Yan Zhang

List of Publications by Year
in descending order

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65 papers	4,702 citations	361413 20 h-index	128289 60 g-index
65 all docs	65 docs citations	65 times ranked	3892 citing authors

#	Article	IF	Citations
1	Formation of L1₀-FeNi hard magnetic material from FeNi-based amorphous alloys. Chinese Physics B, 2022, 31, 046301.	1.4	3
2	Structural origin of magnetic softening in a Fe-based amorphous alloy upon annealing. Journal of Materials Science and Technology, 2022, 96, 233-240.	10.7	32
3	Nanoimprinting of magnetic FeCo-based metallic glass thin films. Journal of Magnetism and Magnetic Materials, 2022, 542, 168455.	2.3	5
4	Design of mesoporous Ni-Co hydroxides nanosheets stabilized by BO2- for pseudocapacitors with superior performance. Journal of Colloid and Interface Science, 2022, 614, 66-74.	9.4	8
5	Taking advantage of glass: capturing and retaining the helium gas on the moon. Materials Futures, 2022, 1, 035101.	8.4	3
6	Effect of Si addition on the magnetic properties of FeNi-based alloys with L10 phase through annealing amorphous precursor. Journal of Alloys and Compounds, 2022, 920, 166029.	5.5	2
7	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
8	Enhanced dynamic mechanical properties and resistance to the formation of adiabatic shear band by Cu-rich nano-precipitates in high-strength steels. International Journal of Plasticity, 2021, 138, 102924.	8.8	25
9	Precipitation strengthening of Cu/NiAl co-precipitates in a martensite-austenite dual-phase steel. Materials Characterization, 2021, 182, 111589.	4.4	8
10	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
11	Precipitation kinetics and mechanical properties of nanostructured steels with Mo additions. Materials Research Letters, 2020, 8, 187-194.	8.7	20
12	Effect of Co addition and annealing conditions on the magnetic properties of nanocrystalline FeCoSiBPCu ribbons. Journal of Magnetism and Magnetic Materials, 2019, 477, 156-161.	2.3	8
13	Designing Highly Efficient and Longâ€Term Durable Electrocatalyst for Oxygen Evolution by Coupling B and P into Amorphous Porous NiFeâ€Based Material. Small, 2019, 15, e1901020.	10.0	71
14	Porous amorphous NiFeOx/NiFeP framework with dual electrocatalytic functions for water electrolysis. Journal of Power Sources, 2019, 428, 76-81.	7.8	40
15	Nano-imprinting potential of magnetic FeCo-based metallic glass. Nanotechnology, 2019, 30, 305302.	2.6	6
16	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
17	Unique influence of heating rate on the magnetic softness of Fe81.5Si0.5B4.5P11Cu0.5C2 nanocrystalline alloy. Journal of Magnetism and Magnetic Materials, 2019, 471, 148-152.	2.3	22
18	Structural and magnetic properties on the Fe-B-P-Cu-W nano-crystalline alloy system. AIP Advances, 2018, 8, .	1.3	5

