrogen on the Glass Formation and Mechanical Properties of a Ti-Based Metallic Glass. <i>Acta Metallurgica Sinica (English Letters)</i> , 2016 , 29, 173-180	2.5	11
65	Atomistic structural evolution with cooling rates during the solidification of liquid nickel. <i>Intermetallics</i> , 2011 , 19, 630-635	3.5	11
64	Growth mechanism from nano-ordered clusters to nanocrystals in a deeply undercooled melt of Zr-Ni-Ti metallic glass. <i>Journal of Applied Physics</i> , 2007 , 102, 063515	2.5	11
63	Ordered nitrogen complexes overcoming strength-ductility trade-off in an additively manufactured high-entropy alloy. <i>Virtual and Physical Prototyping</i> , 2020 , 15, 532-542	10.1	11
62	Experimental Investigation of Phase Equilibria in the Fe-Si-Zr Ternary System. <i>Journal of Phase Equilibria and Diffusion</i> , 2013 , 34, 277-288	1	10
61	Thermodynamic Database and the Phase Diagrams of the (U, Th, Pu)-X Binary Systems. <i>Journal of Phase Equilibria and Diffusion</i> , 2009 , 30, 535-552	1	10
60	Anomalous voltage dependence of tunnel magnetoresistance in (Zn, Co)O-based junction with double barrier. <i>Applied Physics Letters</i> , 2007 , 91, 172109	3.4	10
59	Simultaneously enhancing the strength and plasticity of Ti-based bulk metallic glass composites via microalloying with Ta. <i>Materials Research Letters</i> , 2020 , 8, 23-30	7.4	10
58	Formation mechanism and characterization of immiscible nanoporous binary Cu ₄₀ Ag alloys with excellent surface-enhanced Raman scattering performance by chemical dealloying of glassy precursors. <i>Inorganic Chemistry Frontiers</i> , 2020 , 7, 1127-1139	6.8	10
57	Self-supported NiCoP/nanoporous copper as highly active electrodes for hydrogen evolution reaction. <i>Scripta Materialia</i> , 2019 , 173, 51-55	5.6	9

56	Enhancing dynamic mechanical properties of bulk metallic glass composites via deformation-induced martensitic transformation. <i>Scripta Materialia</i> , 2020 , 186, 346-351	5.6	9
55	Interdiffusion and Atomic Mobility Studies in Ni-Rich fcc Ni-Co-Al Alloys. <i>Journal of Phase Equilibria and Diffusion</i> , 2016 , 37, 269-276	1	9
54	Experimental Determination of Phase Equilibria in the Co-Cr-V Ternary System. <i>Journal of Phase Equilibria and Diffusion</i> , 2012 , 33, 189-194	1	9
53	Phase equilibria and phase transformation of the body-centered cubic phase in the Cu-rich portion of the Cu ₃ NiAl system. <i>Journal of Materials Research</i> , 2008 , 23, 2674-2684	2.5	9
52	A general and transferable deep learning framework for predicting phase formation in materials. <i>Npj Computational Materials</i> , 2021 , 7,	10.9	9
51	Evolution of atomic ordering in metallic glasses. <i>Intermetallics</i> , 2010 , 18, 2333-2337	3.5	8
50	Self-formed pencil-like bulk composite materials consisting of copper alloy and stainless steel. <i>Journal of Materials Research</i> , 2008 , 23, 933-940	2.5	8
49	Thermodynamic Calculation of Phase Equilibria in the Sn-Ag-Cu-Ni-Au System. <i>Journal of Electronic Materials</i> , 2007 , 36, 1429-1441	1.9	8
48	Self-supporting nanoporous Ni/metallic glass composites with hierarchically porous structure for efficient hydrogen evolution reaction. <i>Journal of Materials Science and Technology</i> , 2021 , 73, 145-150	9.1	7
47	The Effects of Metalloid Elements on the Nanocrystallization Behavior and Soft Magnetic Properties of FeCBSiPCu Amorphous Alloys. <i>Metals</i> , 2018 , 8, 283	2.3	7
46	Polyamorphic transition in a transition metal based metallic glass under high pressure. <i>Physical Review B</i> , 2019 , 99,	3.3	6
