Wei Zhang

List of Publications by Year
in descending order

62 papers	2,007 citations	304743 22 h-index	243625 44 g-index
62 all docs	62 docs citations	62 times ranked	1190 citing authors

#	Article	IF	Citations
1	High-Entropy Alloys with a Hexagonal Close-Packed Structure Designed by Equi-Atomic Alloy Strategy and Binary Phase Diagrams. Jom, 2014, 66, 1984-1992.	1.9	275
2	Formation, Thermal Stability and Mechanical Properties of Cu-Zr-Al Bulk Glassy Alloys. Materials Transactions, 2002, 43, 2921-2925.	1.2	230
3	Thermal and Mechanical Properties of Cu-Based Cu-Zr-Ti Bulk Glassy Alloys. Materials Transactions, 2001, 42, 1149-1151.	1.2	127
4	New Cuâ€“Zr-based bulk metallic glasses with large diameters of up to 1.5cm. Scripta Materialia, 2006, 55, 711-713.	5.2	124
5	Preparation of Cu₃₆Zr₄₈Ag₈Al₈ Bulk Metallic Glass with a Diameter of 25 mm by Copper Mold Casting. Materials Transactions, 2007, 48, 629-631.	1.2	83
6	Soft magnetic Fe25Co25Ni25(B, Si)25 high entropy bulk metallic glasses. Intermetallics, 2015, 66, 8-12.	3.9	83
7	Bulk nanocomposite permanent magnets produced by crystallization of (Fe,Co)â€“(Nd,Dy)â€“B bulk glassy alloy. Applied Physics Letters, 2002, 80, 1610-1612.	3.3	81
8	New soft magnetic Fe25Co25Ni25(P, C, B)25 high entropy bulk metallic glasses with large supercooled liquid region. Journal of Alloys and Compounds, 2017, 693, 25-31.	5.5	67
9	Synthesis and magnetic properties of Feâ€“Ptâ€“B nanocomposite permanent magnets with low Pt concentrations. Applied Physics Letters, 2004, 85, 4998-5000.	3.3	62
10	Glass formation, corrosion behavior and mechanical properties of bulk glassy Cuâ€“Hfâ€“Tiâ€“Nb alloys. Acta Materialia, 2005, 53, 3903-3911.	7.9	62
11	Soft magnetic Fe-Si-B-Cu nanocrystalline alloys with high Cu concentrations. Journal of Alloys and Compounds, 2017, 722, 859-863.	5.5	53
12	Formation and crystallization behavior of Fe-based amorphous precursors with pre-existing Î±-Fe nanoparticlesâ€”Structure and magnetic properties of high-Cu-content Fe-Si-B-Cu-Nb nanocrystalline alloys. Journal of Materials Science and Technology, 2021, 65, 171-181.	10.7	49
13	Role of Mo addition on structure and magnetic properties of the Fe85Si2B8P4Cu1 nanocrystalline alloy. Journal of Non-Crystalline Solids, 2018, 481, 590-593.	3.1	46
14	New FeNiCrMo(P, C, B) high-entropy bulk metallic glasses with unusual thermal stability and corrosion resistance. Journal of Materials Science and Technology, 2020, 43, 32-39.	10.7	45
15	Ferromagnetic Fe-based bulk metallic glasses with high thermoplastic formability. Scripta Materialia, 2013, 69, 77-80.	5.2	42
16	Formation and properties of Fe25Co25Ni25(P, C, B, Si)25 high-entropy bulk metallic glasses. Journal of Non-Crystalline Solids, 2018, 487, 60-64.	3.1	40
17	New type of Î³-FePt/FeB exchange-coupled spring magnet obtained from FePtB amorphous alloy. Scripta Materialia, 2006, 54, 431-435.	5.2	33
18	New Fe-based amorphous alloys with large magnetostriction and wide supercooled liquid region before crystallization. Journal of Applied Physics, 1999, 85, 4491-4493.	2.5	29