#	Article	IF	Citations
19	Enhanced Redox properties of amorphous Fe 63.3-83.3 Co 0-20 Si 4 B 8 P 4 Cu 0.7 alloys via long-term CV cycling. Journal of Alloys and Compounds, 2018, 751, 349-358.	5.5	3
20	First principle study on the Si effect in the Fe-based soft magnetic nano-crystalline alloys. Journal of Alloys and Compounds, 2018, 730, 196-200.	5.5	11
21	Ab initio molecular dynamics simulations of nano-crystallization of Fe-based amorphous alloys with early transition metals. Chinese Physics B, 2018, 27, 116401.	1.4	2
22	Fabrication and Properties of Under 10 <inline-formula> <tex-math notation="LaTeX">mu </tex-math> </inline-formula>m Sized Amorphous Powders of High <inline-formula> <tex-math notation="LaTeX">B_{s} </tex-math> </inline-formula> Soft Magnetic Alloy for High-Frequency Applications. IEEE Transactions on Magnetics, 2018, 54, 1-5.	2.1	18
23	Confirmation of Hard Magnetic L1₀ FeNi Phase Precipitated in FeNiSiBPCu Alloy by Anomalous X-Ray Diffraction. IEEE Transactions on Magnetics, 2018, 54, 1-5.	2.1	5
24	Amorphous Metallic NiFeP: A Conductive Bulk Material Achieving High Activity for Oxygen Evolution Reaction in Both Alkaline and Acidic Media. Advanced Materials, 2017, 29, 1606570.	21.0	441
25	Effects of minor precipitation of large size crystals on magnetic properties of Fe-Co-Si-B-P-Cu alloy. Journal of Alloys and Compounds, 2017, 709, 663-667.	5.5	20
26	MnFeNiCuPt and MnFeNiCuCo high-entropy alloys designed based on L1 0 structure in Pettifor map for binary compounds. Intermetallics, 2017, 82, 107-115.	3.9	30
27	Dynamic magnetic characteristics and relaxation of Fe73.5Cu1Nb3Si15.5B7 nanocrystalline alloy under operating temperature and magnetizing frequency. Journal of Magnetism and Magnetic Materials, 2017, 443, 261-266.	2.3	8
28	Magnetic Properties of L1₀ FeNi Phase Developed Through Annealing of an Amorphous Alloy. IEEE Transactions on Magnetics, 2017, 53, 1-10.	2.1	11
29	Stress-Enhanced Transformations from Hypothetical B2 to Stable L1₀ and Amorphous to fcc Phases in Fe₅₀Ni₅₀ Binary Alloy by Molecular Dynamic Simulations. Materials Transactions, 2017, 58, 646-654.	1.2	2
30	Mechanically strong nanocrystalline Fe-Si-B-P-Cu soft magnetic powder cores utilizing magnetic metallic glass as a binder. AIP Advances, 2016, 6, .	1.3	11
31	Crystallization induced ordering of hard magnetic L1 phase in melt-spun FeNi-based ribbons. AIP Advances, 2016, 6, .	1.3	10
32	Investigation on the crystallization mechanism difference between FINEMETÂ® and NANOMETÂ® type Fe-based soft magnetic amorphous alloys. Journal of Applied Physics, 2016, 120, 145102.	2.5	22
33	Mechanism of active dissolution of nanocrystalline FeSiBPCu soft magnetic alloys. Materials Characterization, 2016, 121, 9-16.	4.4	20
34	Effect of substitution of Cu by Au and Ag on nanocrystallization behavior of Fe83.3Si4B8P4Cu0.7 soft magnetic alloy. Journal of Alloys and Compounds, 2016, 683, 263-270.	5.5	14
35	L1₀-type Ordered Phase Formation in Fe-Ni-based Nanocrystalline Alloys. Materia Japan, 2016, 55, 596-596.	0.1	0
36	Artificially produced rare-earth free cosmic magnet. Scientific Reports, 2015, 5, 16627.	3.3	67

