

Tao Zhang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6970315/publications.pdf>

Version: 2024-02-01

227
papers

11,333
citations

43973

48
h-index

33814

99
g-index

227
all docs

227
docs citations

227
times ranked

3593
citing authors

#	ARTICLE	IF	CITATIONS
1	Zr–Al–Ni Amorphous Alloys with High Glass Transition Temperature and Significant Supercooled Liquid Region. <i>Materials Transactions, JIM</i> , 1990, 31, 177-183.	0.9	879
2	Amorphous Zr–Al–TM (TM=Co, Ni, Cu) Alloys with Significant Supercooled Liquid Region of Over 100 K. <i>Materials Transactions, JIM</i> , 1991, 32, 1005-1010.	0.9	742
3	Al–La–Ni Amorphous Alloys with a Wide Supercooled Liquid Region. <i>Materials Transactions, JIM</i> , 1989, 30, 965-972.	0.9	704
4	Glass-forming ability of alloys. <i>Journal of Non-Crystalline Solids</i> , 1993, 156-158, 473-480.	1.5	616
5	Bulk amorphous alloys with high mechanical strength and good soft magnetic properties in Fe–TM–B (TM=IV–VIII group transition metal) system. <i>Applied Physics Letters</i> , 1997, 71, 464-466.	1.5	386
6	Production of Amorphous Cylinder and Sheet of La₅₅Al₂₅Ni₂₀ Alloy by a Metallic Mold Casting Method. <i>Materials Transactions, JIM</i> , 1990, 31, 425-428.	0.9	335
7	Fabrication of Bulk Glassy Zr₅₅Al₁₀Ni₅Cu₃₀ Alloy of 30 mm in Diameter by a Suction Casting Method. <i>Materials Transactions, JIM</i> , 1996, 37, 185-187.	0.9	322
8	Thermal and Mechanical Properties of Ti–Ni–Cu–Sn Amorphous Alloys with a Wide Supercooled Liquid Region before Crystallization. <i>Materials Transactions, JIM</i> , 1998, 39, 1001-1006.	0.9	267
9	Bulk Nd–Fe–Al Amorphous Alloys with Hard Magnetic Properties. <i>Materials Transactions, JIM</i> , 1996, 37, 99-108.	0.9	255
10	Effect of Additional Elements on Glass Transition Behavior and Glass Formation Tendency of Zr–Al–Cu–Ni Alloys. <i>Materials Transactions, JIM</i> , 1995, 36, 1420-1426.	0.9	194
11	New Fe–Co–Ni–Zr–B Amorphous Alloys with Wide Supercooled Liquid Regions and Good Soft Magnetic Properties. <i>Materials Transactions, JIM</i> , 1997, 38, 359-362.	0.9	184
12	Bulk Glass Formation of Ti-Zr-Hf-Cu-M (M=Fe, Co, Ni) Alloys. <i>Materials Transactions</i> , 2002, 43, 277-280.	0.4	178
13	Influence of similar atom substitution on glass formation in (La–Ce)–Al–Co bulk metallic glasses. <i>Acta Materialia</i> , 2007, 55, 3719-3726.	3.8	169
14	Co-based ternary bulk metallic glasses with ultrahigh strength and plasticity. <i>Journal of Materials Research</i> , 2011, 26, 2072-2079.	1.2	151
15	The micro-nanoformability of Pt-based metallic glass and the nanoforming of three-dimensional structures. <i>Intermetallics</i> , 2002, 10, 1241-1247.	1.8	147
16	Microstructural tailoring and improvement of mechanical properties in CuZr-based bulk metallic glass composites. <i>Acta Materialia</i> , 2012, 60, 3128-3139.	3.8	146
17	Amorphous (Ti,Zr, Hf)–Ni–Cu ternary alloys with a wide supercooled liquid region. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1994, 181-182, 1423-1426.	2.6	142
18	Ternary Fe–P–C bulk metallic glass with good soft-magnetic and mechanical properties. <i>Scripta Materialia</i> , 2011, 65, 536-539.	2.6	137

#	ARTICLE	IF	CITATIONS
19	Biodegradable Mg-Zn-Ca-Sr bulk metallic glasses with enhanced corrosion performance for biomedical applications. <i>Materials & Design</i> , 2015, 67, 9-19.	5.1	137
20	Thermal and Mechanical Properties of Cu-Based Cu-Zr-Ti Bulk Glassy Alloys. <i>Materials Transactions</i> , 2001, 42, 1149-1151.	0.4	127
21	Thermal Stability and Mechanical Strength of Bulk Glassy Ni-Nb-Ti-Zr Alloys. <i>Materials Transactions</i> , 2002, 43, 1952-1956.	0.4	121
22	Preparation of Ti-Cu-Ni-Si-B Amorphous Alloys with a Large Supercooled Liquid Region. <i>Materials Transactions, JIM</i> , 1999, 40, 301-306.	0.9	116
23	Ionic interactions between sulfuric acid and chitosan membranes. <i>Carbohydrate Polymers</i> , 2008, 73, 111-116.	5.1	116
24	Ti-based amorphous alloys with a large supercooled liquid region. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 304-306, 771-774.	2.6	112
25	Nucleation and growth of nanoporous copper ligaments during electrochemical dealloying of Mg-based metallic glasses. <i>Corrosion Science</i> , 2013, 67, 100-108.	3.0	97
26	Hard Magnetic Bulk Amorphous Nd-Fe-Al Alloys of 12 mm in Diameter Made by Suction Casting. <i>Materials Transactions, JIM</i> , 1996, 37, 636-640.	0.9	96
27	Ductile Fe-Based Bulk Metallic Glass with Good Soft-Magnetic Properties. <i>Materials Transactions</i> , 2007, 48, 1157-1160.	0.4	93
28	Al _{0.3} CrxFeCoNi high-entropy alloys with high corrosion resistance and good mechanical properties. <i>Journal of Alloys and Compounds</i> , 2021, 860, 158436.	2.8	81
29	Corrosion Behavior of Zr-(Nb)-Al-Ni-Cu Glassy Alloys. <i>Materials Transactions, JIM</i> , 2000, 41, 1490-1494.	0.9	80
30	New Ti-based Ti-Cu-Zr-Fe-Sn-Si-Ag bulk metallic glass for biomedical applications. <i>Journal of Alloys and Compounds</i> , 2015, 625, 323-327.	2.8	79
31	Bio-corrosion study on zirconium-based bulk-metallic glasses. <i>Intermetallics</i> , 2009, 17, 195-199.	1.8	74
32	Bio-corrosion behavior and in vitro biocompatibility of equimolar TiZrHfNbTa high-entropy alloy. <i>Intermetallics</i> , 2020, 124, 106845.	1.8	74
33	Preparation of Bulk Pr-Fe-Al Amorphous Alloys and Characterization of Their Hard Magnetic Properties. <i>Materials Transactions, JIM</i> , 1996, 37, 1731-1740.	0.9	71
34	Thermal Stability and Magnetic Properties of Bulk Amorphous Fe-Al-Ga-P-C-B-Si Alloys. <i>Materials Transactions, JIM</i> , 1997, 38, 189-196.	0.9	71
35	Microstructure and mechanical properties of Al ₂₀ xCr ₂₀ +0.5xFe ₂₀ Co ₂₀ Ni ₂₀ +0.5x high entropy alloys. <i>Journal of Alloys and Compounds</i> , 2016, 659, 279-287.	2.8	71
36	Ni- and Cu-free Zr-Al-Co-Ag bulk metallic glasses with superior glass-forming ability. <i>Journal of Materials Research</i> , 2011, 26, 539-546.	1.2	69

