Lei Xia

List of Publications by Year in Descending Order

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

#	Paper	IF	Citations
116	Outstanding magnetocaloric properties at ambient temperature of a Fe88La4Ce3B5 amorphous alloy. *Journal of Non-Crystalline Solids*, **2022**, 580, 121394	3.9	1
115	Achieve good magneto-caloric response near the ambient temperature in a Fe86La7B5Ce2 amorphous ribbon. *Journal of Magnetism and Magnetic Materials*, **2022**, 547, 168954	2.8	2
114	Effect of Minor Co Substitution for Fe on the Formability and Magnetic and Magnetocaloric Properties of the Amorphous Fe88Ce7B5 Alloy. *Metals*, **2022**, 12, 589	2.3	0
113	Effect of Mn Substitution Fe on the Formability and Magnetic Properties of Amorphous Fe88Zr8B4 Alloy. *Metals*, **2021**, 11, 1577	2.3	1
112	Formability and Magnetic Properties of the Binary Nd-Co Amorphous Alloys. *Metals*, **2021**, 11, 1730	2.3	0
111	Microstructure and Its Effect on the Magnetic, Magnetocaloric and Magnetostrictive Properties of TbCoFe Glassy Ribbons. *Materials*, **2021**, 14,	3.5	4
110	Large magnetic entropy change and adiabatic temperature rise of a□ternary Gd34Ni33Al33 metallic glass. *Journal of Rare Earths*, **2021**, 39, 998-1002	3.7	5
109	Preparation and magnetocaloric properties of Gd45Ni30Al15Co10 amorphous alloy. *Wuli Xuebao/Acta Physica Sinica*, **2021**, 0-0	0.6	
108	Compositional Dependence of Curie Temperature and Magnetic Entropy Change in the Amorphous Tb-Co Ribbons. *Materials*, **2021**, 14,	3.5	2
107	Outstanding glass formability and magneto-caloric effect of a Fe85Co3Zr5B4Nb3 metallic glass. *Journal of Non-Crystalline Solids*, **2021**, 566, 120885	3.9	1
106	Magnetocaloric effect and magnetostriction of a binary Nd50Co50 metallic glass. *Journal of Non-Crystalline Solids*, **2021**, 571, 121076	3.9	3
105	Magnetic and Magneto-Caloric Properties of the Amorphous FeZrB Ribbons. *Materials*, **2020**, 13,	3.5	5
104	Enhanced Curie temperature and magnetic entropy change of Gd50Co50□Nix amorphous alloys. *Modern Physics Letters B*, **2020**, 34, 2050050	1.6	4
103	Effect of Ni substitution on the formability and magnetic properties of Gd50Co50 amorphous alloy. *Chinese Physics B*, **2020**, 29, 056401	1.2	6
102	Large magnetic entropy change and adiabatic temperature rise of Fe85B12La3 amorphous alloy. *Physica B: Condensed Matter*, **2020**, 583, 412014	2.8	3
101	Microstructure and its effect on magnetic and magnetocaloric properties of the Co50Gd50-xFex glassy ribbons. *Journal of Non-Crystalline Solids*, **2020**, 533, 119935	3.9	10
100	Co50Gd48-xFe2Nix amorphous alloys with high adiabatic temperature rise near the hot end of a domestic magnetic refrigerator. *Journal of Non-Crystalline Solids*, **2020**, 544, 120146	3.9	4