#	ARTICLE	IF	CITATIONS
37	Production of Nanocrystalline (Fe, Co)-Si-B-P-Cu Alloy with Excellent Soft Magnetic Properties for Commercial Applications. Materials Transactions, 2015, 56, 372-376.	1.2	28
38	Production and Properties of Soft Magnetic Cores Made From Fe-Rich FeSiBPCu Powders. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	24
39	Miniaturized planar antenna with NANOMET powder cores for the VHF band application. , 2015, , .		3
40	Upper limit for the simultaneous existence of high B<inf>s</inf> and low H<inf>c</inf> in nanocrystalline FeCoSiBPCu alloys. , 2015, , .		0
41	First-principle simulation on the crystallization tendency and enhanced magnetization of Fe₇₆B₁₉P₅ amorphous alloy. Materials Research Express, 2015, 2, 016506.	1.6	8
42	Magnetic Influence of Alloying Elements in Fe-Rich Amorphous Alloys Studied by <italic>Ab Initio</italic> Molecular Dynamics Simulations. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	1
43	Thermodynamic analysis of binary Fe85B15 to quinary Fe85Si2B8P4Cu1 alloys for primary crystallizations of Î±-Fe in nanocrystalline soft magnetic alloys. Journal of Applied Physics, 2015, 117, 17B737.	2.5	6
44	Production of a magnetic material with the ability to change from very soft to semi-hard magnetic. Journal of Applied Physics, 2015, 117, 17E507.	2.5	1
45	Observation of Cu nanometre scale clusters formed in Fe₈₅Si₂B₈P₄Cu₁nanocrystalline soft magnetic alloy by a spherical aberration-corrected TEM/STEM. Philosophical Magazine Letters, 2015, 95, 277-284.	1.2	11
46	Competition driven nanocrystallization in high Bs and low coreloss Feâ€“Siâ€“Bâ€“Pâ€“Cu soft magnetic alloys. Scripta Materialia, 2015, 95, 3-6.	5.2	152
47	Fe-Rich Feâ€“Siâ€“Bâ€“Pâ€“Cu Powder Cores for High-Frequency Power Electronic Applications. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	19
48	Sintered magnetic cores of high Bs Fe84.3Si4B8P3Cu0.7 nano-crystalline alloy with a lamellar microstructure. Journal of Applied Physics, 2014, 115, 17A322.	2.5	7
49	Effects of Cobalt Addition in Nanocrystalline <inline-formula> <tex-math notation="TeX">${m Fe}_{83.3}{m Si}_{4}{m B}_{8}{m P}_{4}{m Cu}_{0.7}$ </tex-math></inline-formula> Soft Magnetic Alloy. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	11
50	Structural and Magnetic Study of <inline-formula> <tex-math notation="TeX">${m Fe}_{76}{m Si}_{9}{m B}_{10}{m P}_{5}$ </tex-math></inline-formula> Metallic Glass by First Principle Simulation. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	3
51	Influence of microstructure on soft magnetic properties of low coreloss and high Bs Fe85Si2B8P4Cu1 nanocrystalline alloy. Journal of Applied Physics, 2014, 115, .	2.5	56
52	Role of P in Nanocrystallization of <inline-formula> <tex-math notation="TeX">${m Fe}_{85}{m Si}_{2}{m B}_{8}{m P}_{4}{m Cu}_{1}$ </tex-math></inline-formula>. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	10
53	X-Ray Absorption Studies of <inline-formula> <tex-math notation="TeX">${m Fe}_{85}{m Si}_{2}{m B}_{8}{m P}_{4}{m Cu}_{1}$ </tex-math></inline-formula> Alloy. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	3
54	Effect of Si addition on the corrosion properties of amorphous Fe-based soft magnetic alloys. Journal of Non-Crystalline Solids, 2014, 402, 36-43.	3.1	21

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55	Synergistic alloying effect on microstructural evolution and mechanical properties of Cu precipitation-strengthened ferritic alloys. Acta Materialia, 2013, 61, 7726-7740.	7.9	85
56	Sintered powder cores of high B s and low coreloss Fe84.3Si4B8P3Cu0.7 nano-crystalline alloy. AIP Advances, 2013, 3, .	1.3	14
57	Electrochemical Behavior of Annealed Soft-Magnetic Fe–Si–B–P–Cu Alloy. Materials Transactions, 2013, 54, 561-565.	1.2	7
58	Fabrication of Nanocrystalline Fe₈₄_.₃Si₄B₈P₃Cu_{0.}₇ Powders with High Magnetization. Key Engineering Materials, 2012, 508, 133-140.	0.4	
59	Spark Plasma Sintering of Soft Magnetic Fe-Si-B-P-Cu Nanocrystalline Alloy in the Form of Magnetic Cores. Materials Transactions, 2011, 52, 2254-2257.	1.2	12
60	Solidâ€Solution Phase Formation Rules for Multiâ€component Alloys. Advanced Engineering Materials, 2008, 10, 534-538.	3.5	2,146
61	Solid solution alloys of AlCoCrFeNiTix with excellent room-temperature mechanical properties. Applied Physics Letters, 2007, 90, 181904.	3.3	820
62	A study of the glass forming ability in ZrNiAl alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 441, 106-111.	5.6	28
63	Optimum glass formation at off-eutectic composition and its relation to skewed eutectic coupled zone in the La based Laâ€“Alâ€“(Cu,Ni) pseudo ternary system. Acta Materialia, 2003, 51, 4551-4561.	7.9	169
64	Glass-forming ability of Prâ€“(Cu,Ni)â€“Al alloys in eutectic system. Journal of Materials Research, 2003, 18, 664-671.	2.6	21
65	The Effect of Co Addition on Glassy Forming Ability and Soft Magnetic Properties of Fe-Si-B-P Bulk Metallic Glass. Key Engineering Materials, 0, 508, 112-116.	0.4	5