#	ARTICLE	IF	CITATIONS
37	New Ti-Based Bulk Metallic Glasses with Significant Plasticity. <i>Materials Transactions</i> , 2005, 46, 2218-2220.	0.4	66
38	Corrosion behavior and in vitro biocompatibility of Zr-Al-Co-Ag bulk metallic glasses: An experimental case study. <i>Journal of Non-Crystalline Solids</i> , 2012, 358, 1599-1604.	1.5	62
39	Biocompatible Ni-free Zr-based bulk metallic glasses with high-Zr-content: Compositional optimization for potential biomedical applications. <i>Materials Science and Engineering C</i> , 2014, 44, 400-410.	3.8	61
40	Effects of Yttrium and Erbium Additions on Glass-Forming Ability and Mechanical Properties of Bulk Glassy Zr-Al-Ni-Cu Alloys. <i>Materials Transactions</i> , 2006, 47, 450-453.	0.4	59
41	Effect of similar elements on improving glass-forming ability of La-Ce-based alloys. <i>Journal of Alloys and Compounds</i> , 2009, 483, 60-63.	2.8	59
42	Enhanced degradation of azo dye by nanoporous-copper-decorated Mg-Cu-Y metallic glass powder through dealloying pretreatment. <i>Applied Surface Science</i> , 2014, 305, 314-320.	3.1	59
43	Corrosion Behavior of Cu-Zr-Ti-Nb Bulk Glassy Alloys. <i>Materials Transactions</i> , 2003, 44, 749-753.	0.4	57
44	Fracture Toughness of Zr ₅₅ Al ₁₀ Ni ₅ Cu ₃₀ Bulk Metallic Glass by 3-Point Bend Testing. <i>Materials Transactions</i> , 2005, 46, 1725-1732.	0.4	55
45	Formation and mechanical properties of (Ce-La-Pr-Nd)-Co-Al bulk glassy alloys with superior glass-forming ability. <i>Scripta Materialia</i> , 2006, 54, 1123-1126.	2.6	55
46	The effect of atomic size on the stability of supercooled liquid for amorphous (Ti, Zr, Hf) ₆₅ Ni ₂₅ Al ₁₀ and (Ti, Zr, Hf) ₆₅ Cu ₂₅ Al ₁₀ alloys. <i>Materials Letters</i> , 1993, 15, 379-382.	1.3	53
47	Formation, corrosion behavior, and mechanical properties of bulk glassy Zr-Al-Co-Nb alloys. <i>Journal of Materials Research</i> , 2003, 18, 1652-1658.	1.2	53
48	Bulk glassy Ni(Co-Nb)-Ti-Zr alloys with high corrosion resistance and high strength. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004, 375-377, 368-371.	2.6	50
49	Compressibility and hardness of Co-based bulk metallic glass: A combined experimental and density functional theory study. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	49
50	Induced multiple heterogeneities and related plastic improvement by laser surface treatment in CuZr-based bulk metallic glass. <i>Intermetallics</i> , 2012, 24, 50-55.	1.8	47
51	Correlations between the wear resistance and properties of bulk metallic glasses. <i>Intermetallics</i> , 2018, 93, 290-298.	1.8	47
52	Three-dimensional nanoporous copper with high surface area by dealloying Mg-Cu-Y metallic glasses. <i>Materials Letters</i> , 2012, 76, 96-99.	1.3	45
53	Design and properties of novel Ti-Zr-Hf-Nb-Ta high-entropy alloys for biomedical applications. <i>Intermetallics</i> , 2022, 141, 107421.	1.8	45
54	Ductile Fe-Mo-P-C-Ba-Si bulk metallic glasses with high saturation magnetization. <i>Journal of Alloys and Compounds</i> , 2009, 483, 613-615.	2.8	44

