Ming-Gang Zhu

List of Publications by Year
in descending order

54 papers	828 citations	516710 16 h-index	552781 26 g-index
54 all docs	54 docs citations	54 times ranked	269 citing authors

#	Article	IF	Citations
1	Influence of Ce Content on the Rectangularity of Demagnetization Curves and Magnetic Properties of Re-Fe-B Magnets Sintered by Double Main Phase Alloy Method. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	92
2	The microstructure and magnetic characteristics of Sm(CobalFe0.1Cu0.09Zr0.03)7.24 high temperature permanent magnets. Scripta Materialia, 2017, 132, 44-48.	5.2	57
3	Effects of diffusing DyZn film on magnetic properties and thermal stability of sintered NdFeB magnets. Journal of Magnetism and Magnetic Materials, 2018, 454, 215-220.	2.3	38
4	The microstructure and magnetic properties of melt-spun CeFeB ribbons with varying Ce content. Electronic Materials Letters, 2015, 11, 109-112.	2.2	34
5	Magnetic properties and microstructures of high-performance Sm 2 Co 17 based alloy. Journal of Magnetism and Magnetic Materials, 2015, 378, 214-216.	2.3	33
6	Crystalline and magnetic microstructures of iron-rich Sm(Co0.65Fe0.26Cu0.07Zr0.02)7.8 sintered magnets: Isothermal aging effect. Journal of Magnetism and Magnetic Materials, 2018, 465, 569-577.	2.3	33
7	Revealing on metallurgical behavior of iron-rich Sm(Co0.65Fe0.26Cu0.07Zr0.02)7.8 sintered magnets. AIP Advances, 2017, 7, .	1.3	27
8	Optimal design of sintered Ce9Nd21FebalB1 magnets with a low-melting-point (Ce,Nd)-rich phase. International Journal of Minerals, Metallurgy and Materials, 2015, 22, 417-422.	4.9	25
9	Investigation of chemical composition and crystal structure in sintered Ce15Nd15FebalB1 magnet. AIP Advances, 2014, 4, 107127.	1.3	24
10	Effect of cerium on the corrosion behaviour of sintered (Nd,Ce)FeB magnet. Journal of Magnetism and Magnetic Materials, 2017, 432, 181-189.	2.3	24
11	Coercivity temperature dependence of Sm2Co17-type sintered magnets with different cell and cell boundary microchemistry. Journal of Magnetism and Magnetic Materials, 2018, 452, 272-277.	2.3	24
12	An Enhanced Coercivity for (CeNdPr)â€“Feâ€“B Sintered Magnet Prepared by Structure Design. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	23
13	Optimization of both coercivity and knee-point magnetic field of Sm2Co17-type magnets via solid solution process. Journal of Rare Earths, 2020, 38, 1224-1230.	4.8	23
14	Structure and intrinsic magnetic properties of MM2Fe14B (MM=La, Ce, Pr, Nd) alloys. Journal of Rare Earths, 2016, 34, 614-617.	4.8	22
15	The technology and mechanism of coercivity promotion of Ce-rich dual-main-phase sintered magnets. Journal of Magnetism and Magnetic Materials, 2019, 490, 165414.	2.3	21
16	Optimization of microstructures and magnetic properties of Sm(CobalFe0.227Cu0.07Zr0.023)7.6 magnets by sintering treatment. Journal of Rare Earths, 2019, 37, 171-177.	4.8	18
17	Development of Ce-based sintered magnets: review and prospect. Journal of Iron and Steel Research International, 2020, 27, 1-11.	2.8	18
18	Relationship between controllable preparation and microstructure of NdFeB sintered magnets. Journal of Rare Earths, 2014, 32, 628-632.	4.8	16