45	Static atomic-scale structural heterogeneity and its effects on glass formation and dynamics of metallic glasses. <i>Intermetallics</i> , 2018 , 101, 133-143	3.5	6
44	Mechanical heterogeneity and its relation with glass-forming ability in Zr-Cu and Zr-Cu-Al metallic glasses. <i>Intermetallics</i> , 2017 , 90, 159-163	3.5	6
43	Experimental Investigation and Thermodynamic Assessment of Phase Equilibria in the Ag-Au-Sn System. <i>Journal of Electronic Materials</i> , 2009 , 38, 2096-2105	1.9	6
42	Chemical short-range ordering and its strengthening effect in refractory high-entropy alloys. <i>Physical Review B</i> , 2021 , 103,	3.3	6
41	Local structural mechanism for frozen-in dynamics in metallic glasses. <i>Physical Review B</i> , 2018 , 97,	3.3	5
40	Work-hardenable Zr-based bulk metallic glass composites reinforced with ex-situ TiNi fibers. <i>Journal of Alloys and Compounds</i> , 2019 , 806, 1497-1508	5.7	5
39	Experimental Investigation of the Phase Equilibria in the Co-Nb-V Ternary System. <i>Journal of Phase Equilibria and Diffusion</i> , 2015 , 36, 592-598	1	5

38	Atomic-scale structural evolution from disorder to order in an amorphous metal. <i>Journal of Applied Physics</i> , 2011 , 110, 123508	2.5	5
37	Substantially enhanced plasticity of bulk metallic glasses by densifying local atomic packing. <i>Nature Communications</i> , 2021 , 12, 6582	17.4	5
36	High-entropy carbide-nitrides with enhanced toughness and sinterability. <i>Science China Materials</i> , 2021 , 64, 2037-2044	7.1	5
35	Atomic vibration as an indicator of the propensity for configurational rearrangements in metallic glasses. <i>Materials Horizons</i> , 2021 , 8, 2359-2372	14.4	5
34	Ion Irradiation-Enhanced Raman Scattering on Nanoporous Copper. <i>Langmuir</i> , 2018 , 34, 13041-13046	4	5
33	Experimental Investigation of Isothermal Sections (1000, 1200 °C) in the Ni-Ti-Zr System. <i>Journal of Phase Equilibria and Diffusion</i> , 2015 , 36, 414-421	1	4
32	Influences of Au ion radiation on microstructure and surface-enhanced Raman scattering of nanoporous copper. <i>Nanotechnology</i> , 2018 , 29, 184001	3.4	4
31	Effects of Al addition on atomic structure of Cu-Zr metallic glass. <i>Journal of Applied Physics</i> , 2018 , 123, 055101	2.5	4
30	Experimental Investigation and Thermodynamic Calculation of the Phase Equilibria in the Cu-Nb-Zr Ternary System. <i>Journal of Phase Equilibria and Diffusion</i> , 2016 , 37, 513-523	1	4
29	Alloying effects of the elements with a positive heat of mixing on the glass forming ability of Al-La-Ni amorphous alloys. <i>Science China: Physics, Mechanics and Astronomy</i> , 2014 , 57, 122-127	3.6	4
28	Thermodynamic Database for Phase Diagrams of Mn-RE Binary Alloy Systems. <i>Journal of Phase Equilibria and Diffusion</i> , 2014 , 35, 612-621	1	4
27	Thermodynamic Assessments of the Au-Nd and Au-Dy Systems. <i>Journal of Phase Equilibria and Diffusion</i> , 2015 , 36, 241-247	1	3
26	Thermal Stability of Copper-Aluminum Alloy Thin Films for Barrierless Copper Metallization on Silicon Substrate. <i>Journal of Electronic Materials</i> , 2017 , 46, 4891-4897	1.9	3
25	Interdiffusion and Atomic Mobilities in bcc Ti-Ga and Ti-Cu Alloys. <i>Journal of Phase Equilibria and Diffusion</i> , 2017 , 38, 84-93	1	2
24	Eight in one: high-entropy-alloy nanoparticles synthesized by carbothermal shock. <i>Science Bulletin</i> , 2018 , 63, 737-738	10.6	2
23	Experimental Investigation and Thermodynamic Calculation of the Phase Equilibria in the Cu-Cr-W and Cu-Cr-Mo Systems. <i>Journal of Phase Equilibria and Diffusion</i> , 2014 , 35, 314-325	1	2
22	High speed characterization of the magnetoelectric hysteresis loop. <i>IEEE Transactions on Magnetics</i> , 2013 , 49, 5671-5674	2	2
