Shengfeng Guo

List of Publications by Year
in descending order

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76	2,085	186265	265206
papers	citations	28 h-index	42 g-index

76	76	76	1641
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Fe-based bulk metallic glass matrix composite with large plasticity. Scripta Materialia, 2010, 62, 329-332.	5.2	160
2	Fe-based bulk metallic glasses: Brittle or ductile?. Applied Physics Letters, 2014, 105, .	3.3	105
3	Effects of annealing on the hardness and elastic modulus of a Cu36Zr48Al8Ag8 bulk metallic glass. Materials & Design, 2013, 47, 706-710.	5.1	79
4	Texture control by {10-12} twinning to improve the formability of Mg alloys: A review. Journal of Materials Science and Technology, 2019, 35, 2269-2282.	10.7	79
5	Fe-based amorphous coating for corrosion protection of magnesium alloy. Materials and Design, 2016, 108, 624-631.	7.0	78
6	Enhanced mechanical properties of Mg-Gd-Y-Zn-Mn alloy by tailoring the morphology of long period stacking ordered phase. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 733, 267-275.	5.6	71
7	Effect of Sn addition on the mechanical properties and bio-corrosion behavior of cytocompatible Mgâ€“4Zn based alloys. Journal of Magnesium and Alloys, 2019, 7, 15-26.	11.9	68
8	Improving mechanical properties and corrosion resistance of Mgî—¸6Znî—¸Mn magnesium alloy by rapid solidification. Materials Letters, 2013, 92, 45-48.	2.6	59
9	The effect of Mo on the glass forming ability, mechanical and magnetic properties of FePC ternary bulk metallic glasses. Journal of Alloys and Compounds, 2013, 554, 446-449.	5.5	57
10	Enhanced mechanical properties and degradation rate of Mgâ€“Niâ€“Y alloy by introducing LPSO phase for degradable fracturing ball applications. Journal of Magnesium and Alloys, 2020, 8, 127-133.	11.9	57
11	Design of Fe-Based Bulk Metallic Glasses with Improved Wear Resistance. ACS Applied Materials & Interfaces, 2018, 10, 43144-43155.	8.0	53
12	Effect of Sr on the microstructure and biodegradable behavior of Mgâ€“Znâ€“Ca-Mn alloys for implant application. Materials and Design, 2018, 153, 308-316.	7.0	52
13	Effects of Co substitution for Fe on the glass forming ability and properties of Fe80P13C7 bulk metallic glasses. Intermetallics, 2014, 51, 53-58.	3.9	51
14	Plasticity improvement of an Fe-based bulk metallic glass by geometric confinement. Materials Letters, 2011, 65, 1172-1175.	2.6	47
15	Corrosion resistances of amorphous and crystalline Zr-based alloys in simulated seawater. Electrochemistry Communications, 2012, 24, 39-42.	4.7	47
16	Enhancement of plasticity of Fe-based bulk metallic glass by Ni substitution for Fe. Journal of Alloys and Compounds, 2010, 504, S78-S81.	5.5	46
17	A plastic Ni-free Zr-based bulk metallic glass with high specific strength and good corrosion properties in simulated body fluid. Materials Letters, 2012, 84, 81-84.	2.6	45
18	Plasticity enhancement of a Zr-based bulk metallic glass by an electroplated Cu/Ni bilayered coating. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 552, 199-203.	5.6	42