99	Mussel-inspired hydrophilic modification of polypropylene membrane for oil-in-water emulsion separation. *Surface and Coatings Technology*, **2020**, 403, 126375	4.4	20
98	A New Cu-Based Metallic Glass Composite with Excellent Mechanical Properties. *Chinese Physics Letters*, **2020**, 37, 086401	1.8	3
97	Compositional dependence of magnetic and magnetocaloric properties of the Gd-Ni binary amorphous alloys. *Journal of Non-Crystalline Solids*, **2019**, 522, 119589	3.9	13
96	Enhanced Curie temperature and magnetic entropy change of Gd63Ni37 amorphous alloy by Co substitution. *Intermetallics*, **2019**, 115, 106614	3.5	6
95	Effect of minor Nb substitution for Co on the glass forming ability and magnetic properties of the Gd50Co50 metallic glass. *Materials Research Express*, **2019**, 6, 085208	1.7	0
94	Deformation Behavior of Bulk Metallic Glasses and High Entropy Alloys under Complex Stress Fields: A Review. *Entropy*, **2019**, 21,	2.8	8
93	Achieving high adiabatic temperature change at room temperature in a Gd48Co50Fe2 amorphous alloy. *Journal of Alloys and Compounds*, **2019**, 811, 152003	5.7	4
92	Outstanding magnetocaloric effect of Fe88−xZr8B4Sm x (x=0, 1, 2, 3) amorphous alloys. *Science China: Physics, Mechanics and Astronomy*, **2018**, 61, 1	3.6	15
91	Fe87Zr7B4Co2 amorphous alloy with excellent magneto-caloric effect near room temperature. *Intermetallics*, **2018**, 95, 85-88	3.5	14
90	Achieving better glass-forming ability and magnetocaloric effect in the minor Zr-substituted Gd50Co50 amorphous alloy. *International Journal of Modern Physics B*, **2018**, 32, 1850085	1.1	0
89	Magnetic properties and magnetostriction of a binary Dy 50 Co 50 amorphous alloy. *Journal of Non-Crystalline Solids*, **2018**, 493, 29-32	3.9	5
88	Formability and magnetic properties of Dy-Co binary amorphous alloys. *AIP Advances*, **2018**, 8, 075215	1.5	7
87	Phase separation and its effect on the magnetic entropy change profile in an amorphous Gd 48 Co 50 Nb 2 alloy. *Journal of Non-Crystalline Solids*, **2018**, 493, 82-85	3.9	7
86	Evaluation of glass forming ability in ternary Ni62(Nb, Ta)38 alloys. *Intermetallics*, **2017**, 88, 77-80	3.5	
85	Excellent magneto-caloric effect of a binary Gd 63 Ni 37 amorphous alloy. *Intermetallics*, **2017**, 86, 11-14	3.5	5
84	Large adiabatic temperature rise above the water ice point of a minor Fe substituted Gd 50 Co 50 amorphous alloy. *Journal of Non-Crystalline Solids*, **2017**, 464, 30-33	3.9	11
83	Magnetoelastic and magnetocaloric properties of Tb62.5Co37.5 amorphous alloy. *Journal of Alloys and Compounds*, **2017**, 728, 747-751	5.7	9
82	Effect of boron on the magneto-caloric effect in Fe91−x Zr9B x (x = 3, 4, 5) amorphous alloys. *Journal of Materials Science*, **2017**, 52, 13948-13955	4.3	15

81	Achieving a table-like magnetic entropy change across the ice point of water with tailorable temperature range in Gd-Co-based amorphous hybrids. *Journal of Alloys and Compounds*, **2017**, 723, 197-200	5.7	22
80	Enhanced mechanical properties of Ni62Nb38 bulk metallic glasses by Ta substitution. *Journal of Non-Crystalline Solids*, **2017**, 471, 452-455	3.9	5
79	Kinetics and thermal stability of the Ni62Nb38□ Ta x (x=5, 10, 15, 20 and 25) bulk metallic glasses. *Science China: Physics, Mechanics and Astronomy*, **2017**, 60, 1	3.6	3
78	Effect of Co substitution on the glass forming ability and magnetocaloric effect of Fe88Zr8B4 amorphous alloys. *Science China: Physics, Mechanics and Astronomy*, **2017**, 60, 1	3.6	11
77	Improved magneto-caloric effect of the Gd 50 Co 50 metallic glass by minor Si addition. *Journal of Magnetism and Magnetic Materials*, **2017**, 424, 275-278	2.8	10
76	Magneto-caloric effect of FexZryB100□□ metallic ribbons for room temperature magnetic refrigeration. *Journal of Magnetism and Magnetic Materials*, **2017**, 423, 379-385	2.8	14
75	Achieving an enhanced magneto-caloric effect by melt spinning a Gd55Co25Al20 bulk metallic glass into amorphous ribbons. *Journal of Alloys and Compounds*, **2016**, 655, 353-356	5.7	16
74	Outstanding Magneto-Caloric Effect of a Gd 60 Ni 37 Co 3 Amorphous Alloy. *Chinese Physics Letters*, **2016**, 33, 126101	1.8	7
73	Achieving better magneto-caloric effect near room temperature in amorphous Gd50Co50 alloy by minor Zn addition. *Journal of Non-Crystalline Solids*, **2016**, 434, 36-40	3.9	22
72	Excellent magneto-caloric effect of a low cost Gd34Ni22Co11Al33 metallic glass. *Materials Letters*, **2016**, 173, 239-241	3.3	7
71	Near room temperature magneto-caloric effect of a Gd 48 Co 52 amorphous alloy. *Journal of Alloys and Compounds*, **2016**, 658, 598-602	5.7	44
70	Influence of Minor Addition of Cr on the Magnetocaloric Effect in Fe-Based Metallic Ribbons. *Materials Transactions*, **2016**, 57, 9-14	1.3	7
69	Loading-rate-independent delay of catastrophic avalanches in a bulk metallic glass. *Scientific Reports*, **2016**, 6, 21967	4.9	18
68	Achieving tailorable magneto-caloric effect in the Gd-Co binary amorphous alloys. *AIP Advances*, **2016**, 6, 035302	1.5	23
67	Effect of Al Addition on the Glass-Forming Ability and Magnetic Properties of a Gd□o Binary Amorphous Alloy. *Chinese Physics Letters*, **2016**, 33, 016102	1.8	10
66	Glass forming ability and magnetic properties of a Gd55Ni25Al18Zn2 bulk metallic glass. *Journal of Non-Crystalline Solids*, **2015**, 422, 23-25	3.9	9
65	Hierarchical amorphous structures in a Zr50Cu42Al8 bulk metallic glass. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 639, 75-79	5.3	4
64	Magneto-caloric effect of a Gd50Co50 amorphous alloy near the freezing point of water. *AIP Advances*, **2015**, 5, 097122	1.5	25

