

Weixing Xia

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3741839/publications.pdf>

Version: 2024-02-01

80
papers

1,611
citations

361413

20
h-index

315739

38
g-index

80
all docs

80
docs citations

80
times ranked

2101
citing authors

#	ARTICLE	IF	CITATIONS
1	Skyrmion-skyrmion and skyrmion-edge repulsions in skyrmion-based racetrack memory. Scientific Reports, 2015, 5, 7643.	3.3	360
2	Dependency of magnetic microwave absorption on surface architecture of $\text{Co}_{20}\text{Ni}_{80}$ hierarchical structures studied by electron holography. Nanoscale, 2015, 7, 1736-1743.	5.6	184
3	Orientation Mediated Enhancement on Magnetic Hyperthermia of Fe_3O_4 Nanodisc. Advanced Functional Materials, 2015, 25, 812-820.	14.9	121
4	Grain boundary restructuring of multi-main-phase Nd-Ce-Fe-B sintered magnets with Nd hydrides. Acta Materialia, 2018, 142, 18-28.	7.9	93
5	Large magnetic entropy change and enhanced mechanical properties of Ni-Mn-Sn-C alloys. Scripta Materialia, 2014, 75, 26-29.	5.2	49
6	Directional Magnetization Reversal Enables Ultrahigh Energy Density in Gradient Nanostructures. Advanced Materials, 2021, 33, e2102800.	21.0	49
7	Enhanced large magnetic entropy change and adiabatic temperature change of $\text{Ni}_{43}\text{Mn}_{46}\text{Sn}_{11}$ alloys by a rapid solidification method. Scripta Materialia, 2015, 104, 41-44.	5.2	46
8	Enhanced coercivity of Nd-Ce-Fe-B sintered magnets by adding (Nd, Pr)-H powders. Journal of Alloys and Compounds, 2017, 721, 1-7.	5.5	45
9	Grain boundary modification induced magnetization reversal process and giant coercivity enhancement in 2:17 type SmCo magnets. Journal of Alloys and Compounds, 2019, 785, 429-435.	5.5	37
10	Large and sensitive magnetostriction in ferromagnetic composites with nanodispersive precipitates. NPG Asia Materials, 2021, 13, .	7.9	34
11	Direct Observation of Field Emission in a Single TaSi ₂ Nanowire. Nano Letters, 2007, 7, 2243-2247.	9.1	33
12	Effects of magnetic field heat treatment on $\text{SmCo}_{1\pm}\text{-Fe}$ nanocomposite permanent magnetic materials prepared by high energy ball milling. Journal of Alloys and Compounds, 2015, 647, 375-379.	5.5	28
13	Direct chemical synthesis of well dispersed $\text{L}_{10}\text{-FePt}$ nanoparticles with tunable size and coercivity. Green Chemistry, 2016, 18, 417-422.	9.0	28
14	Direct Observation of Magnetocrystalline Anisotropy Tuning Magnetization Configurations in Uniaxial Magnetic Nanomaterials. ACS Nano, 2018, 12, 3442-3448.	14.6	26
15	Structure and magnetism of SmCo_5 nanoflakes prepared by surfactant-assisted ball milling with different ball sizes. Journal of Magnetism and Magnetic Materials, 2013, 347, 116-123.	2.3	24
16	Investigation of magnetic structure and magnetization process of yttrium iron garnet film by Lorentz microscopy and electron holography. Journal of Applied Physics, 2010, 108, .	2.5	23
17	Growth mechanisms and size control of FePt nanoparticles synthesized using $\text{Fe}(\text{CO})_x$ ($x < 1$). Tj ETQq1 1 0.784314, rgBT /Overlock 10 T	5.5	23
18	The structure and magnetic properties of Sm-Fe-N powders prepared by ball milling at low temperature. Journal of Magnetism and Magnetic Materials, 2016, 410, 116-122.	2.3	22

