Xin Tang

List of Publications by Year
in descending order

32	843	471509 17	477307 29
papers	citations	h-index	g-index

33	33	33	338
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Coercivity and its thermal stability of Nd Fe B hot-deformed magnets enhanced by the eutectic grain boundary diffusion process. Acta Materialia, 2018, 161, 171-181.	7.9	96
2	Coercivity enhancement of hot-deformed Ce-Fe-B magnets by grain boundary infiltration of Nd-Cu eutectic alloy. Acta Materialia, 2018, 144, 884-895.	7.9	89
3	Magnetic refrigeration material operating at a full temperature range required for hydrogen liquefaction. Nature Communications, 2022, 13, 1817.	12.8	64
4	Improved coercivity and squareness in bulk hot-deformed Ndâ€“Feâ€“B magnets by two-step eutectic grain boundary diffusion process. Acta Materialia, 2021, 203, 116479.	7.9	51
5	Thermally-stable high coercivity Ce-substituted hot-deformed magnets with 20% Nd reduction. Acta Materialia, 2020, 190, 8-15.	7.9	47
6	Enhanced texture in die-upset nanocomposite magnets by Nd-Cu grain boundary diffusion. Applied Physics Letters, 2013, 102, .	3.3	43
7	Coercivities of hot-deformed magnets processed from amorphous and nanocrystalline precursors. Acta Materialia, 2017, 123, 1-10.	7.9	39
8	Relationship between the thermal stability of coercivity and the aspect ratio of grains in Nd-Fe-B magnets: Experimental and numerical approaches. Acta Materialia, 2020, 183, 408-417.	7.9	31
9	Impact of Ndâ€“Cu diffusion on microstructure and coercivity in hot-pressed and die-upset nanocomposite magnets. Scripta Materialia, 2014, 88, 49-52.	5.2	30
10	Role of Co on the magnetic properties of Ce-substituted Nd-Fe-B hot-deformed magnets. Acta Materialia, 2019, 175, 1-10.	7.9	30
11	On the temperature-dependent coercivities of anisotropic Nd-Fe-B magnet. Acta Materialia, 2020, 199, 288-296.	7.9	29
12	Angular dependence and thermal stability of coercivity of Nd-rich Ga-doped Ndâ€“Feâ€“B sintered magnet. Acta Materialia, 2020, 187, 66-72.	7.9	29
13	Development of high coercivity anisotropic Nd-Fe-B/Fe nanocomposite powder using hydrogenation disproportionation desorption recombination process. Acta Materialia, 2019, 175, 276-285.	7.9	27
14	Reduction of hysteresis in (La1-Ce) (Mn Fe11.4-)Si1.6 magnetocaloric compounds for cryogenic magnetic refrigeration. Acta Materialia, 2021, 220, 117286.	7.9	24
15	Suppression of non-oriented grains in Nd-Fe-B hot-deformed magnets by Nb doping. Scripta Materialia, 2018, 147, 108-113.	5.2	22
16	Tuning magnetocaloric effect of Ho1-Gd Ni2 and HoNi2-Co alloys around hydrogen liquefaction temperature. Scripta Materialia, 2020, 188, 302-306.	5.2	21
17	Origin of coercivity in an anisotropic Sm(Fe,Ti,V)12-based sintered magnet. Acta Materialia, 2021, 217, 117161.	7.9	20
18	Role of V on the coercivity of SmFe12-based melt-spun ribbons revealed by machine learning and microstructure characterizations. Scripta Materialia, 2021, 200, 113925.	5.2	18

#	Article	IF	Citations
19	Mechanism of texture enhancement in nanocomposite magnets during process of die upsetting coupled with Ndâ€“Cu grain boundary diffusion. Journal of Alloys and Compounds, 2015, 623, 386-392.	5.5	17
20	Tuning transition temperature of magnetocaloric Mn1.8Fe0.2(P0.59Si0.41) alloys for cryogenic magnetic refrigeration. Scripta Materialia, 2020, 183, 127-132.	5.2	16
21	Significant coercivity enhancement of hot-deformed bulk magnets by two-step diffusion process using a minimal amount of Dy. Scripta Materialia, 2021, 205, 114207.	5.2	16
22	Phase relations and extrinsic magnetic properties of Smâ€“(Fe,Co)â€“Tiâ€“(Ga)-based alloys for ThMn12-type permanent magnets. Journal of Magnetism and Magnetic Materials, 2021, 529, 167866.	2.3	15
23	Influence of Ti addition on microstructure and magnetic properties of a heavy-rare-earth-free Nd-Fe-B sintered magnet. Journal of Alloys and Compounds, 2019, 806, 1267-1275.	5.5	14
24	Machine learning assisted development of Fe2P-type magnetocaloric compounds for cryogenic applications. Acta Materialia, 2022, 232, 117942.	7.9	14
25	(Nd,La,Ce)-Fe-B hot-deformed magnets for application of variable-magnetic-force motors. Acta Materialia, 2022, 228, 117747.	7.9	10
26	(Pr0.75Ce0.25)-Fe-B hot-deformed magnets for cryogenic applications. Scripta Materialia, 2021, 194, 113648.	5.2	9
27	Polycrystalline Nd2Fe14B/Î±-Fe nanocomposite flakes with a sub-micro/nanometre thickness prepared by surfactant-assisted high-energy ball milling. Journal of Alloys and Compounds, 2015, 644, 562-569.	5.5	8
28	Origins of Radial and Axial Inhomogeneity of Magnetic Performance in Cylindrical Nd-Fe-B Magnet Prepared by Hot Deformation. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	6
29	Development of Co-lean (Sm,Y)(Fe,Co,Ti)₁₂ compounds with large saturation magnetization. Applied Physics Express, 2022, 15, 045505.	2.4	4
30	Influence of LRE (Ce, Y, and La) on microstructure and magnetic properties of (Nd0.8LRE0.2)â€“Feâ€“B hot-deformed magnets. AIP Advances, 2021, 11, 115118.	1.3	2
31	An Analysis of the Magnetization Behavior and Temperature Dependence of Coercivity in Hot Deformed Nd2Fe14B Magnets with Different Deformation Degrees. , 2013, , 1821-1828.		1
32	Magnetization Reversals of Nd-Fe-B-Based Magnets with Different Microstructural Features. Jom, 2022, 74, 2328-2337.	1.9	1