## Lei Xia

#### List of Publications by Citations

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116 1,881 38 21 g-index h-index citations papers 4.89 120 2,140 3.4 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
116	Relationship between the widths of supercooled liquid regions and bond parameters of Mg-based bulk metallic glasses. <i>Journal of Non-Crystalline Solids</i> , <b>2003</b> , 321, 120-125	3.9	222
115	Self-organized intermittent plastic flow in bulk metallic glasses. <i>Acta Materialia</i> , <b>2009</b> , 57, 6146-6155	8.4	150
114	Thermodynamic modeling of glass formation in metallic glasses. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 1719	05.4	80
113	Anomalous thermal stability of NdBello Al bulk metallic glass. Acta Materialia, 2002, 50, 4357-4367	8.4	53
112	Large magnetic entropy change and adiabatic temperature rise of a Gd55Al20Co20Ni5 bulk metallic glass. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 223904	2.5	46
111	The glass forming ability of Cu-rich Cu⊞f binary alloys. <i>Journal of Physics Condensed Matter</i> , <b>2006</b> , 18, 3543-3548	1.8	46
110	Near room temperature magneto-caloric effect of a Gd 48 Co 52 amorphous alloy. <i>Journal of Alloys and Compounds</i> , <b>2016</b> , 658, 598-602	5.7	44
109	Structural evolution and property changes in Nd60Al10Fe20Co10 bulk metallic glass during crystallization. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 4371-4373	3.4	39
108	Magneto-caloric response of the Gd60Co25Al15 metallic glasses. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 19	24,02	36
107	Enhanced glass forming ability and refrigerant capacity of a Gd55Ni22Mn3Al20 bulk metallic glass. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, 6640-6643	5.7	29
106	Deformation behavior of a Zr-based bulk metallic glass under a complex stress state. <i>Intermetallics</i> , <b>2013</b> , 43, 38-44	3.5	27
105	Effect of stress gradient on the deformation behavior of a bulk metallic glass under uniaxial tension. <i>Materials Science &amp; amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2013</b> , 574, 262-265	5.3	27
104	Magneto-caloric effect of a Gd50Co50 amorphous alloy near the freezing point of water. <i>AIP Advances</i> , <b>2015</b> , 5, 097122	1.5	25
103	Excellent magnetocaloric effect of a Gd55Al20Co25 bulk metallic glass. <i>Physica B: Condensed Matter</i> , <b>2011</b> , 406, 3398-3401	2.8	24
102	Achieving tailorable magneto-caloric effect in the Gd-Co binary amorphous alloys. <i>AIP Advances</i> , <b>2016</b> , 6, 035302	1.5	23
101	Achieving better magneto-caloric effect near room temperature in amorphous Gd50Co50 alloy by minor Zn addition. <i>Journal of Non-Crystalline Solids</i> , <b>2016</b> , 434, 36-40	3.9	22
100	Achieving a table-like magnetic entropy change across the ice point of water with tailorable temperature range in Gd-Co-based amorphous hybrids. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 723, 19	7-200	22