63	Achieving the best glass former in a binary GdCo alloy system. *Materials and Design*, **2015**, 85, 715-718	8.1	9
62	Achieving a large adiabatic temperature rise of Gd55Co25Al20 bulk metallic glass by minor Zn addition. *Journal of Materials Science*, **2015**, 50, 1333-1337	4.3	9
61	Magneto-Caloric Response of a Gd 55 Co 25 Al 18 Sn 2 Bulk Metallic Glass. *Chinese Physics Letters*, **2015**, 32, 106101	1.8	6
60	Improvement of glass forming ability and magnetic properties of a Gd55Al20Co25 bulk metallic glass by minor Fe substitution for Co. *Modern Physics Letters B*, **2015**, 29, 1550198	1.6	1
59	Achieving high energy absorption capacity in cellular bulk metallic glasses. *Scientific Reports*, **2015**, 5, 10302	4.9	21
58	Fracture Morphologies of Zr-Based Bulk Metallic Glasses Under Different Stress States. *Advanced Engineering Materials*, **2015**, 17, 366-373	3.5	15
57	Buckling of metallic glass bars. *Journal of Non-Crystalline Solids*, **2014**, 387, 1-5	3.9	5
56	Deformation behavior of bulk metallic glass structural elements. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 606, 196-204	5.3	17
55	Large magnetic entropy change and adiabatic temperature rise of a Gd55Al20Co20Ni5 bulk metallic glass. *Journal of Applied Physics*, **2014**, 115, 223904	2.5	46
54	Magneto-caloric response of the Gd60Co25Al15 metallic glasses. *Applied Physics Letters*, **2014**, 105, 192402	3.4	36
53	Pronounced energy absorption capacity of cellular bulk metallic glasses. *Applied Physics Letters*, **2014**, 104, 111907	3.4	17
52	Distribution of size in multi-evaporator air conditioning systems. *International Journal of Energy Research*, **2014**, 38, 652-657	4.5	5
51	Deformation Evolution of a Zr-Based Bulk Metallic Glass under Three-Point Bending Tests. *Advanced Materials Research*, **2014**, 939, 31-38	0.5	5
50	Multi-layer laminated Pd-based metallic glass with enhanced plasticity. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 587, 240-243	5.3	14
49	Constant-volume heat capacity at glass transition. *Journal of Alloys and Compounds*, **2013**, 577, 299-302	5.7	3
48	Deformation behavior of a Zr-based bulk metallic glass under a complex stress state. *Intermetallics*, **2013**, 43, 38-44	3.5	27
47	Excellent glass forming ability and refrigeration capacity of a Gd55Al18Ni25Sn2 bulk metallic glass. *Journal of Alloys and Compounds*, **2013**, 581, 828-831	5.7	20
46	Effect of stress gradient on the deformation behavior of a bulk metallic glass under uniaxial tension. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 574, 262-265	5.3	27