#	ARTICLE	IF	CITATIONS
55	A multicomponent TiZr-based amorphous brazing filler metal for high-strength joining of titanium alloy. <i>Scripta Materialia</i> , 2016, 117, 55-59.	2.6	44
56	New Glassy Zr-Al-Fe and Zr-Al-Co Alloys with a Large Supercooled Liquid Region. <i>Materials Transactions</i> , 2002, 43, 267-270.	0.4	42
57	Formation, Thermal Stability and Mechanical Properties in Zr-Al-Co Bulk Glassy Alloys. <i>Materials Transactions</i> , 2002, 43, 2843-2846.	0.4	41
58	Improvement in mechanical properties of a Zr-based bulk metallic glass by laser surface treatment. <i>Journal of Alloys and Compounds</i> , 2010, 504, S45-S47.	2.8	40
59	Effects of Metalloid B Addition on the Glass Formation, Magnetic and Mechanical Properties of FePCB Bulk Metallic Glasses. <i>Journal of Materials Science and Technology</i> , 2015, 31, 493-497.	5.6	38
60	Surface vitrification of alloys by laser surface treatment. <i>Journal of Alloys and Compounds</i> , 2012, 511, 215-220.	2.8	37
61	Tribocorrosion behaviors of a biodegradable Mg ₆₅ Zn ₃₀ Ca ₅ bulk metallic glass for potential biomedical implant applications. <i>Journal of Alloys and Compounds</i> , 2018, 745, 111-120.	2.8	37
62	Quasi phase transition model of shear bands in metallic glasses. <i>Acta Materialia</i> , 2011, 59, 7416-7424.	3.8	35
63	Pronounced ductility in CuZrAl ternary bulk metallic glass composites with optimized microstructure through melt adjustment. <i>AIP Advances</i> , 2012, 2, 032176.	0.6	35
64	Near room-temperature magnetocaloric effect in FeMnPBC metallic glasses with tunable Curie temperature. <i>Journal of Magnetism and Magnetic Materials</i> , 2013, 347, 131-135.	1.0	34
65	Towards improved integrated properties in FeCrPCB bulk metallic glasses by Cr addition. <i>Intermetallics</i> , 2015, 61, 16-20.	1.8	34
66	Formation and evolution of nanoporous bimetallic Ag-Cu alloy by electrochemically dealloying Mg-(Ag-Cu)-Y metallic glass. <i>Corrosion Science</i> , 2017, 119, 23-32.	3.0	34
67	Tribological behaviors of high-hardness Co-based amorphous coatings fabricated by laser cladding. <i>Tribology International</i> , 2021, 162, 107142.	3.0	34
68	Corrosion resistant Cr-based bulk metallic glasses with high strength and hardness. <i>Journal of Non-Crystalline Solids</i> , 2015, 410, 20-25.	1.5	33
69	Bulk Glassy Alloys with Low Liquidus Temperature in Pt-Cu-P System. <i>Materials Transactions</i> , 2003, 44, 1143-1146.	0.4	32
70	Optimization of mechanical properties of bulk metallic glasses by residual stress adjustment using laser surface melting. <i>Scripta Materialia</i> , 2012, 66, 1057-1060.	2.6	32
71	Effects of minor Cu addition on glass-forming ability and magnetic properties of FePCBCu alloys with high saturation magnetization. <i>Philosophical Magazine</i> , 2013, 93, 2182-2189.	0.7	32
72	In vitro investigation of Mg ₄₀ Zn ₄₀ Ca ₁₀ Ag bulk metallic glasses for biomedical applications. <i>Journal of Non-Crystalline Solids</i> , 2015, 427, 134-138.	1.5	32

#	ARTICLE	IF	CITATIONS
73	Class formation, corrosion behavior, and mechanical properties of novel Cr-rich Cr ₄₀ Fe ₁₀ Mo ₁₀ Ca ₁₀ Ba ₁₀ Y bulk metallic glasses. <i>Journal of Alloys and Compounds</i> , 2015, 625, 318-322.	2.8	32
74	A centimeter-size Zr ₄₀ Hf ₁₀ Ti ₄ Y ₁ Al ₁₀ Cu ₂₅ Ni ₇ Co ₂ Fe ₁ bulk metallic glass with high mixing entropy designed by multi-substitution. <i>Journal of Non-Crystalline Solids</i> , 2015, 410, 39-42.	1.5	32
75	Formation and properties of Ti-based Ti ₄₀ Zr ₄₀ Cu ₁₀ Fe ₁₀ Sn ₁₀ Si bulk metallic glasses with different (Ti+Zr)/Cu ratios for biomedical application. <i>Intermetallics</i> , 2016, 72, 36-43.	1.8	32
76	Centimeter-scale-diameter Co-based bulk metallic glasses with fracture strength exceeding 5000 MPa. <i>Science Bulletin</i> , 2011, 56, 3972-3977.	1.7	31
77	Dry and lubricated tribological behavior of a Ni- and Cu-free Zr-based bulk metallic glass. <i>Journal of Non-Crystalline Solids</i> , 2015, 426, 63-71.	1.5	31
78	Ni-free Zr ₄₀ Cu ₁₀ Al ₁₀ Nb ₁₀ Pd bulk metallic glasses with different Zr/Cu ratios for biomedical applications. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2012, 100B, 1472-1482.	1.6	30
79	Design and preparation of nanoporous Ag ₄₀ Cu alloys by dealloying Mg ₄₀ (Ag,Cu) ₆₀ Y metallic glasses for antibacterial applications. <i>Journal of Materials Chemistry B</i> , 2019, 7, 4169-4176.	2.9	30
80	Ti ₄₀ Cu ₁₀ Zr ₁₀ Fe ₁₀ Sn ₁₀ Si ₁₀ Sc bulk metallic glasses with good mechanical properties for biomedical applications. <i>Journal of Alloys and Compounds</i> , 2016, 679, 341-349.	2.8	29
81	Nanoporous metallic-glass electrocatalysts for highly efficient oxygen evolution reaction. <i>Journal of Alloys and Compounds</i> , 2021, 852, 156876.	2.8	29
82	Novel low Cu content and Ni-free Zr-based bulk metallic glasses for biomedical applications. <i>Journal of Non-Crystalline Solids</i> , 2013, 363, 1-5.	1.5	28
83	A Ni-free high-zirconium-based bulk metallic glass with enhanced plasticity and biocompatibility. <i>Journal of Non-Crystalline Solids</i> , 2013, 376, 133-138.	1.5	28
84	Fe ₄₀ Al ₁₀ P ₁₀ C ₁₀ B bulk metallic glass with good mechanical and soft magnetic properties. <i>Journal of Alloys and Compounds</i> , 2015, 637, 5-9.	2.8	28
85	Tunable magnetic properties and heat-treatable bending ductility of Fe-Co-B-P-C amorphous alloys with a high saturated magnetization up to 1.79 T. <i>Journal of Alloys and Compounds</i> , 2019, 778, 302-308.	2.8	28
86	Antimicrobial behavior of Cu-bearing Zr-based bulk metallic glasses. <i>Materials Science and Engineering C</i> , 2014, 39, 325-329.	3.8	27
87	Glass-forming ability, crystallization kinetics, mechanical property, and corrosion behavior of Zr ₄₀ Al ₁₀ Ni ₁₀ Ag glassy alloys. <i>Journal of Alloys and Compounds</i> , 2014, 602, 339-345.	2.8	27
88	A new strategy to fabricate nanoporous iron-based metallic glasses: Selective phase tailoring of amorphous-nanocrystalline composite alloys through electrochemical dissolution. <i>Scripta Materialia</i> , 2017, 133, 14-18.	2.6	27
89	Effects of Additional Elements on the Glass Formation and Corrosion Behavior of Bulk Glassy Cu-Hf-Ti Alloys. <i>Materials Transactions</i> , 2003, 44, 1042-1045.	0.4	26
90	Nitrogen-doping effect on glass formation and primary phase selection in Cu ₄₀ Zr ₄₀ Al alloys. <i>Journal of Alloys and Compounds</i> , 2011, 509, 5033-5037.	2.8	26