# (2017-2003)

99	Primary crystallization and hard magnetic properties of Nd60Al10Fe20Co10metallic glasses. Journal Physics D: Applied Physics, <b>2003</b> , 36, 2954-2957	3	22	
98	Effects of bond parameters on the widths of supercooled liquid regions of ferrous BMGs. <i>Intermetallics</i> , <b>2004</b> , 12, 1069-1072	3.5	22	
97	Achieving high energy absorption capacity in cellular bulk metallic glasses. <i>Scientific Reports</i> , <b>2015</b> , 5, 10302	4.9	21	
96	The viscoelastic properties of bulk Zr55Cu25Ni5Al10Nb5 metallic glass. <i>Journal of Alloys and Compounds</i> , <b>2006</b> , 413, 181-187	5.7	21	
95	Excellent glass forming ability and refrigeration capacity of a Gd55Al18Ni25Sn2 bulk metallic glass. <i>Journal of Alloys and Compounds</i> , <b>2013</b> , 581, 828-831	5.7	20	
94	Microstructure and magnetic properties of Nd60Al10Fe20Co10glass-forming alloy. <i>Journal Physics D: Applied Physics</i> , <b>2003</b> , 36, 775-778	3	20	
93	Elastic behaviour and microstructural characteristics of Nd60Al10Fe20Co10bulk metallic glass investigated by ultrasonic measurement under pressure. <i>Journal of Physics Condensed Matter</i> , <b>2003</b> , 15, 4503-4509	1.8	20	
92	Mussel-inspired hydrophilic modification of polypropylene membrane for oil-in-water emulsion separation. <i>Surface and Coatings Technology</i> , <b>2020</b> , 403, 126375	4.4	20	
91	Evaluation of the thermal stability of Nd60Al20Co20 bulk metallic glass. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 111903	3.4	19	
90	Effect of strain rates on the fracture morphologies of Zr-based bulk metallic glasses. <i>Journal of Non-Crystalline Solids</i> , <b>2003</b> , 330, 242-247	3.9	19	
89	Thermal and mechanical properties of Zr52.5Al10Ni10Cu15Be12.5 bulk metallic glass. <i>Journal of Alloys and Compounds</i> , <b>2003</b> , 351, 324-328	5.7	18	
88	Loading-rate-independent delay of catastrophic avalanches in a bulk metallic glass. <i>Scientific Reports</i> , <b>2016</b> , 6, 21967	4.9	18	
87	Deformation behavior of bulk metallic glass structural elements. <i>Materials Science &amp; amp; Engineering A: Structural Materials: Properties, Microstructure and Processing,</i> <b>2014</b> , 606, 196-204	5.3	17	
86	Pronounced energy absorption capacity of cellular bulk metallic glasses. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 111907	3.4	17	
85	Binary bulk metallic glass Ni62Nb38 with high compressive strength of 3100MPa. <i>Intermetallics</i> , <b>2007</b> , 15, 1046-1049	3.5	17	
84	Achieving an enhanced magneto-caloric effect by melt spinning a Gd55Co25Al20 bulk metallic glass into amorphous ribbons. <i>Journal of Alloys and Compounds</i> , <b>2016</b> , 655, 353-356	5.7	16	
83	Outstanding magnetocaloric effect of Fe88\(\mathbb{Z}\)r8B4Sm x (x=0, 1, 2, 3) amorphous alloys. <i>Science China: Physics, Mechanics and Astronomy</i> , <b>2018</b> , 61, 1	3.6	15	
82	Effect of boron on the magneto-caloric effect in Fe91 $\frac{1}{8}$ Zr9B x (x = 3, 4, 5) amorphous alloys. Journal of Materials Science, <b>2017</b> , 52, 13948-13955	4.3	15	