45	Excellent Glass Forming Ability and Refrigeration Capacity of a Gd 55 Al 20 Ni 12 Co 10 Mn 3 Bulk Metallic Glass. *Chinese Physics Letters*, **2013**, 30, 096104	1.8	4
44	Thermodynamic, corrosion and mechanical properties of Zr-based bulk metallic glasses in relation to heterogeneous structures. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2012**, 534, 157-162	5.3	5
43	Large magnetic entropy and electron-phonon coupling in Gd-based metallic glass. *Journal of Applied Physics*, **2012**, 112, 113503	2.5	2
42	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. *Chinese Physics Letters*, **2012**, 29, 096103	1.8	11
41	Enhanced glass forming ability and refrigerant capacity of a Gd55Ni22Mn3Al20 bulk metallic glass. *Journal of Alloys and Compounds*, **2011**, 509, 6640-6643	5.7	29
40	Elastic moduli and mechanical properties of bulk metallic glasses after quasi-static compression. *Journal of Alloys and Compounds*, **2011**, 509, 8518-8521	5.7	10
39	Enhanced plasticity of a Zr50Cu48Al2 bulk metallic glass. *Journal of Non-Crystalline Solids*, **2011**, 357, 1469-1472	3.9	4
38	Enhanced magnetocaloric effect of a partially crystalline Gd55Al20Ni25 bulk metallic glass. *Solid State Sciences*, **2011**, 13, 2086-2089	3.4	6
37	Deformation induced structural evolution in bulk metallic glasses. *Science Bulletin*, **2011**, 56, 3952-3959		2
36	Excellent magnetocaloric effect of a Gd55Al20Co25 bulk metallic glass. *Physica B: Condensed Matter*, **2011**, 406, 3398-3401	2.8	24
35	Low-temperature mechanical properties of Ce68Al10Cu20Co2 bulk metallic glass. *Philosophical Magazine Letters*, **2011**, 91, 70-77	1	14
34	Valence fluctuation and electron□phonon coupling in La68□CexAl10Cu20Co2 (x=0, 34, and 68) metallic glasses. *Journal of Applied Physics*, **2010**, 108, 033525	2.5	3
33	EFFECT OF MINOR Al ADDITION ON GLASS-FORMING ABILITY AND THERMAL STABILITY OF Zr□Cu BINARY ALLOY. *Modern Physics Letters B*, **2010**, 24, 2143-2150	1.6	4
32	Formation of Metastable Phases and Their Effect on the Glass-Forming Ability of Cu-Hf Binary Alloys. *Materials Transactions*, **2010**, 51, 68-71	1.3	9
31	Self-organized intermittent plastic flow in bulk metallic glasses. *Acta Materialia*, **2009**, 57, 6146-6155	8.4	150
30	Enhancement of Strength and Corrosion Resistance of Copper Wires by Metallic Glass Coating. *Materials Transactions*, **2009**, 50, 2451-2454	1.3	10
29	Glass forming ability and mechanical properties of Zr50Cu42Al8bulk metallic glass. *Journal Physics D: Applied Physics*, **2008**, 41, 225410	3	8
28	Evaluation of the thermal stability of Nd60Al20Co20 bulk metallic glass. *Applied Physics Letters*, **2007**, 90, 111903	3.4	19