#	ARTICLE	IF	CITATIONS
91	General synthesis of sponge-like ultrafine nanoporous metals by dealloying in citric acid. <i>Nano Research</i> , 2016, 9, 2467-2477.	5.8	26
92	Formation and properties of centimeter-size Zr-Ti-Cu-Al-Y bulk metallic glasses as potential biomaterials. <i>Journal of Alloys and Compounds</i> , 2016, 656, 389-394.	2.8	26
93	Effect of primary δ -Fe on soft magnetic properties of FeCuNbSiB amorphous/nanocrystalline alloy. <i>Journal of Non-Crystalline Solids</i> , 2021, 571, 121079.	1.5	26
94	Synthesis and mechanical properties of TiC-reinforced Cu-based bulk metallic glass composites. <i>Scripta Materialia</i> , 2009, 60, 84-87.	2.6	25
95	Effects of minor Sn addition on the glass formation and properties of Fe-metalloid metallic glasses with high magnetization and high glass forming ability. <i>Journal of Magnetism and Magnetic Materials</i> , 2015, 378, 417-423.	1.0	25
96	Formation and mechanical properties of Ni-free Zr-based bulk metallic glasses. <i>Journal of Alloys and Compounds</i> , 2011, 509, S175-S178.	2.8	24
97	Effect of Ni addition on the glass-forming ability and soft-magnetic properties of FeNiBPNb metallic glasses. <i>Science Bulletin</i> , 2011, 56, 3932-3936.	1.7	24
98	Effects of noble elements on the glass-forming ability, mechanical property, electrochemical behavior and tribocorrosion resistance of Ni- and Cu-free Zr-Al-Co bulk metallic glass. <i>Journal of Alloys and Compounds</i> , 2017, 725, 403-414.	2.8	24
99	Corrosion-fatigue study of a Zr-based bulk-metallic glass in a physiologically relevant environment. <i>Journal of Alloys and Compounds</i> , 2010, 504, S159-S162.	2.8	23
100	Large-sized CuZr-based Bulk Metallic Glass Composite with Enhanced Mechanical Properties. <i>Journal of Materials Science and Technology</i> , 2014, 30, 590-594.	5.6	23
101	In-situ constructed Ru-rich porous framework on NiFe-based ribbon for enhanced oxygen evolution reaction in alkaline solution. <i>Journal of Materials Science and Technology</i> , 2021, 70, 197-204.	5.6	23
102	Biocompatible Zr-Al-Fe bulk metallic glasses with large plasticity. <i>Science China: Physics, Mechanics and Astronomy</i> , 2012, 55, 1664-1669.	2.0	22
103	Thermal stability, crystallization and soft magnetic properties of Fe-P-C-based glassy alloys. <i>Journal of Non-Crystalline Solids</i> , 2016, 454, 39-45.	1.5	22
104	Synthesis of Fe 75 Cr 5 (PBC) 20 bulk metallic glasses with a combination of desired merits using industrial ferro-alloys without high-purity materials. <i>Journal of Alloys and Compounds</i> , 2017, 699, 92-97.	2.8	22
105	Correlation between dealloying conditions and coarsening behaviors of nanoporous silver produced by chemical dealloying of Ca-Ag metallic glass. <i>Journal of Alloys and Compounds</i> , 2017, 695, 1600-1609.	2.8	22
106	Tribological behaviors of a Ni-free Ti-based bulk metallic glass in air and a simulated physiological environment. <i>Journal of Alloys and Compounds</i> , 2018, 766, 1030-1036.	2.8	22
107	Formation of nanoporous silver by dealloying Ca-Ag metallic glasses in water. <i>Intermetallics</i> , 2015, 67, 166-170.	1.8	21
108	In vitro responses of bone-forming MC3T3-E1 pre-osteoblasts to biodegradable Mg-based bulk metallic glasses. <i>Materials Science and Engineering C</i> , 2016, 68, 632-641.	3.8	21