81	Fracture Morphologies of Zr-Based Bulk Metallic Glasses Under Different Stress States. <i>Advanced Engineering Materials</i> , <b>2015</b> , 17, 366-373	3.5	15
80	Fe87Zr7B4Co2 amorphous alloy with excellent magneto-caloric effect near room temperature. <i>Intermetallics</i> , <b>2018</b> , 95, 85-88	3.5	14
79	Multi-layer laminated Pd-based metallic glass with enhanced plasticity. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2013</b> , 587, 240-243	5.3	14
78	Magneto-caloric effect of FexZryB100ᢂ metallic ribbons for room temperature magnetic refrigeration. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2017</b> , 423, 379-385	2.8	14
77	Low-temperature mechanical properties of Ce68Al10Cu20Co2 bulk metallic glass. <i>Philosophical Magazine Letters</i> , <b>2011</b> , 91, 70-77	1	14
76	Glass forming ability and microstructure of hard magnetic Nd60Al20Fe20 glass forming alloy. <i>Intermetallics</i> , <b>2006</b> , 14, 1098-1101	3.5	14
75	Compositional dependence of magnetic and magnetocaloric properties of the Gd-Ni binary amorphous alloys. <i>Journal of Non-Crystalline Solids</i> , <b>2019</b> , 522, 119589	3.9	13
74	Phase evolution and its effect on magnetic properties of Nd60Al10Fe20Co10bulk metallic glass. Journal of Physics Condensed Matter, <b>2003</b> , 15, 3531-3537	1.8	13
73	Kinetic nature of hard magnetic Nd50Al15Fe15Co20 bulk metallic glass with distinct glass transition. <i>Journal of Materials Research</i> , <b>2004</b> , 19, 1307-1310	2.5	12
72	Large adiabatic temperature rise above the water ice point of a minor Fe substituted Gd 50 Co 50 amorphous alloy. <i>Journal of Non-Crystalline Solids</i> , <b>2017</b> , 464, 30-33	3.9	11
71	Effect of Co substitution on the glass forming ability and magnetocaloric effect of Fe88Zr8B4 amorphous alloys. <i>Science China: Physics, Mechanics and Astronomy</i> , <b>2017</b> , 60, 1	3.6	11
70	Effect of Minor Co Substitution for Ni on the Glass Forming Ability and Magnetic Properties of Gd 55 Al 20 Ni 25 Bulk Metallic Glass. <i>Chinese Physics Letters</i> , <b>2012</b> , 29, 096103	1.8	11
69	Microstructure and its effect on magnetic and magnetocaloric properties of the Co50Gd50-xFex glassy ribbons. <i>Journal of Non-Crystalline Solids</i> , <b>2020</b> , 533, 119935	3.9	10
68	Improved magneto-caloric effect of the Gd 50 Co 50 metallic glass by minor Si addition. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2017</b> , 424, 275-278	2.8	10
67	Elastic moduli and mechanical properties of bulk metallic glasses after quasi-static compression. Journal of Alloys and Compounds, <b>2011</b> , 509, 8518-8521	5.7	10
66	Enhancement of Strength and Corrosion Resistance of Copper Wires by Metallic Glass Coating. <i>Materials Transactions</i> , <b>2009</b> , 50, 2451-2454	1.3	10
65	Effect of Al Addition on the Glass-Forming Ability and Magnetic Properties of a Gdto Binary Amorphous Alloy. <i>Chinese Physics Letters</i> , <b>2016</b> , 33, 016102	1.8	10
64	Magnetoelastic and magnetocaloric properties of Tb62.5Co37.5 amorphous alloy. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 728, 747-751	5.7	9