#	ARTICLE	IF	CITATIONS
19	Effect of grain boundary on magnetization behaviors in 2:17 type SmCo magnet. Journal of Magnetism and Magnetic Materials, 2019, 489, 165459.	2.3	21
20	Growth mechanism and magnetic properties of monodisperse L1 ₀ -Co(Fe)Pt@C core-shell nanoparticles by one-step solid-phase synthesis. Nanoscale, 2015, 7, 975-980.	5.6	20
21	Electron holography on dynamic motion of secondary electrons around sciatic nerve tissues. Journal of Electron Microscopy, 2007, 56, 1-5.	0.9	19
22	Magnetic structure and coercivity mechanism of AlNiCo magnets studied by electron holography. Journal of Alloys and Compounds, 2017, 720, 401-407.	5.5	19
23	Determination of stress-coefficient of magnetoelastic anisotropy in flexible amorphous CoFeB film by anisotropic magnetoresistance. Applied Physics Letters, 2017, 111, .	3.3	19
24	Highly anisotropic SmCo ₅ nanoflakes by surfactant-assisted ball milling at low temperature. Journal of Magnetism and Magnetic Materials, 2015, 374, 108-115.	2.3	18
25	Spin-reorientation transition induced magnetic skyrmion in Nd ₂ Fe ₁₄ B magnet. Applied Physics Letters, 2020, 117, .	3.3	17
26	High-field gradient single-pole head with an improved pole structure. IEEE Transactions on Magnetics, 2002, 38, 2216-2218.	2.1	16
27	High anisotropic NdFeB submicro/nanoflakes prepared by surfactant-assisted ball milling at low temperature. Journal of Magnetism and Magnetic Materials, 2017, 442, 279-287.	2.3	12
28	The microstructure and magnetic properties of anisotropic polycrystalline Nd ₂ Fe ₁₄ B nanoflakes prepared by surfactant-assisted cryomilling. Materials Research Express, 2014, 1, 016106.	1.6	11
29	Morphology and magnetic properties of SmCo ₃ /±-Fe nanocomposite magnets prepared via severe plastic deformation. Journal of Applied Physics, 2014, 115, .	2.5	11
30	Oxygen vacancies controlled multiple magnetic phases in epitaxial single crystal Co _{0.5} (Mg _{0.55} Zn _{0.45}) _{0.5} O _{1-v} thin films. Scientific Reports, 2016, 6, 24188.	3.3	11
31	Direct imaging of cross-sectional magnetization reversal in an exchange-biased CoFeB/IrMn bilayer. Physical Review B, 2018, 97, .	3.2	11
32	Resolution Improvement of Transition Width With Shielded Pole Writer. IEEE Transactions on Magnetics, 2004, 40, 2365-2367.	2.1	10
33	Direct observation of magnetization reversal of hot-deformed Nd-Fe-B magnet. AIP Advances, 2018, 8, 015227.	1.3	10
34	Magnetic hardening of Nd-Ce-Fe-B films with high Ce concentration. Scientific Reports, 2018, 8, 11599.	3.3	10
35	Growth of quasi-texture in nanostructured magnets with ultra-high coercivity. Acta Materialia, 2020, 195, 282-291.	7.9	9
36	<i>In Situ</i> Observation of Domain Wall Pinning in Sm(Co,Fe,Cu,Zr)₅ Magnet by Lorentz Microscopy. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	8

#	ARTICLE	IF	CITATIONS
37	PrCo ₅ nanoflakes prepared by surfactant-assisted ball milling at low temperature. Journal of Applied Physics, 2015, 117, .	2.5	8
38	Achieving a high cutting-off frequency in the oriented CoFe ₂ O ₄ nanocubes. Applied Physics Letters, 2017, 111, .	3.3	8
39	An achiral ferromagnetic/chiral antiferromagnetic bilayer system leading to controllable size and density of skyrmions. Scientific Reports, 2019, 9, 2970.	3.3	8
40	Sm ₂ Fe ₁₇ N _x nanoflakes prepared by surfactant assisted cryomilling. Journal of Applied Physics, 2014, 115, 17A706.	2.5	7
41	Performance enhancement of NdFeB nanoflakes prepared by surfactant-assisted ball milling at low temperature by using different surfactants. Materials Research Express, 2017, 4, 025033.	1.6	7
42	Efficiently controlling crystallization and magnetic properties of nanostructured Nd-Ce-Fe-B ribbons via electron beam exposure. Journal of Alloys and Compounds, 2019, 807, 151669.	5.5	7
43	Interlayer coupling effect on skyrmion dynamics in synthetic antiferromagnets. Applied Physics Letters, 2021, 118, .	3.3	7
44	Micromagnetic Configuration of Variable Nanostructured Cobalt Ferrite: Modulating and Simulations toward Memory Devices. ACS Applied Materials & Interfaces, 2019, 11, 28442-28448.	8.0	6
45	Intergranular interaction in nanocrystalline Ce-Fe-B melt-spinning ribbons via first-order reversal curve analysis. AIP Advances, 2021, 11, 015209.	1.3	6
46	Changes of Magnetic Anisotropy of CoPtCr Perpendicular Films Due to Ru Intermediate Layer Under High Gas Pressure. IEEE Transactions on Magnetics, 2010, 46, 3711-3714.	2.1	5
47	Effect of Rh spacer on Synthetic-Antiferromagnetic Coupling in FeCoB/Rh/FeCoB Films. Journal of Physics: Conference Series, 2011, 266, 012064.	0.4	5
48	Electron holography of magnetic field generated by a magnetic recording head. Microscopy (Oxford), 2015, 15, 107-115.	1.5	5
49	Effect of stoichiometry on the magnetocrystalline anisotropy of FePt and CoPt from first-principles calculation. Journal of Physics Condensed Matter, 2014, 26, 386002.	1.8	5
50	An <i>in-situ</i> study of magnetic domain structures in undercooled Fe-29.5 at. %Pd magnetostrictive alloys by Lorentz microscopy and electron holography. Journal of Applied Physics, 2015, 117, 163909.	2.5	5
51	Coercivity enhancement and mechanism in a high Ce-containing NdCeFeB film by the design of a diffusion layer. Journal of Materials Chemistry C, 2019, 7, 7318-7326.	5.5	5
52	Electron Holography of Charging Effect in ZrO ₂ /SiO ₂ Sintered Body. Materials Transactions, 2007, 48, 2616-2620.	1.2	4
53	Changes in switching fields of CoCrPt/SiO ₂ perpendicular recording media due to Ru intermediate layer under low and high gas pressures. Journal of Applied Physics, 2009, 105, 013926.	2.5	4
54	Effect of exchange coupling on magnetic property in SmCo ₂ -Fe layered system. Chinese Physics B, 2016, 25, 037501.	1.4	4