#	ARTICLE	IF	CITATIONS
109	Formation and High Mechanical Strength of Bulk Glassy Alloys in Zr-Al-Co-Cu System. <i>Materials Transactions</i> , 2003, 44, 1839-1844.	0.4	20
110	Tuning glass formation and brittle behaviors by similar solvent element substitution in (Mn,Fe)-based bulk metallic glasses. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 626, 16-26.	2.6	20
111	Influences of laser surface melting on microstructure, mechanical properties and corrosion resistance of dual-phase Cr-Fe-Co-Ni-Al high entropy alloys. <i>Journal of Alloys and Compounds</i> , 2020, 826, 154100.	2.8	20
112	The Influence of Similar Element Coexistence in (La-Ce)-Al-(Co-Cu) Bulk Metallic Glasses. <i>Materials Transactions</i> , 2007, 48, 1680-1683.	0.4	19
113	Effect of Mo element on the properties of Fe-Mo-P-C-B bulk metallic glasses. <i>Journal of Non-Crystalline Solids</i> , 2009, 355, 1444-1447.	1.5	19
114	Crystallization and thermophysical properties of Cu ₄₆ Zr ₄₇ Al ₆ Co ₁ bulk metallic glass. <i>AIP Advances</i> , 2013, 3, .	0.6	19
115	Self-oxidized sponge-like nanoporous nickel alloy in three-dimensions with pseudocapacitive behavior and excellent capacitive performance. <i>Journal of Power Sources</i> , 2018, 399, 192-198.	4.0	19
116	Effect of similar element substitution on Fe-B-Si-Mo bulk metallic glasses studied by experiment and ab initio molecular dynamics simulation. <i>Journal of Alloys and Compounds</i> , 2019, 784, 1139-1144.	2.8	19
117	Nanocrystalline Fe ₈₃ Si ₄ B ₁₀ P ₂ Cu ₁ ribbons with improved soft magnetic properties and bendability prepared via rapid annealing of the amorphous precursor. <i>Journal of Magnetism and Magnetic Materials</i> , 2021, 523, 167583.	1.0	19
118	Formation, thermal stability and corrosion behavior of glassy Ti ₄₅ Zr ₅ Cu ₄₅ Ni ₅ alloy. <i>Intermetallics</i> , 2007, 15, 683-686.	1.8	18
119	Corrosion fatigue behavior of a Mg-based bulk metallic glass in a simulated physiological environment. <i>Intermetallics</i> , 2016, 73, 31-39.	1.8	18
120	Formation of ultrafine spongy nanoporous metals (Ni, Cu, Pd, Ag and Au) by dealloying metallic glasses in acids with capping effect. <i>Corrosion Science</i> , 2019, 153, 1-11.	3.0	18
121	Dry wear behavior and mechanism of a Fe-based bulk metallic glass: description by Hertzian contact calculation and finite-element method simulation. <i>Journal of Non-Crystalline Solids</i> , 2020, 543, 120065.	1.5	18
122	Misch metal based metallic glasses. <i>Journal of Alloys and Compounds</i> , 2008, 450, 181-184.	2.8	17
123	AlNiY chill-zone alloys with good mechanical properties. <i>Journal of Alloys and Compounds</i> , 2009, 477, 346-349.	2.8	17
124	Spray formed Al-based amorphous matrix nanocomposite plate. <i>Journal of Alloys and Compounds</i> , 2011, 509, L169-L173.	2.8	16
125	A study on the surface structures and properties of Ni-free Zr-based bulk metallic glasses after Ar and Ca ion implantation. <i>Intermetallics</i> , 2013, 41, 35-43.	1.8	16
126	Effects of boron content on the glass-forming ability and mechanical properties of Co-B-Ta glassy alloys. <i>Journal of Alloys and Compounds</i> , 2014, 617, 7-11.	2.8	16

#	ARTICLE	IF	CITATIONS
127	Effects of lutetium addition on formation, oxidation and tribological properties of a Zr-based bulk metallic glass. <i>Intermetallics</i> , 2017, 90, 81-89.	1.8	16
128	A Tiâ€“Zrâ€“Cuâ€“Niâ€“Coâ€“Feâ€“Alâ€“Sn amorphous filler metal for improving the strength of Tiâ€“6Alâ€“4V alloy brazing joint. <i>Progress in Natural Science: Materials International</i> , 2017, 27, 687-694.	1.8	16
129	Non-isothermal crystallization kinetics of Fe 75 Cr 5 P 9 B 4 C 7 metallic glass with a combination of desired merits. <i>Vacuum</i> , 2018, 152, 8-14.	1.6	16
130	Isothermal crystallization kinetics of Fe75Cr5P9B4C7 metallic glass with cost-effectiveness and desirable merits. <i>Journal of Thermal Analysis and Calorimetry</i> , 2018, 133, 1309-1315.	2.0	16
131	Fabrication of Bulk Glassy Hf₅₀Cu₃₀Ni₁₀Al₁₀ Alloy by Copper Mold Casting. <i>Materials Transactions</i> , 2002, 43, 2357-2359.	0.4	15
132	Formation of Tiâ€“Zrâ€“Cuâ€“Niâ€“Snâ€“Si bulk metallic glasses with good plasticity. <i>Journal of Alloys and Compounds</i> , 2010, 504, S10-S13.	2.8	15
133	Coring micron- and milli-scale holes in metallic glasses. <i>Journal of Non-Crystalline Solids</i> , 2011, 357, 3190-3194.	1.5	15
134	Tunable magnetic and magnetocaloric properties in heavy rare-earth based metallic glasses through the substitution of similar elements. <i>Journal of Applied Physics</i> , 2014, 115, 133903.	1.1	15
135	Ternary Laâ€“Alâ€“C bulk metallic glasses. <i>Intermetallics</i> , 2014, 52, 92-96.	1.8	15
136	Fabrication of Three-Dimensional Nanoporous Nickel by Dealloying Mg-Ni-Y Metallic Glasses in Citric Acid Solutions for High-Performance Energy Storage. <i>Journal of the Electrochemical Society</i> , 2017, 164, A348-A354.	1.3	15
137	Glass formation and properties of Ti-based bulk metallic glasses as potential biomaterials with Nb additions. <i>Rare Metals</i> , 2018, 37, 831-837.	3.6	15
138	Controllable brittleness in soft-magnetic Fe-P-C-B metallic glasses through composition design. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 766, 138385.	2.6	15
139	Nanolayered flaky Fe-based amorphous-nanocrystalline/graphite sheet composites with enhanced microwave absorbing properties. <i>Journal of Alloys and Compounds</i> , 2019, 797, 39-44.	2.8	15
140	Glass-Forming Ability and Mechanical Properties of Sm-Doped Fe–Cr–Mo–C–B Glassy Alloys. <i>Materials Transactions</i> , 2005, 46, 2949-2953.	0.4	14
141	Chill-zone aluminum alloys with GPa strength and good plasticity. <i>Journal of Materials Research</i> , 2009, 24, 1513-1521.	1.2	14
142	Effect of the cooling rate on plastic deformability of a Zr-based bulk metallic glass. <i>Science China: Physics, Mechanics and Astronomy</i> , 2010, 53, 415-418.	2.0	14
143	Effect of cooling rate on microstructure and mechanical properties of rapidly solidified Al-based bulk alloys. <i>Journal of Alloys and Compounds</i> , 2010, 504, S117-S122.	2.8	14
144	Homogeneous Nanoporous Ni Particles Produced by Dealloying Mg-Based Metallic Glass as Efficient Hydrogen Evolution Electrocatalyst. <i>Journal of the Electrochemical Society</i> , 2018, 165, F207-F214.	1.3	14