### (2011-2015)

63	Glass forming ability and magnetic properties of a Gd55Ni25Al18Zn2 bulk metallic glass. <i>Journal of Non-Crystalline Solids</i> , <b>2015</b> , 422, 23-25	3.9	9
62	Achieving the best glass former in a binary Gdto alloy system. <i>Materials and Design</i> , <b>2015</b> , 85, 715-718	8.1	9
61	Achieving a large adiabatic temperature rise of Gd55Co25Al20 bulk metallic glass by minor Zn addition. <i>Journal of Materials Science</i> , <b>2015</b> , 50, 1333-1337	4.3	9
60	Formation of Metastable Phases and Their Effect on the Glass-Forming Ability of Cu-Hf Binary Alloys. <i>Materials Transactions</i> , <b>2010</b> , 51, 68-71	1.3	9
59	Deformation behavior and dilatometric measurements of NdFe based bulk metallic glass.  Materials Science & Microstructure and Processing , 2004, 375-377, 1161-1164	5.3	9
58	Deformation Behavior of Bulk Metallic Glasses and High Entropy Alloys under Complex Stress Fields: A Review. <i>Entropy</i> , <b>2019</b> , 21,	2.8	8
57	Glass forming ability and mechanical properties of Zr50Cu42Al8bulk metallic glass. <i>Journal Physics D: Applied Physics</i> , <b>2008</b> , 41, 225410	3	8
56	Glass transition and thermal stability of hard magnetic bulk NdAlFeCo metallic glass. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2002</b> , 334, 307-311	5.3	8
55	Outstanding Magneto-Caloric Effect of a Gd 60 Ni 37 Co 3 Amorphous Alloy. <i>Chinese Physics Letters</i> , <b>2016</b> , 33, 126101	1.8	7
54	Excellent magneto-caloric effect of a low cost Gd34Ni22Co11Al33 metallic glass. <i>Materials Letters</i> , <b>2016</b> , 173, 239-241	3.3	7
53	Formability and magnetic properties of Dy-Co binary amorphous alloys. <i>AIP Advances</i> , <b>2018</b> , 8, 075215	1.5	7
52	Glass forming ability and magnetic properties of Nd48Al20Fe27Co5bulk metallic glass with distinct glass transition. <i>Journal Physics D: Applied Physics</i> , <b>2004</b> , 37, 1706-1709	3	7
51	Influence of Minor Addition of Cr on the Magnetocaloric Effect in Fe-Based Metallic Ribbons. <i>Materials Transactions</i> , <b>2016</b> , 57, 9-14	1.3	7
50	Phase separation and its effect on the magnetic entropy change profile in an amorphous Gd 48 Co 50 Nb 2 alloy. <i>Journal of Non-Crystalline Solids</i> , <b>2018</b> , 493, 82-85	3.9	7
49	Enhanced Curie temperature and magnetic entropy change of Gd63Ni37 amorphous alloy by Co substitution. <i>Intermetallics</i> , <b>2019</b> , 115, 106614	3.5	6
48	Effect of Ni substitution on the formability and magnetic properties of Gd50Co50 amorphous alloy. <i>Chinese Physics B</i> , <b>2020</b> , 29, 056401	1.2	6
47	Magneto-Caloric Response of a Gd 55 Co 25 Al 18 Sn 2 Bulk Metallic Glass. <i>Chinese Physics Letters</i> , <b>2015</b> , 32, 106101	1.8	6
46	Enhanced magnetocaloric effect of a partially crystalline Gd55Al20Ni25 bulk metallic glass. <i>Solid State Sciences</i> , <b>2011</b> , 13, 2086-2089	3.4	6