21	Thermodynamic Assessment of Phase Equilibria in the Sn-Ag-Ni System with Key Experimental Verification. <i>Journal of Electronic Materials</i> , 2008 , 37, 279-287	1.9	2

20	Enhanced crystallization resistance and thermal stability via suppressing the metastable superlattice phase in Ni-(Pd)-P metallic glasses. <i>Journal of Materials Science and Technology</i> , 2020 , 42, 203-211	9.1	2
19	Enhanced Corrosion Resistance of an Alumina-forming Austenitic Steel Against Molten Al. <i>Oxidation of Metals</i> , 2020 , 94, 465-475	1.6	2
18	Design of Hierarchical Porosity Via Manipulating Chemical and Microstructural Complexities in High-Entropy Alloys for Efficient Water Electrolysis.. <i>Advanced Science</i> , 2022 , e2105808	13.6	2
17	Experimental Investigation of Phase Equilibria in the Nb-Si-V Ternary System. <i>Journal of Phase Equilibria and Diffusion</i> , 2017 , 38, 110-120	1	1
16	Thermodynamic Assessments of the Sc-M (M: Cr, Gd, Mo, W and Zr) Systems. <i>Journal of Phase Equilibria and Diffusion</i> , 2015 , 36, 3-9	1	1
15	Experimental Determination of Phase Equilibria in the Ag-Cu-Sb Ternary System. <i>Journal of Phase Equilibria and Diffusion</i> , 2015 , 36, 503-509	1	1
14	Experimental Investigation and Thermodynamic Calculation of the Phase Equilibria in the Cr-Hf-Ti Ternary System. <i>Journal of Phase Equilibria and Diffusion</i> , 2013 , 34, 375-384	1	1
13	Experimental Investigation and Thermodynamic Calculation of the Phase Equilibria in the Cu-Ni-Sb Ternary System. <i>Journal of Electronic Materials</i> , 2013 , 42, 2961-2974	1.9	1
12	The Calculation of Phase Equilibrium Between Structural Phases with a Magnetic Transition by the Cluster Variation Method. <i>International Journal of Thermophysics</i> , 1999 , 20, 755-770	2.1	1
11	Local chemical fluctuation mediated ultra-sluggish martensitic transformation in high-entropy intermetallics.. <i>Materials Horizons</i> , 2021 ,	14.4	1
10	Prediction of Ti-Zr-Nb-Ta high-entropy alloys with desirable hardness by combining machine learning and experimental data. <i>Applied Physics Letters</i> , 2021 , 119, 201905	3.4	1
9	Corrosion and irradiation behavior of Fe-based amorphous coating in lead-bismuth eutectic liquids. <i>Science China Technological Sciences</i> , 2022 , 65, 440-449	3.5	1
8	Calculation of Thermodynamic Properties in Pure Organic Compounds. <i>Journal of Phase Equilibria and Diffusion</i> , 2009 , 30, 46-58	1	0
7	Effects of stacking fault energy on the deformation behavior of CoNiCrFeMn high-entropy alloys: A molecular dynamics study. <i>Applied Physics Letters</i> , 2021 , 119, 201907	3.4	0
6	Self-supported efficient hydrogen evolution catalysts with a core-shell structure designed phase separation. <i>Nanoscale</i> , 2021 ,	7.7	0
5	Unravel unusual hardening behavior of a PdNiB metallic glass in its supercooled liquid region. <i>Applied Physics Letters</i> , 2021 , 118, 121902	3.4	0
4	Thermodynamic Assessments of the Au-Tb and Au-Lu Systems. <i>Journal of Phase Equilibria and Diffusion</i> , 2016 , 37, 319-326	1	0
3	Phase Equilibria of the Ti-Ta-Si Ternary System at 1100 and 1300 °C. <i>Journal of Phase Equilibria and Diffusion</i> , 2022 , 43, 58-67	1	0

- 2 Experimental Investigation of the Phase Equilibria in the CoVSn Ternary System. *Journal of Phase Equilibria and Diffusion*, **2017**, 38, 723-732 1
- 1 Revealing the role of local shear strain partition of transformable particles in a TRIP-reinforced bulk metallic glass composite via digital image correlation. *International Journal of Minerals, Metallurgy and Materials*, **2022**, 29, 807-813 3.1