#	ARTICLE	IF	CITATIONS
145	Ti–Zr–Cu–Fe–Sn–Si–Ag–Ta bulk metallic glasses with good corrosion resistance as potential biomaterials. <i>Rare Metals</i> , 2020, 39, 688-694.	3.6	14
146	Influence of laser surface melting on glass formation and tribological behaviors of Zr ₅₅ Al ₁₀ Ni ₅ Cu ₃₀ alloy. <i>Journal of Materials Research</i> , 2011, 26, 2642-2652.	1.2	13
147	Glass-forming ability, fragility parameter, and mechanical properties of Co–Ir–Ta–B amorphous alloys. <i>Journal of Alloys and Compounds</i> , 2013, 576, 375-379.	2.8	13
148	Surface engineering of a Zr-based bulk metallic glass with low energy Ar- or Ca-ion implantation. <i>Materials Science and Engineering C</i> , 2015, 47, 248-255.	3.8	13
149	Tensile plasticity in monolithic bulk metallic glass with sandwiched structure. <i>Journal of Alloys and Compounds</i> , 2016, 688, 724-728.	2.8	13
150	Corrosion behavior of a glassy Ti–Zr–Hf–Cu–Ni–Si alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007, 449-451, 557-560.	2.6	12
151	Glass formation, thermal properties, and elastic constants of La–Al–Co alloys. <i>Journal of Materials Research</i> , 2010, 25, 1398-1404.	1.2	12
152	Enhanced glass-forming ability of a Sm-based alloy with the addition of La. <i>Journal of Alloys and Compounds</i> , 2010, 505, 497-500.	2.8	12
153	The relationship between t-ZrO ₂ stability and the crystallization of a Zr-based bulk metallic glass during oxidation. <i>Intermetallics</i> , 2012, 31, 21-25.	1.8	12
154	Hierarchical ultrafine-grained/nanocrystalline Al-based bulk alloy with high strength and large plasticity. <i>Intermetallics</i> , 2012, 23, 199-203.	1.8	12
155	The influence of Ag substitution for Cu on glass-forming ability and thermal properties of Mg-based bulk metallic glasses. <i>Journal of Non-Crystalline Solids</i> , 2012, 358, 1425-1429.	1.5	12
156	Compositional dependence of microstructure and tribological properties of plasma sprayed Fe-based metallic glass coatings. <i>Science China Technological Sciences</i> , 2012, 55, 1335-1342.	2.0	12
157	High-zirconium bulk metallic glasses with high strength and large ductility. <i>Science China: Physics, Mechanics and Astronomy</i> , 2013, 56, 540-544.	2.0	12
158	Effect of Minor Au Addition on Glass-Forming Ability and Mechanical Properties of Pd–Cu–Au–Si–P Alloys. <i>Materials Transactions</i> , 2005, 46, 2945-2948.	0.4	11
159	Formation and biocorrosion behavior of Zr–Al–Co–Nb bulk metallic glasses. <i>Science Bulletin</i> , 2012, 57, 1723-1727.	1.7	11
160	Size-dependent enhancement of plasticity by laser surface melting in Zr ₅₅ Al ₁₀ Ni ₅ Cu ₃₀ bulk metallic glass. <i>Journal of Alloys and Compounds</i> , 2016, 658, 49-54.	2.8	11
161	Balancing benefits of strength, plasticity and glass-forming ability in Co-based metallic glasses. <i>Journal of Materials Science and Technology</i> , 2021, 86, 110-116.	5.6	11
162	A Bulk Glassy Cu–Zr–Ti–Sn Alloy with Superior Plasticity. <i>Materials Transactions</i> , 2005, 46, 2545-2547.	0.4	9

#	ARTICLE	IF	CITATIONS
163	Investigation of viscosity and crystallization in supercooled-liquid region of Zr-based glassy alloys. Journal of Non-Crystalline Solids, 2012, 358, 150-154.	1.5	9
164	Macrophage responses to a Zr-based bulk metallic glass. Journal of Biomedical Materials Research - Part A, 2014, 102, 3369-3378.	2.1	9
165	Honeycomb-like porous metallic glasses decorated by Cu nanoparticles formed by one-pot electrochemically galvanostatic etching. Materials and Design, 2020, 196, 109109.	3.3	9
166	Triggering of Apoptosis in Osteosarcoma 143B Cell Line by Carbon Quantum Dots via the Mitochondrial Apoptotic Signal Pathway. BioMed Research International, 2020, 2020, 1-12.	0.9	9
167	Formation and properties of biocompatible Ti-based bulk metallic glasses in the Ti-Cu-Zr-Fe-Sn-Si-Ag system. Journal of Non-Crystalline Solids, 2021, 571, 121060.	1.5	9
168	The atomic structure, magnetic properties and bending ductility of a novel Fe-P-C-B-Si amorphous alloy investigated by experiments and ab initio molecular dynamics. Journal of Alloys and Compounds, 2022, 904, 164101.	2.8	9
169	Ti-Zr-Hf-Nb-Ta-Sn high-entropy alloys with good properties as potential biomaterials. Rare Metals, 2022, 41, 2305-2315.	3.6	9
170	Effect of continuous rapid annealing on the microstructure and properties of Fe ₈₅ P ₁₁ C ₂ B ₂ amorphous alloy. Materials Letters, 2022, 315, 131984.	1.3	9
171	Formation and thermal stability of Cu-Zr-Al-Er bulk metallic glasses with high glass-forming ability. International Journal of Minerals, Metallurgy, and Materials, 2007, 14, 36-38.	0.2	8
172	Synthesis of impurity-insensitive Zr-based bulk metallic glass. Journal of Non-Crystalline Solids, 2016, 439, 1-5.	1.5	8
173	Microstructure and Mechanical Properties of Al ₂₅ Cr ₂₅ Fe ₂₅ Ni ₂₅ (Al ₁₉ Cr ₁₇ Fe ₁₅ Ni ₁₅ at%) Multi-Component Alloys. Advanced Engineering Materials, 2018, 20, 1701057.	1.6	8
174	Fabrication of hierarchical porous metallic glasses decorated with Cu nanoparticles as integrated electrodes for high-performance non-enzymatic glucose sensing. Scripta Materialia, 2021, 199, 113884.	2.6	8
175	The similarity of elements in multi-principle element alloys based on a new criterion for phase constitution. Materials and Design, 2021, 207, 109849.	3.3	8
176	Î ² duplex phase Ti-Zr-Nb-Ag alloys with impressive mechanical properties, excellent antibacterial and good biocompatibility. Journal of Materials Research and Technology, 2022, 19, 5008-5016.	2.6	8
177	Magnetic softening of the Fe ₈₃ Si ₃ B ₁₁ P ₂ Cu ₁ amorphous/nanocrystalline alloys with large-size pre-existing Î±-Fe grains by high heating-rate annealing. Journal of Materials Research and Technology, 2022, 20, 161-168.	2.6	8
178	Ce-Rich Misch Metal-Based Bulk Metallic Glasses with High Glass-Forming Ability. Materials Transactions, 2005, 46, 2291-2294.	0.4	7
179	Air Oxidation Kinetics Study of Zr ₅₈ Nb ₃ Cu ₁₆ Ni ₁₃ Al ₁₀ Bulk Metallic Glass. Defect and Diffusion Forum, 2009, 283-286, 209-213.	0.4	7
180	Studies on the formability of Al-based metallic glasses/nanocomposites based on isochronal DSC analysis. Journal of Non-Crystalline Solids, 2010, 356, 2258-2262.	1.5	7