#	Article	IF	Citations
19	Novel centimeter-sized Fe-based bulk metallic glass with high corrosion resistance in simulated acid rain and seawater. Journal of Non-Crystalline Solids, 2013, 369, 29-33.	3.1	38
20	Quaternary magnetic FeNiPC bulk metallic glasses with large plasticity. Journal of Alloys and Compounds, 2013, 577, 345-350.	5.5	36
21	Design of Feâ€“Mnâ€“Ag Alloys as Potential Candidates for Biodegradable Metals. Acta Metallurgica Sinica (English Letters), 2018, 31, 584-590.	2.9	36
22	Enhancement of glass-forming ability and bio-corrosion resistance of Zrâ€“Coâ€“Al bulk metallic glasses by the addition of Ag. Journal of Alloys and Compounds, 2010, 504, S163-S167.	5.5	35
23	The effect of microalloying on mechanical properties in CuZrAl bulk metallic glass. Journal of Alloys and Compounds, 2010, 504, S74-S77.	5.5	34
24	Linking the thermal characteristics and mechanical properties of Fe-based bulk metallic glasses. Journal of Alloys and Compounds, 2016, 663, 867-871.	5.5	33
25	Preparation and magnetic properties of FeCoHfMoBY bulk metallic glasses. Journal of Alloys and Compounds, 2009, 468, 54-57.	5.5	32
26	Enhanced mechanical properties and corrosion resistance of a Mgâ€“Znâ€“Ca bulk metallic glass composite by Fe particle addition. Materials Letters, 2013, 91, 311-314.	2.6	31
27	In vitro degradation behavior and cytocompatibility of Mg-6Zn-Mn alloy. Materials Letters, 2018, 228, 77-80.	2.6	30
28	Improving the plasticity of bulk metallic glasses via pre-compression below the yield stress. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 602, 68-76.	5.6	29
29	Formation of magnetic Fe-based bulk metallic glass under low vacuum. Journal of Alloys and Compounds, 2009, 478, 226-228.	5.5	25
30	Bioactive calcium titanate coatings on a Zr-based bulk metallic glass by laser cladding. Materials Letters, 2012, 82, 67-70.	2.6	25
31	Statistical Analysis on the Mechanical Properties of Magnesium Alloys. Materials, 2017, 10, 1271.	2.9	25
32	Notch toughness of Fe-based bulk metallic glass and composites. Journal of Alloys and Compounds, 2011, 509, 9441-9446.	5.5	20
33	Structure related hardness and elastic modulus of bulk metallic glass. Journal of Applied Physics, 2012, 111, .	2.5	20
34	Effects of cooling rate on microstructure, mechanical and corrosion properties of Mgâ€“Znâ€“Ca alloy. Transactions of Nonferrous Metals Society of China, 2013, 23, 1930-1935.	4.2	20
35	A detailed appraisal of the stress exponent used for characterizing creep behavior in metallic glasses. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 654, 53-59.	5.6	19
36	The Y-doped MgZnCa alloys with ultrahigh specific strength and good corrosion resistance in simulated body fluid. Materials Letters, 2012, 81, 112-114.	2.6	18

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37	Micro/nano ductile-phases reinforced Fe-based bulk metallic glass matrix composite with large plasticity. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 707, 44-50.	5.6	18
38	Regulating Precipitates by Simple Cold Deformations to Strengthen Mg Alloys: A Review. Materials, 2019, 12, 2507.	2.9	18
39	Atmospheric RE-free Mg-based bulk metallic glass with high bio-corrosion resistance. Journal of Non-Crystalline Solids, 2013, 379, 107-111.	3.1	17
40	Ternary Co-Mo-B bulk metallic glasses with ultrahigh strength and good ductility. Journal of Non-Crystalline Solids, 2019, 524, 119657.	3.1	17
41	Inhomogeneous creep deformation in metallic glasses. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 648, 57-60.	5.6	16
42	High-temperature Mo-based bulk metallic glasses. Scripta Materialia, 2021, 203, 114095.	5.2	16
43	Effect of W on the thermal stability, mechanical properties and corrosion resistance of Fe-based bulk metallic glass. Intermetallics, 2022, 143, 107485.	3.9	16
44	Rapid degradation of Direct Blue dye by Co-based amorphous alloy wire. Journal of Non-Crystalline Solids, 2022, 576, 121282.	3.1	15
45	Correlation between hardness and shear banding of metallic glasses under nanoindentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 657, 38-42.	5.6	14
46	Combined effect of isothermal annealing and pre-compression on mechanical properties of Cu36Zr48Al8Ag8 bulk metallic glass. Transactions of Nonferrous Metals Society of China, 2016, 26, 1620-1628.	4.2	13
47	Low hydrogen release behavior and antibacterial property of Mg-4Zn-xSn alloys. Materials Letters, 2019, 241, 88-91.	2.6	13
48	The evolution of local mechanical properties of bulk metallic glasses caused by structural inhomogeneity. Journal of Alloys and Compounds, 2014, 591, 315-319.	5.5	12
49	Effect of Y on the high-temperature oxidation behavior of CrMoTaTi refractory high entropy alloy. International Journal of Refractory Metals and Hard Materials, 2022, 103, 105755.	3.8	12
50	Tensile plastic deformation of a Zr-based bulk metallic glass composite in the supercooled liquid region. Scripta Materialia, 2009, 60, 369-372.	5.2	11
51	Design of high strength Fe-(P, C)-based bulk metallic glasses with Nb addition. Transactions of Nonferrous Metals Society of China, 2011, 21, 2433-2437.	4.2	11
52	Effect of Ag on the Microstructure, Mechanical and Bio-corrosion Properties of Feâ€“30Mn Alloy. Acta Metallurgica Sinica (English Letters), 2019, 32, 1337-1345.	2.9	11
53	Fabrication of a Zr-based bulk metallic glass surface with extreme wettability. Journal of Non-Crystalline Solids, 2020, 536, 120001.	3.1	11
54	Effect of free-end torsion on microstructure and mechanical properties of AZ31 bars with square section. Journal of Materials Science and Technology, 2021, 69, 20-31.	10.7	11