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19	The coercivity mechanism of sintered SM(CobalFe0.245Cu0.07Zr0.02)7.8 permanent magnets with different isothermal annealing time. Physica B: Condensed Matter, 2015, 476, 154-157.	2.7	16
20	Overview of composition and technique process study on 2:17-type Smâ€“Co high-temperature permanent magnet. Rare Metals, 2021, 40, 790-798.	7.1	16
21	The microstructure and magnetization reversal behavior of melt-spun (Nd 1â^'x Ce x)-Fe-B ribbons. Journal of Rare Earths, 2018, 36, 95-98.	4.8	15
22	The Impact Induced Demagnetization Mechanism in NdFeB Permanent Magnets. Chinese Physics Letters, 2013, 30, 097501.	3.3	13
23	Phase structure of Al doped Ce-rich alloys and its effect on magnetic properties of sintered Ce-Fe-B magnets. Journal of Alloys and Compounds, 2019, 782, 723-728.	5.5	13
24	Correlation between anisotropic fractal dimension of fracture surface and coercivity for Nd-Fe-B permanent magnets. Journal of Materials Research and Technology, 2021, 15, 745-753.	5.8	13
25	Effect of Sm-rich liquid phase on magnetic properties and microstructures of sintered 2:17-type Sm-Co magnet. Journal of Rare Earths, 2011, 29, 934-938.	4.8	11
26	Microstructural Analysis During the Step-Cooling Annealing of Iron-Rich Sm(Co0.65Fe0.26Cu0.07Zr0.02)7.8 Anisotropic Sintered Magnets. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	11
27	Dependence of magnetic properties on microstructure and composition of Ce-Fe-B sintered magnets. Journal of Rare Earths, 2019, 37, 865-870.	4.8	10
28	Coercivity enhancement of nanocrystalline hot-deformed Nd-Fe-B magnets by low-melting eutectic MM-Cu (MM=La, Ce, Pr, Nd) alloys addition. Journal of Rare Earths, 2020, 38, 594-599.	4.8	10
29	Effects of grain boundary ternary alloy doping on corrosion resistance of (Ce,Pr,Nd)-Fe-B permanent magnets. Journal of Rare Earths, 2021, 39, 979-985.	4.8	10
30	Cellular microstructure modification and high temperature performance enhancement for Sm2Co17-based magnets with different Zr contents. Journal of Materials Science and Technology, 2022, 120, 8-14.	10.7	10
31	Numerical simulation of single roller melt spinning for NdFeB alloy based on finite element method. Rare Metals, 2020, 39, 1145-1150.	7.1	9
32	Phase composition and magnetic properties of Prâ€“Ndâ€“MMâ€“Feâ€“B nanocrystalline magnets prepared by spark plasma sintering. Rare Metals, 2020, 39, 36-40.	7.1	9
33	Microstructure characteristics and optimization of 2:17-type Sm-Co sintered magnets with different iron content. Journal of Magnetism and Magnetic Materials, 2020, 514, 167288.	2.3	9
34	Identification of optimal solid solution temperature for Sm2Co17-type permanent magnets with different Fe contents. Rare Metals, 2021, 40, 3567-3574.	7.1	9
35	Microstructures and magnetic properties of Ce32.15Co49.36Cu9.84Fe9.65 magnet sintered at different temperatures. Rare Metals, 2012, 31, 470-473.	7.1	8
36	Relation between microstructure and magnetic properties of shock wave-compressed Ndâ€“Feâ€“B magnets. Rare Metals, 2022, 41, 2353-2356.	7.1	8

#	Article	IF	Citations
37	Anisotropic corrosion behavior of sintered (Ce0.15Nd0.85)30FebalB permanent magnets. Journal of Rare Earths, 2019, 37, 287-291.	4.8	8
38	Microstructures and coercivity mechanism of 2:17-type Sm-Co magnets with high remanence. Rare Metals, 2022, 41, 1353-1356.	7.1	7
39	Microstructures and magnetic properties of Sm(CobalFe0.245Cu0.07Zr0.02)7.8 sintered magnet solution-treated at high temperature. Rare Metals, 2022, 41, 4230-4234.	7.1	7
40	Dependence of macromagnetic properties on the microstructure in high-performance Sm2Co17-type permanent magnets. Journal of Magnetism and Magnetic Materials, 2020, 510, 166942.	2.3	7
41	Grains orientation and restructure mechanism of Ce-contained magnets processed by reduction diffusion. Journal of Alloys and Compounds, 2022, 891, 161921.	5.5	7
42	Superior corrosion resistance and corrosion mechanism of dual-main-phase (Ce15Nd85)30FebalB1M magnets in different solutions. Journal of Rare Earths, 2023, 41, 122-129.	4.8	6
43	Fractal study for the fractured surface of Nd-Fe-B permanent magnets. Journal of Applied Physics, 2011, 109, 07A706.	2.5	5
44	Effects of Sm content on thermal stability of Sm2Co17 sintered magnets. Journal of the Korean Physical Society, 2013, 63, 784-786.	0.7	4
45	High temperature properties improvement and microstructure regulation of Sm2Co17-based permanent magnet. AIP Advances, 2019, 9, 125237.	1.3	4
46	Corrosion behavior of dual-main-phased (Nd0.8Ce0.2)2Fe14B magnets with and without annealing process. Rare Metals, 2023, 42, 585-590.	7.1	3
47	Effect of grain alignment distribution on magnetic properties in (MM, Nd)â€“Feâ€“B sintered magnets. Journal Physics D: Applied Physics, 2018, 51, 125001.	2.8	3
48	Intrinsic evolution of novel (Nd, MM)2Fe14B-system magnetic flakes. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	3
49	Abnormal corrosion behavior of dual-main phase sintered (Ce,Nd)-Fe-B magnets in different sodium solutions. Journal of Rare Earths, 2020, 38, 735-741.	4.8	3
50	Study on Preferred Orientation in Nd-Fe-B Cast Strip. Journal of Iron and Steel Research International, 2006, 13, 119-121.	2.8	2
51	Microstructure and magnetic properties of sintered CeCo4.325â^'x Cu0.675Fe x magnets. Rare Metals, 2015, 34, 164-167.	7.1	2
52	Effect of the Ce Content on the Magnetic Properties and Microstructure of CeCo5-based Sintered Bulk Magnets. Journal of Superconductivity and Novel Magnetism, 2018, 31, 1761-1765.	1.8	2
53	Rotation behavior of individual magnetic moment with uniaxial magnetocrystalline anisotropy in magnetic field. Physica B: Condensed Matter, 2021, , 413500.	2.7	2
54	Spontaneous Formation of Skyrmion Structure in a Hard Magnetic Film with Low Coercivity. Materials Letters, 2021, 308, 131135.	2.6	1