#	ARTICLE	IF	CITATIONS
55	Observations of a magnetic microstructure in a Co-CoO obliquely evaporated tape using electron holography. <i>Journal of Electron Microscopy</i> , 2008, 58, 7-13.	0.9	3
56	Quantitative evaluation of magnetic flux density in a magnetic recording head and pseudo soft underlayer by electron holography. <i>Journal of Electron Microscopy</i> , 2010, 59, 331-337.	0.9	3
57	Effect of Reaction Temperature on the Shape of FePt Nanoparticles. <i>IEEE Transactions on Magnetics</i> , 2014, 50, 1-4.	2.1	3
58	Evolution of Texture and Magnetic Property in Nd-Pr-Fe-B-Based Nanocomposite Magnets With Plastic Deformation. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-4.	2.1	3
59	Air stable Fe nanostructures with high magnetization prepared by reductive annealing. <i>Journal of Materials Science and Technology</i> , 2017, 33, 1334-1338.	10.7	3
60	Magnetic domain reversal induced by thermal activation in SmCo alloy. <i>Journal of Alloys and Compounds</i> , 2022, 895, 162684.	5.5	3
61	Reduction of track width in perpendicular magnetic recording. <i>Journal of Magnetism and Magnetic Materials</i> , 2005, 287, 77-82.	2.3	2
62	Quantitative Electron Holographic Analysis of Electric Potential Distribution around FEG-Emitters. <i>Materials Transactions</i> , 2007, 48, 2631-2635.	1.2	2
63	Magnetization distribution of magnetic vortex of amorphous FeSiB investigated by electron holography and computer simulation. <i>Microscopy (Oxford, England)</i> , 2012, 61, 71-76.	1.5	2
64	Effect of $\{m H\}_2$ on the Formation Mechanism and Magnetic Properties of FePt Nanocrystals. <i>IEEE Transactions on Magnetics</i> , 2013, 49, 3307-3309.	2.1	2
65	Synthesis of Ferromagnetic Nd ₂ Fe ₁₄ B Nanocrystalline via Solvothermal Decomposition and Reduction-Diffusion Calcination. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-4.	2.1	1
66	A novel strategy for the fabrication of high-performance nanostructured Ce-Fe-B magnetic materials via electron-beam exposure. <i>Science China Materials</i> , 2021, 64, 2519-2529.	6.3	1
67	High field gradient single pole head with a novel pole structure. , 0, , .		0
68	Observation of Magnetization Transition of a Co-CoO Obliquely Evaporated Magnetic Recording Tape. , 2006, , .		0
69	Magnetic Microstructure of L10 (Fe _{0.55} Pt _{0.45}) ₇₈ Zr ₂ -4B ₁₈ -20 Nanocrystalline Alloys Observed by Electron Holography. , 2006, , .		0
70	Lorentz Microscopy Study on Magnetization Reversal Process in Single-Domain State in Perovskite-Type Manganite. <i>Japanese Journal of Applied Physics</i> , 2010, 49, 063003.	1.5	0
71	Vacancy formation energy in disordered FePt mediated by distortion and magnetism. , 2015, , .		0
72	Synthesis of ferromagnetic Nd<inf>2</inf>/<inf>Fe</inf>14</inf>/<inf>B nanocrystalline via solvothermal decomposition and reduction-diffusion calcination. , 2015, , .		0

#	ARTICLE	IF	CITATIONS
73	Evolution of texture and magnetic properties in NdPrFeB based nanocomposite magnets with plastic deformation. , 2015, , .		0
74	Influence of the preparation process and target composition on crystal structure and magnetic properties of NdFeB thin films. , 2015, , .		0
75	In-situ observation of domain wall pinning in Sm(Co, Fe, Cu, Zr) magnet by Lorentz microscopy. , 2015, , .		0
76	The synthesis and magnetic properties of Co(Fe)Pt nanoparticles. , 2015, , .		0
77	Influence of Track Width on Reproduction Resolution of a Shielded GMR Head. Kyokai Joho Imeji Zasshi/Journal of the Institute of Image Information and Television Engineers, 2004, 58, 982-986.	0.1	0
78	Analysis of Recorded Track Width Using 3D FEM in Perpendicular Magnetic Recording. Kyokai Joho Imeji Zasshi/Journal of the Institute of Image Information and Television Engineers, 2005, 59, 604-609.	0.1	0
79	Chapter 2 Experimental Observation of Magnetic Skyrmions. Series in Materials Science and Engineering, 2016, , 33-62.	0.1	0
80	Microstructure and magnetic anisotropy of SmCo based films prepared via external magnetic field assisted magnetron sputtering. Advanced Engineering Materials, 0, , .	3.5	0