#	ARTICLE	IF	CITATIONS
181	Glass formation, magnetic properties and magnetocaloric effect of ternary Ho-Al-Co bulk metallic glass. <i>Journal of Magnetism and Magnetic Materials</i> , 2012, 324, 4064-4067.	1.0	7
182	Correlation of glass-forming ability to thermal properties in Ti-based bulk metallic glasses. <i>Journal of Alloys and Compounds</i> , 2013, 546, 7-13.	2.8	7
183	Synthesis of CoCrMoCB bulk metallic glasses with high strength and good plasticity via regulating the metalloid content. <i>Journal of Non-Crystalline Solids</i> , 2015, 410, 155-159.	1.5	7
184	Surface vitrification of alloys by pulsed electrical discharge treatment. <i>Journal of Alloys and Compounds</i> , 2017, 707, 148-154.	2.8	7
185	Enhanced Wear Resistance of Zr-Based Bulk Metallic Glass by Thermal Oxidation Treatment. <i>Materials Transactions</i> , 2017, 58, 520-523.	0.4	7
186	Local atomic structure of Co B-based glassy alloys: Ab initio molecular dynamics simulations. <i>Journal of Non-Crystalline Solids</i> , 2018, 483, 118-125.	1.5	7
187	FeSiBPNbCu Bulk Nanocrystalline Alloys with High GFA and Excellent Soft-Magnetic Properties. <i>Metals</i> , 2019, 9, 219.	1.0	7
188	Microstructure and mechanical properties of a spray-formed Ti-based metallic glass former alloy. <i>Journal of Alloys and Compounds</i> , 2012, 512, 241-245.	2.8	6
189	Formation and mechanical properties of La-Al-Ga-C bulk metallic glasses with high content of carbon. <i>Journal of Non-Crystalline Solids</i> , 2014, 403, 18-22.	1.5	6
190	Hard rhenium-boron-cobalt amorphous alloys with a wide supercooled liquid region. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 645, 122-125.	2.6	6
191	Fabrication of highly ordered nanotube layer on Zr-based bulk metallic glass for biomedical uses. <i>Materials Letters</i> , 2017, 200, 63-66.	1.3	6
192	Influence of laser surface melting treatment on the surface composition and mechanical properties of a Zr ₆₅ Al _{7.5} Ni ₁₀ Cu _{12.5} Ag ₅ bulk metallic glass. <i>Journal of Non-Crystalline Solids</i> , 2018, 488, 63-68.	1.5	6
193	Atomic Structure and Magnetic Properties of the Fe ₇₈ B ₁₃ Si ₉ Amorphous Alloy Surface. <i>Journal of Physical Chemistry C</i> , 2018, 122, 28613-28618.	1.5	6
194	EFFECT OF COEXISTENCE OF SIMILAR ELEMENTS La AND Ce ON FORMATION OF (La-Ce)-Al-Cu BULK METALLIC GLASSES. <i>International Journal of Modern Physics B</i> , 2009, 23, 1235-1240.	1.0	5
195	Real time synchrotron radiation studies on metallic glass (Zr _{0.55} Al _{0.1} Ni _{0.05} Cu _{0.3}) ₉₉ Y ₁ after cold rolling. <i>Intermetallics</i> , 2009, 17, 231-234.	1.8	5
196	Initial Oxidation Behavior of Zr ₅₅ Cu ₃₀ Al ₁₀ Ni ₅ Bulk Metallic Glass in Short-Term Stage. <i>Materials Science Forum</i> , 0, 675-677, 209-212.	0.3	5
197	Tailoring residual stress to achieve large plasticity in Zr ₅₅ Al ₁₀ Ni ₅ Cu ₃₀ bulk metallic glass. <i>Journal of Alloys and Compounds</i> , 2017, 690, 176-181.	2.8	5
198	Development of Co-Based Amorphous Composite Coatings Synthesized by Laser Cladding for Neutron Shielding. <i>Materials</i> , 2021, 14, 279.	1.3	5