45	KINETICS AND THERMAL STABILITY OF Nd55Al20Fe25 BULK METALLIC GLASS. <i>Modern Physics Letters B</i> , <b>2006</b> , 20, 225-232	1.6	6
44	Excellent magneto-caloric effect of a binary Gd 63 Ni 37 amorphous alloy. <i>Intermetallics</i> , <b>2017</b> , 86, 11-	143.5	5
43	Magnetic and Magneto-Caloric Properties of the Amorphous FeZrB Ribbons. <i>Materials</i> , <b>2020</b> , 13,	3.5	5
42	Magnetic properties and magnetostriction of a binary Dy 50 Co 50 amorphous alloy. <i>Journal of Non-Crystalline Solids</i> , <b>2018</b> , 493, 29-32	3.9	5
41	Buckling of metallic glass bars. Journal of Non-Crystalline Solids, 2014, 387, 1-5	3.9	5
40	Thermodynamic, corrosion and mechanical properties of Zr-based bulk metallic glasses in relation to heterogeneous structures. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2012</b> , 534, 157-162	5.3	5
39	Enhanced mechanical properties of Ni62Nb38 bulk metallic glasses by Ta substitution. <i>Journal of Non-Crystalline Solids</i> , <b>2017</b> , 471, 452-455	3.9	5
38	Distribution of size in multi-evaporator air conditioning systems. <i>International Journal of Energy Research</i> , <b>2014</b> , 38, 652-657	4.5	5
37	Deformation Evolution of a Zr-Based Bulk Metallic Glass under Three-Point Bending Tests. <i>Advanced Materials Research</i> , <b>2014</b> , 939, 31-38	0.5	5
36	The dynamic shear response of the Zr base bulk metallic glass around the calorimetric glass transition temperature. <i>Journal of Materials Science</i> , <b>2005</b> , 40, 4795-4799	4.3	5
35	Large magnetic entropy change and adiabatic temperature rise of alternary Gd34Ni33Al33 metallic glass. <i>Journal of Rare Earths</i> , <b>2021</b> , 39, 998-1002	3.7	5
34	Hierarchical amorphous structures in a Zr50Cu42Al8 bulk metallic glass. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2015</b> , 639, 75-79	5.3	4
33	Enhanced Curie temperature and magnetic entropy change of Gd50Co50Nix amorphous alloys. <i>Modern Physics Letters B</i> , <b>2020</b> , 34, 2050050	1.6	4
32	Excellent Glass Forming Ability and Refrigeration Capacity of a Gd 55 Al 20 Ni 12 Co 10 Mn 3 Bulk Metallic Glass. <i>Chinese Physics Letters</i> , <b>2013</b> , 30, 096104	1.8	4
31	Enhanced plasticity of a Zr50Cu48Al2 bulk metallic glass. <i>Journal of Non-Crystalline Solids</i> , <b>2011</b> , 357, 1469-1472	3.9	4
30	EFFECT OF MINOR ALADDITION ON GLASS-FORMING ABILITY AND THERMAL STABILITY OF Zr <b>ū</b> u BINARY ALLOY. <i>Modern Physics Letters B</i> , <b>2010</b> , 24, 2143-2150	1.6	4
29	Microstructure, glass forming ability and magnetic properties of Nd60Al20Fe20glass forming alloys. <i>Journal Physics D: Applied Physics</i> , <b>2005</b> , 38, 4335-4338	3	4
28	Co50Gd48-xFe2Nix amorphous alloys with high adiabatic temperature rise near the hot end of a domestic magnetic refrigerator. <i>Journal of Non-Crystalline Solids</i> , <b>2020</b> , 544, 120146	3.9	4