27	Binary bulk metallic glass Ni62Nb38 with high compressive strength of 3100MPa. *Intermetallics*, **2007**, 15, 1046-1049	3.5	17
26	The glass forming ability of Cu-rich CuHf binary alloys. *Journal of Physics Condensed Matter*, **2006**, 18, 3543-3548	1.8	46
25	Thermodynamic modeling of glass formation in metallic glasses. *Applied Physics Letters*, **2006**, 88, 171905	3.4	80
24	KINETICS AND THERMAL STABILITY OF Nd55Al20Fe25 BULK METALLIC GLASS. *Modern Physics Letters B*, **2006**, 20, 225-232	1.6	6
23	The viscoelastic properties of bulk Zr55Cu25Ni5Al10Nb5 metallic glass. *Journal of Alloys and Compounds*, **2006**, 413, 181-187	5.7	21
22	Glass forming ability and microstructure of hard magnetic Nd60Al20Fe20 glass forming alloy. *Intermetallics*, **2006**, 14, 1098-1101	3.5	14
21	Glass forming ability of Gd55Al15Ni30 ternary alloy. *Journal of Materials Science*, **2006**, 41, 6112-6115	4.3	3
20	The dynamic shear response of the Zr base bulk metallic glass around the calorimetric glass transition temperature. *Journal of Materials Science*, **2005**, 40, 4795-4799	4.3	5
19	GLASS FORMING ABILITY OF HARD MAGNETIC Nd55Al20Fe25 BULK GLASSY ALLOY WITH DISTINCT GLASS TRANSITION. *International Journal of Modern Physics B*, **2005**, 19, 3493-3500	1.1	1
18	Microstructure, glass forming ability and magnetic properties of Nd60Al20Fe20glass forming alloys. *Journal Physics D: Applied Physics*, **2005**, 38, 4335-4338	3	4
17	Glass forming ability and magnetic properties of Nd48Al20Fe27Co5bulk metallic glass with distinct glass transition. *Journal Physics D: Applied Physics*, **2004**, 37, 1706-1709	3	7
16	Kinetic nature of hard magnetic Nd50Al15Fe15Co20 bulk metallic glass with distinct glass transition. *Journal of Materials Research*, **2004**, 19, 1307-1310	2.5	12
15	GLASS FORMING ABILITY AND KINETIC CHARACTERS OF PARAMAGNETIC Nd60Co40-xAlx(x=5, 10, 15) BULK METALLIC GLASSES. *Modern Physics Letters B*, **2004**, 18, 679-685	1.6	3
14	CRYSTALLIZATION-MELTING BEHAVIORS AND CRYSTALLIZATION KINETICS OF Nd60Al10Fe20Co10 BULK METALLIC GLASS. *International Journal of Modern Physics B*, **2004**, 18, 911-917	1.1	1
13	Deformation behavior and dilatometric measurements of NdFe based bulk metallic glass. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2004**, 375-377, 1161-1164	5.3	9
12	Effects of bond parameters on the widths of supercooled liquid regions of ferrous BMGs. *Intermetallics*, **2004**, 12, 1069-1072	3.5	22
11	Phase evolution and its effect on magnetic properties of Nd60Al10Fe20Co10bulk metallic glass. *Journal of Physics Condensed Matter*, **2003**, 15, 3531-3537	1.8	13
10	Microstructure and magnetic properties of Nd60Al10Fe20Co10glass-forming alloy. *Journal Physics D: Applied Physics*, **2003**, 36, 775-778	3	20

9	Elastic behaviour and microstructural characteristics of Nd60Al10Fe20Co10bulk metallic glass investigated by ultrasonic measurement under pressure. *Journal of Physics Condensed Matter*, **2003**, 15, 4503-4509	1.8	20
8	Primary crystallization and hard magnetic properties of Nd60Al10Fe20Co10metallic glasses. *Journal Physics D: Applied Physics*, **2003**, 36, 2954-2957	3	22
7	Effect of strain rates on the fracture morphologies of Zr-based bulk metallic glasses. *Journal of Non-Crystalline Solids*, **2003**, 330, 242-247	3.9	19
6	Dynamic tensile response of Zr41.2Ti13.8Cu12.5Ni10Be22.5 bulk metallic glass. *Journal of Materials Science Letters*, **2003**, 22, 407-411		3
5	Relationship between the widths of supercooled liquid regions and bond parameters of Mg-based bulk metallic glasses. *Journal of Non-Crystalline Solids*, **2003**, 321, 120-125	3.9	222
4	Thermal and mechanical properties of Zr52.5Al10Ni10Cu15Be12.5 bulk metallic glass. *Journal of Alloys and Compounds*, **2003**, 351, 324-328	5.7	18
3	Glass transition and thermal stability of hard magnetic bulk NdAlFeCo metallic glass. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2002**, 334, 307-311	5.3	8
2	Anomalous thermal stability of Nd[illegible]Al bulk metallic glass. *Acta Materialia*, **2002**, 50, 4357-4367	8.4	53
1	Structural evolution and property changes in Nd60Al10Fe20Co10 bulk metallic glass during crystallization. *Applied Physics Letters*, **2002**, 81, 4371-4373	3.4	39