#	ARTICLE	IF	CITATIONS
199	Formation and Mechanical Properties of Bulk Glassy (Cu _{0.55} Zr _{0.40} Al _{0.05}) ₉₉ RE ₁ (RE=Y, Pr). <i>Trends in Applied Sciences</i> , 2019, 1, 0.784314.	1.7	4
200	Formation and mechanical properties of Zr-based bulk metallic glass composites with high oxygen levels. <i>Science Bulletin</i> , 2012, 57, 3931-3936.	1.7	4
201	Ab initio molecular dynamics simulation of the surface composition of Co ₅₄ Ta ₁₁ B ₃₅ metallic glasses. <i>Journal of Non-Crystalline Solids</i> , 2015, 425, 199-206.	1.5	4
202	Crystallization kinetics of a high-zirconium-based glassy alloy: A DSC study. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2016, 31, 191-196.	0.4	4
203	Crystallization and corrosion resistance of Zr-Ti-Y-Al-Cu-Ni-Co-Fe complex multi-component bulk metallic glasses. <i>Intermetallics</i> , 2020, 118, 106688.	1.8	4
204	Formation of bulk Pt-Pd-Ni-P glassy alloys. <i>Journal of Non-Crystalline Solids</i> , 2006, 352, 3103-3108.	1.5	3
205	Investigation on structure and dynamic property of liquid Pd-Cu-Ni-P alloys using ab initio molecular dynamics simulation. <i>Science China Technological Sciences</i> , 2013, 56, 376-386.	2.0	3
206	Local structure of Co ₅₅ Ta ₁₀ B ₃₅ amorphous alloy investigated by ab-initio molecular dynamics. <i>Science China: Physics, Mechanics and Astronomy</i> , 2013, 56, 904-909.	2.0	3
207	Effects of the laser surface treatment on the mechanical properties of CuZr-based bulk metallic glasses. <i>Science China: Physics, Mechanics and Astronomy</i> , 2013, 56, 925-927.	2.0	3
208	Amorphization of Ni ₆₁ Nb ₃₉ Alloy by Laser Surface Treatment. <i>Journal of Iron and Steel Research International</i> , 2016, 23, 37-41.	1.4	3
209	Correlation between local structure and glass forming ability enhanced by similar element substitution in (La-Ce)-Co-Al bulk metallic glasses. <i>Journal of Applied Physics</i> , 2017, 122, 085103.	1.1	3
210	Fabrication of fine spongy nanoporous Ag-Au alloys with improved catalysis properties. <i>Progress in Natural Science: Materials International</i> , 2017, 27, 658-663.	1.8	3
211	Effect of similar element Nb and Ti substitution for Zr in Fe ₇₀ (ZrNbTi) ₁₀ B ₂₀ bulk metallic glasses. <i>Journal of Non-Crystalline Solids</i> , 2020, 529, 119765.	1.5	3
212	Effect of annealing on crystallization behavior in Cu ₁₅ Zr ₈₅ amorphous film. <i>Journal of Alloys and Compounds</i> , 2021, 883, 160913.	2.8	3
213	Tailoring metalloid elements in Fe-C-P-B amorphous/nanocrystalline alloys with high saturated magnetization and heat-treatable bending ductility. <i>Journal of Non-Crystalline Solids</i> , 2022, 584, 121515.	1.5	3
214	Correlation between supercooled liquid region and crystallization behavior with alloy composition of La-Al-Cu metallic glasses. <i>Science China: Physics, Mechanics and Astronomy</i> , 2011, 54, 1608-1611.	2.0	2
215	The 1.85 GPa AlSc Bulk Alloy with Abundant Nanoscale Growth Twins. <i>Chinese Physics Letters</i> , 2015, 32, 076401.	1.3	2
216	Microalloying-induced large plasticity in La-Al-C bulk metallic glass. <i>Journal of Non-Crystalline Solids</i> , 2016, 447, 55-58.	1.5	2

#	ARTICLE	IF	CITATIONS
217	Formation and mechanical properties of Zr-Nb-Cu-Ni-Al-Lu bulk glassy alloys with superior glass-forming ability. Journal Wuhan University of Technology, Materials Science Edition, 2016, 31, 186-190.	0.4	2
218	Tailoring Nano-crystallization in Zr ₅₀ Ti ₄ Y ₁ Al ₁₀ Cu ₂₅ Ni ₇ Co ₂ Fe ₁ complex multicomponent bulk metallic glass by O doping. Journal of Non-Crystalline Solids, 2021, 553, 120474.	1.5	2
219	Ti-Cu-Zr-Fe-Sn-Si-Ag-Pd Bulk Metallic Glasses with Potential for Biomedical Applications. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 1559-1567.	1.1	2
220	General route to fabricate ultrafine metallic glass powders directly from their own crystalline states by localized pulsed electrical discharge atomization. Intermetallics, 2021, 136, 107267.	1.8	2
221	Ductile Fe-based amorphous alloys with high iron content. International Journal of Minerals, Metallurgy and Materials, 2010, 17, 199-203.	2.4	1
222	Ti-Cu-Zr-Fe-Nb ultrafine structure-dendrite composites with good mechanical properties and biocompatibility. Progress in Natural Science: Materials International, 2013, 23, 557-561.	1.8	1
223	Induced Plasticity of a Brittle (La, Ce)-Based Bulk Metallic Glass by Surface Corrosion. Acta Metallurgica Sinica (English Letters), 2016, 29, 129-133.	1.5	1
224	A complex multicomponent bulk metallic glass/ultrafine-nanocrystal composite fabricated under industrial-applicable condition. Journal of Non-Crystalline Solids, 2020, 530, 119827.	1.5	1
225	Atomic structure of $\langle \text{Co}_{92}\text{B}_8\text{Ta}_8 \rangle$ glassy alloys studied by ab initio molecular dynamics simulations. International Journal of Quantum Chemistry, 2020, 120, e26406.	1.0	1
226	FORMATION OF $\langle \text{La-Al-Ni-Cu-Fe} \rangle$ BULK METALLIC GLASSES WITH HIGH GLASS-FORMING ABILITY. International Journal of Modern Physics B, 2010, 24, 2314-2319.	1.0	0
227	Direct drive friction welding of a multi-phase $\text{Al}_{13}\text{Cr}_{23.5}\text{Fe}_{20}\text{Co}_{20}\text{Ni}_{23.5}$ high-entropy alloy. Science and Technology of Welding and Joining, 2021, 26, 513-520.	1.5	0