### (2005-2021)

27	Microstructure and Its Effect on the Magnetic, Magnetocaloric and Magnetostrictive Properties of TbCoFe Glassy Ribbons. <i>Materials</i> , <b>2021</b> , 14,	3.5	4
26	Achieving high adiabatic temperature change at room temperature in a Gd48Co50Fe2 amorphous alloy. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 811, 152003	5.7	4
25	Large magnetic entropy change and adiabatic temperature rise of Fe85B12La3 amorphous alloy. <i>Physica B: Condensed Matter</i> , <b>2020</b> , 583, 412014	2.8	3
24	Constant-volume heat capacity at glass transition. <i>Journal of Alloys and Compounds</i> , <b>2013</b> , 577, 299-302	5.7	3
23	Kinetics and thermal stability of the Ni62Nb38⊠ Ta x (x=5, 10, 15, 20 and 25) bulk metallic glasses. <i>Science China: Physics, Mechanics and Astronomy</i> , <b>2017</b> , 60, 1	3.6	3
22	Valence fluctuation and electronphonon coupling in La68\(\mathbb{R}\)CexAl10Cu20Co2 (x=0, 34, and 68) metallic glasses. <i>Journal of Applied Physics</i> , <b>2010</b> , 108, 033525	2.5	3
21	Glass forming ability of Gd55Al15Ni30 ternary alloy. <i>Journal of Materials Science</i> , <b>2006</b> , 41, 6112-6115	4.3	3
<b>2</b> 0	GLASS FORMING ABILITY AND KINETIC CHARACTERS OF PARAMAGNETIC Nd60Co40-xAlx(x=5, 10, 15) BULK METALLIC GLASSES. <i>Modern Physics Letters B</i> , <b>2004</b> , 18, 679-685	1.6	3
19	Dynamic tensile response of Zr41.2Ti13.8Cu12.5Ni10Be22.5 bulk metallic glass. <i>Journal of Materials Science Letters</i> , <b>2003</b> , 22, 407-411		3
18	A New Cu-Based Metallic Glass Composite with Excellent Mechanical Properties. <i>Chinese Physics Letters</i> , <b>2020</b> , 37, 086401	1.8	3
17	Magnetocaloric effect and magnetostriction of a binary Nd50Co50 metallic glass. <i>Journal of Non-Crystalline Solids</i> , <b>2021</b> , 571, 121076	3.9	3
16	Large magnetic entropy and electron-phonon coupling in Gd-based metallic glass. <i>Journal of Applied Physics</i> , <b>2012</b> , 112, 113503	2.5	2
15	Deformation induced structural evolution in bulk metallic glasses. Science Bulletin, 2011, 56, 3952-3959		2
14	Achieve good magneto-caloric response near the ambient temperature in a Fe86La7B5Ce2 amorphous ribbon. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2022</b> , 547, 168954	2.8	2
13	Compositional Dependence of Curie Temperature and Magnetic Entropy Change in the Amorphous Tb-Co Ribbons. <i>Materials</i> , <b>2021</b> , 14,	3.5	2
12	Improvement of glass forming ability and magnetic properties of a Gd55Al20Co25 bulk metallic glass by minor Fe substitution for Co. <i>Modern Physics Letters B</i> , <b>2015</b> , 29, 1550198	1.6	1
11	CRYSTALLIZATION-MELTING BEHAVIORS AND CRYSTALLIZATION KINETICS OF Nd60Al10Fe20Co10 BULK METALLIC GLASS. <i>International Journal of Modern Physics B</i> , <b>2004</b> , 18, 911-917	1.1	1
10	GLASS FORMING ABILITY OF HARD MAGNETIC Nd55Al20Fe25 BULK GLASSY ALLOY WITH DISTINCT GLASS TRANSITION. <i>International Journal of Modern Physics B</i> , <b>2005</b> , 19, 3493-3500	1.1	1

9	Outstanding magnetocaloric properties at ambient temperature of a Fe88La4Ce3B5 amorphous alloy. <i>Journal of Non-Crystalline Solids</i> , <b>2022</b> , 580, 121394	3.9	1
8	Effect of Mn Substitution Fe on the Formability and Magnetic Properties of Amorphous Fe88Zr8B4 Alloy. <i>Metals</i> , <b>2021</b> , 11, 1577	2.3	1
7	Outstanding glass formability and magneto-caloric effect of a Fe85Co3Zr5B4Nb3 metallic glass. Journal of Non-Crystalline Solids, <b>2021</b> , 566, 120885	3.9	1
6	Effect of minor Nb substitution for Co on the glass forming ability and magnetic properties of the Gd50Co50 metallic glass. <i>Materials Research Express</i> , <b>2019</b> , 6, 085208	1.7	О
5	Achieving better glass-forming ability and magnetocaloric effect in the minor Zr-substituted Gd50Co50 amorphous alloy. <i>International Journal of Modern Physics B</i> , <b>2018</b> , 32, 1850085	1.1	0
4	Formability and Magnetic Properties of the Binary Nd-Co Amorphous Alloys. <i>Metals</i> , <b>2021</b> , 11, 1730	2.3	O
3	Effect of Minor Co Substitution for Fe on the Formability and Magnetic and Magnetocaloric Properties of the Amorphous Fe88Ce7B5 Alloy. <i>Metals</i> , <b>2022</b> , 12, 589	2.3	O
2	Evaluation of glass forming ability in ternary Ni62(Nb, Ta)38 alloys. <i>Intermetallics</i> , <b>2017</b> , 88, 77-80	3.5	
1	Preparation and magnetocaloric properties of Gd45Ni30Al15Co10 amorphous alloy. <i>Wuli Xuehao/Acta Physica Sinica</i> <b>2021</b> , 0-0	0.6	