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19	Formation and Magnetic Properties of Bulk Glassy Fe–Co–Nd–Dy–B Alloys with High Boron Concentrations. Materials Transactions, JIM, 2000, 41, 1679-1682.	0.9	27
20	Glass-forming ability and differences in the crystallization behavior of ribbons and rods of Cu36Zr48Al8Ag8 bulk glass-forming alloy. Journal of Materials Research, 2009, 24, 1886-1895.	2.6	27
21	Crystallization and hard magnetic properties of Feâ€“Coâ€“Ndâ€“Dyâ€“B amorphous alloys with glass transition. Journal of Applied Physics, 2000, 87, 6122-6124.	2.5	23
22	Glass-forming ability and thermoplastic formability of ferromagnetic (Fe, Co, Ni) 75 P 10 C 10 B 5 metallic glasses. Journal of Alloys and Compounds, 2017, 707, 57-62.	5.5	23
23	Soft magnetic Co-based Coâ€“Feâ€“Bâ€“Siâ€“P bulk metallic glasses with high saturation magnetic flux density of over 1.2ÂT. Journal of Alloys and Compounds, 2020, 843, 154862.	5.5	22
24	Structure and properties of nanoporous FePt fabricated by dealloying a melt-spun Fe60Pt20B20 alloy and subsequent annealing. Journal of Materials Science and Technology, 2020, 36, 128-133.	10.7	20
25	A study on the role of Ni content on structure and properties of Feâ€“Niâ€“Siâ€“Bâ€“Pâ€“Cu nanocrystalline alloys. Journal of Alloys and Compounds, 2020, 822, 152784.	5.5	20
26	Fabrication and electrocatalytic properties of ferromagnetic nanoporous PtFe by dealloying an amorphous Fe 60 Pt 10 B 30 alloy. Journal of Alloys and Compounds, 2017, 706, 215-219.	5.5	16
27	The role of Cu content on structure and magnetic properties of Feâ€“Siâ€“Bâ€“Pâ€“Cu nanocrystalline alloys. Journal of Materials Science, 2019, 54, 4400-4408.	3.7	16
28	Enhancement of glass-forming ability and corrosion resistance of Zr-based Zr-Ni-Al bulk metallic glasses with minor addition of Nb. Journal of Applied Physics, 2011, 110, 023513.	2.5	15
29	Direct synthesis of Fe-Si-B-C Cu nanocrystalline alloys with superior soft magnetic properties and ductile by melt-spinning. Journal of Materials Science and Technology, 2022, 108, 186-195.	10.7	15
30	Effects of Cu, Fe and Co addition on the glass-forming ability and mechanical properties of Zr-Al-Ni bulk metallic glasses. Science China: Physics, Mechanics and Astronomy, 2012, 55, 2367-2371.	5.1	14
31	Glass-forming ability, thermal properties, and corrosion resistance of Fe-based (Fe, Ni, Mo, Cr)-P-C-B metallic glasses. Journal of Non-Crystalline Solids, 2017, 476, 75-80.	3.1	14
32	Effect of P addition on the structure and magnetic properties of melt-spun Feâ€“Ptâ€“B alloy. Journal of Alloys and Compounds, 2014, 586, S294-S297.	5.5	13
33	Optimization of the structure and soft magnetic properties of a Fe87B13 nanocrystalline alloy by additions of Cu and Nb. Journal of Magnetism and Magnetic Materials, 2020, 497, 166001.	2.3	13
34	Two-stage-like glass transition and the glass-forming ability of a soft magnetic Fe-based glassy alloy. Journal of Applied Physics, 2009, 105, 053518.	2.5	12
35	Effects of Alloying Elements on the Thermal Stability and Corrosion Resistance of an Fe-based Metallic Glass with Low Glass Transition Temperature. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 2393-2398.	2.2	12
36	Fabrication and properties of soft magnetic Feâ€“Coâ€“Niâ€“Pâ€“Câ€“B bulk metallic glasses with high glass-forming ability. Journal of Non-Crystalline Solids, 2015, 421, 24-29.	3.1	11