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55	Promoting hybrid twins structure to reduce yield asymmetry of rolled AZ31 plates by combining side-rolling and torsion. Journal of Magnesium and Alloys, 2023, 11, 2096-2105.	11.9	11
56	In-situ formation of a gradient Mg2Si/Mg composite with good biocompatibility. Surface and Coatings Technology, 2019, 361, 255-262.	4.8	10
57	Microstructure and mechanical properties of (CrCoNi)97Al1.5Ti1.5 medium entropy alloy twisted by free-end-torsion at room and cryogenic temperatures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 797, 140101.	5.6	10
58	Ternary Co-W-B bulk metallic glasses with ultrahigh strength. Journal of Non-Crystalline Solids, 2020, 544, 120194.	3.1	10
59	Enhanced plasticity of Fe-based bulk metallic glass by tailoring microstructure. Transactions of Nonferrous Metals Society of China, 2012, 22, 348-353.	4.2	9
60	Corrosion Behavior of Fe-based Bulk Metallic Glass and In-situ Dendrite-reinforced Metallic Glass Matrix Composites in Acid Solution. Journal of Iron and Steel Research International, 2016, 23, 1200-1205.	2.8	9
61	Effect of pre-rolling path on mechanical properties of rolled ZK60 alloys. Transactions of Nonferrous Metals Society of China, 2021, 31, 1322-1338.	4.2	9
62	The effect of Hf substitution for Zr on glass forming ability and magnetic property of FeCoZrMoBAlY bulk metallic glasses. Journal of Alloys and Compounds, 2008, 458, 214-217.	5.5	8
63	The Effect of Rod-Shaped Long-Period Stacking Ordered Phases Evolution on Corrosion Behavior of Mg95.33Zn2Y2.67 Alloy. Materials, 2018, 11, 815.	2.9	8
64	Development of Fe-based bulk metallic glass composite as biodegradable metal. Materials Letters, 2019, 247, 185-188.	2.6	8
65	Ultrahigh strength MgZnCa eutectic alloy/Fe particle composites with excellent plasticity. Materials Letters, 2014, 137, 139-142.	2.6	7
66	Microstructure and tensile behavior of small scale resistance spot welded sandwich bulk metallic glasses. Journal of Non-Crystalline Solids, 2016, 447, 300-306.	3.1	6
67	Probing the role of Johariâ€“Goldstein relaxation in the plasticity of metallic glasses. Materials Research Letters, 2019, 7, 383-391.	8.7	6
68	The structural evolution and mechanical properties of a Zr-based bulk metallic glass during superplastic gas pressure forming. Materials & Design, 2012, 37, 510-514.	5.1	5
69	Effects of B addition on glass forming ability and thermal behavior of FePC-based bulk metallic glasses. Journal of Iron and Steel Research International, 2017, 24, 442-447.	2.8	3
70	Revealing the Texture Evolution and Compressive Anisotropy in Free-End Twisted AZ31 Rods. Journal of Materials Engineering and Performance, 2021, 30, 1157-1166.	2.5	3
71	Wetting properties and surface energy of four different amorphous alloys compared to the corresponding crystalline alloys. Materials Chemistry and Physics, 2022, 278, 125674.	4.0	3
72	Microstructure and electronic structure of Cr2C and Fe2Y in the Cr-coating prepared by pack-cementation on the surface of ODS steel. Materials Today Communications, 2021, 28, 102591.	1.9	2

#	Article	IF	Citations
73	Ternary Feâ€“Wâ€“B bulk metallic glasses with ultrahigh thermal stabilities. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 826, 142034.	5.6	2
74	Dataset for microstructure and mechanical properties of (CrCoNi)97Al1.5Ti1.5 medium entropy alloy twisted by free-end-torsion at room and cryogenic temperatures. Data in Brief, 2020, 33, 106333.	1.0	1
75	Effects of microalloying on the isothermal and non-isothermal crystallization behaviors of TiZrSi-based metallic glasses. Journal of Materials Science, 2022, 57, 7980-7996.	3.7	1
76	Nickel plating on a CuZr-based metallic glass and the influence on plasticity. Scientia Sinica: Physica, Mechanica Et Astronomica, 2015, 45, 047001-047001.	0.4	0