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37	Effects of Si content on structure and soft magnetic properties of Fe81.3SixB17-xCu1.7 nanocrystalline alloys with pre-existing Î±-Fe nanocrystals. Journal of Materials Science, 2021, 56, 2539-2548.	3.7	11
38	Roles of Y and Fe contents on glass-forming ability, thermal stability, and magnetic properties of Co-based Coâ€“Feâ€“Yâ€“B bulk metallic glasses. Intermetallics, 2021, 132, 107135.	3.9	11
39	Synthesis and electromagnetic wave absorption properties of FeCoNi(Si0.6Al0.2B0.2) high-entropy nanocrystalline alloy powders. AIP Advances, 2019, 9, .	1.3	10
40	Formation, Crystallized Structure and Magnetic Properties of Fe–Pt–B Amorphous Alloys. Materials Transactions, 2005, 46, 891-894.	1.2	9
41	Correlation between the glass-forming ability and activation energy of crystallization for Zr75â^'x Ni25Al x metallic glasses. International Journal of Minerals, Metallurgy and Materials, 2013, 20, 445-449.	4.9	9
42	Effects of Mo addition on thermal stability and magnetic properties of a ferromagnetic Fe75P10C10B5 metallic glass. Journal of Applied Physics, 2014, 115, 17A768.	2.5	9
43	Preparation and electromagnetic properties of Fe80.7Si4B13Cu2.3 nanocrystalline alloy powders for electromagnetic wave absorbers in X-band. Journal of Magnetism and Magnetic Materials, 2020, 497, 165988.	2.3	9
44	Effects of annealing temperature and heating rate on microstructure, magnetic, and mechanical properties of high-Bs Fe81.7â^'xSi4B13NbxCu1.3 nanocrystalline alloys. Journal of Materials Science, 2021, 56, 2572-2583.	3.7	9
45	Hard Magnetic Properties and Nanocrystallized Structure of Fe_{66.5}Co₁₀Pr_{3.5}B₂₀ Glassy Alloy. Materials Transactions, 2001, 42, 1543-1546.	1.2	8
46	Unveiling the role of Y content in glass-forming ability and soft magnetic properties of Co-Y-B metallic glasses by experiment and ab initio molecular dynamics simulations. Journal of Alloys and Compounds, 2022, 902, 163637.	5.5	8
47	Nanoscale precipitates and phase transformations in a rapidly-solidified Feâ€“Ptâ€“B amorphous alloy. Journal of Alloys and Compounds, 2005, 402, 78-83.	5.5	7
48	Effect of Y doping on surface crystallization and magnetic properties of a FeHfB nanocrystalline alloy. Journal of Magnetism and Magnetic Materials, 2022, 549, 169035.	2.3	7
49	Role of Fe substitution for Co on thermal stability and glass-forming ability of soft magnetic Co-based Co-Fe-B-P-C metallic glasses. Intermetallics, 2022, 147, 107598.	3.9	7
50	Effect of Co concentration on thermal stability and magnetic properties of (Fe,Co)â€“Nbâ€“Gdâ€“B glassy alloys. Journal of Alloys and Compounds, 2010, 504, S129-S131.	5.5	6
51	Structure and soft magnetic properties of Fe-Si-B-P-Cu nanocrystalline alloys with minor Mn addition. AIP Advances, 2018, 8, .	1.3	6
52	Structure and magnetic properties of melt-spun Feâ€“Ptâ€“B alloys with high B concentrations. Journal of Alloys and Compounds, 2014, 615, S252-S255.	5.5	5
53	Synthesis and properties of ferromagnetic Fe-based (Fe, Ni, Co)â€“Moâ€“Pâ€“Câ€“B bulk metallic glasses with large supercooled liquid region. Physica B: Condensed Matter, 2015, 470-471, 107-112.	2.7	5
54	Enhancement of glass-forming ability and thermal stability of a soft magnetic Co75B25 metallic glass by micro-alloying Y and Nb. Journal of Iron and Steel Research International, 2021, 28, 597-603.	2.8	5

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55	Effects of Sm content on crystallized structure and magnetic properties of Co80â€‰â˜†â€‰xSmxB20 amorphous alloys. Journal of Iron and Steel Research International, 2020, 27, 471-476.	2.8	4
56	Unusual alloying effects of Co and Ni on structure and magnetic properties of Fe-Si-B-Cu nanocrystalline alloys with pre-existing Î±-Fe nanocrystals. Journal of Alloys and Compounds, 2022, 920, 166030.	5.5	4
57	Effect of Nb Concentration on Thermal Stability and Glass-Forming Ability of Soft Magnetic (Fe,Co)-Gd-Nb-B Glassy Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 1685-1690.	2.2	3
58	Microstructure and magnetic properties of Fe81.3Si4B13Cu1.7 nanocrystalline alloys with minor Nb addition. Journal of Iron and Steel Research International, 2018, 25, 614-618.	2.8	3
59	Improvement of soft magnetic properties of a Fe84Nb7B9 nanocrystalline alloy by synergistic substitution of P and Hf. Journal of Alloys and Compounds, 2022, 918, 165735.	5.5	3
60	Effects of Ribbon Thickness on Structure and Soft Magnetic Properties of a High-Cu-Content FeBCuNb Nanocrystalline Alloy. Acta Metallurgica Sinica (English Letters), 0, , 1.	2.9	2
61	A combined experimental and ab initio molecular dynamics study on a novel B-based B50Sm10Co40 amorphous alloy. Journal of Alloys and Compounds, 2022, 899, 163326.	5.5	2
62	C effect on the amorphous formation and soft magnetic properties of Fe84.3Si4B8P3-C Cu0.7 nanocrystalline alloys. Physica B: Condensed Matter, 2022, 642, 414105.	2.7	1