Wei Liu

List of Publications by Year
in descending order

129	1,989	279701 23	360920 35
papers	citations	h-index	g-index

129	129	129	1782
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	An overview of SrRuO₃-based heterostructures for spintronic and topological phenomena. Journal Physics D: Applied Physics, 2022, 55, 233001.	1.3	15
2	Magnetic properties and coercivity mechanism of high Ce-content CeNdFeB film with Tb diffusion. Journal of Applied Physics, 2022, 131, .	1.1	5
3	Controllable Spinâ€“Orbit Torque Efficiency in Pt/Co/Ru/Co/Pt Multilayers with Interlayer Exchange Couplings. ACS Applied Electronic Materials, 2021, 3, 611-618.	2.0	14
4	Emerging opportunities for voltage-driven magneto-ionic control in ferroic heterostructures. APL Materials, 2021, 9, .	2.2	22
5	Coercivity Mechanism and Magnetization Reversal in Anisotropic Ce-(Y)-Pr-Fe-B Films. Materials, 2021, 14, 4680.	1.3	4
6	Interlayer exchange coupling modulated spin-orbit torque and multi-state switching in GdCo/Ru/GdCo heterostructures. Journal Physics D: Applied Physics, 2021, 54, 505003.	1.3	8
7	Large spinâ€“orbit torque efficiency in PtBi2 film. Applied Physics Letters, 2021, 119, 132402.	1.5	0
8	Coercivity enhancement by adjusting the ratio of La to Ce in REFeB films. Journal of Magnetism and Magnetic Materials, 2021, 540, 168435.	1.0	5
9	Facilitating room-temperature oxygen ion migration via Coâ€“O bond activation in cobaltite films. Nanoscale, 2021, 13, 18256-18266.	2.8	8
10	Enhanced Spinâ€“Orbit Torque and Low Critical Current Density in Pt_{100â€“x}Ru_x/[CoNi]/Ru Multilayer for Spintronic Devices. ACS Applied Materials & Interfaces, 2021, 13, 61742-61750.	4.0	6
11	Field-free spinâ€“orbit torque switching induced by interlayer exchange coupling in Pt/Co/Ru/Ni/Pt multilayer. Journal of Applied Physics, 2021, 130, 243901.	1.1	3
12	Cluster spin-glass behavior in Ni2In-type Mnâ€“Cu-Ga alloys. Journal of Alloys and Compounds, 2020, 816, 152678.	2.8	11
13	Enhancement of spinâ€“orbit torque and modulation of Dzyaloshinskiiâ€“Moriya interaction in Pt100-xCrx/Co/AlOx trilayer. Applied Physics Letters, 2020, 117, .	1.5	15
14	Coercivity mechanism and effect of Dy element in anisotropic LaPrFeB multilayers with Dy diffusion. Journal of Applied Physics, 2020, 128, .	1.1	4
15	Spinâ€“orbit torque driven four-state switching in splicing structure. Applied Physics Letters, 2020, 117, 232408.	1.5	6
16	Influence of rare earth metal Ho on the interfacial Dzyaloshinskiiâ€“Moriya interaction and spin torque efficiency in Pt/Co/Ho multilayers. Nanoscale, 2020, 12, 12444-12453.	2.8	13
17	Interfacial Control of Ferromagnetism in Ultrathin SrRuO₃ Films Sandwiched between Ferroelectric BaTiO₃ Layers. ACS Applied Materials & Interfaces, 2020, 12, 6707-6715.	4.0	16
18	Field-Free Switching of a Spin-Orbit-Torque Device Through Interlayer-Coupling-Induced Domain Walls. Physical Review Applied, 2020, 13, .	1.5	16

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19	Interfacial oxygen-octahedral-tilting-driven electrically tunable topological Hall effect in ultrathin SrRuO₃ films. Journal Physics D: Applied Physics, 2019, 52, 404001.	1.3	51
20	Magnetic interactions and magnetization reversal in anisotropic La-Nd-Fe-B/Ta/Co multilayers and disks. Journal of Magnetism and Magnetic Materials, 2019, 489, 165476.	1.0	7
21	Interface-induced transition from a cluster glass state to a spin glass state in LaMnO3/BiFeO3 heterostructures. Journal of Materials Chemistry C, 2019, 7, 2376-2384.	2.7	10
22	Coercivity enhancement of sputtered (La,Nd,Dy)-Feâ€“Coâ€“B multilayers by inserting Ta space layers. Journal Physics D: Applied Physics, 2019, 52, 145001.	1.3	5
23	Modulation of spin-orbit torque induced magnetization switching in Pt/CoFe through oxide interlayers. Applied Physics Letters, 2019, 114, .	1.5	8
24	Strain-Induced Cluster Glass State in LaMnO₃ Films. Journal of Physical Chemistry C, 2019, 123, 14842-14848.	1.5	6
25	Transition of the exchange bias effect from in-plane to out-of-plane in La_{0.7}Sr_{0.3}MnO₃:NiO nanocomposite thin films. Journal of Materials Chemistry C, 2019, 7, 6091-6098.	2.7	9
26	Oxygen-Valve Formed in Cobaltite-Based Heterostructures by Ionic Liquid and Ferroelectric Dual-Gating. ACS Applied Materials & Interfaces, 2019, 11, 19584-19595.	4.0	30
27	Interface effect of ultrathin W layer on spin-orbit torque in Ta/W/CoFeB multilayers. Applied Physics Letters, 2019, 114, 082402.	1.5	11
28	Controllable oxygen vacancies, orbital occupancy and magnetic ordering in SrCoO 3â^Î´ films. Journal of Magnetism and Magnetic Materials, 2018, 454, 228-236.	1.0	13
29	Asymmetric current-driven switching of synthetic antiferromagnets with Pt insert layers. Nanoscale, 2018, 10, 7612-7618.	2.8	19
30	Chromium-induced ferromagnetism with perpendicular anisotropy in topological crystalline insulator SnTe (111) thin films. Physical Review B, 2018, 97, .	1.1	14
31	Mediating exchange bias by Verwey transition in CoO/Fe3O4 thin film. Journal of Applied Physics, 2018, 123, .	1.1	8
32	Magnetization reversal of antiferromagnetically coupled perpendicular anisotropy films driven by current. Journal of Materials Science and Technology, 2018, 34, 832-835.	5.6	5
33	Coercivity enhancement and microstructural optimization in diffusion-processed Ce-Nd-Fe-B-based films. Thin Solid Films, 2018, 645, 1-4.	0.8	7
34	Magnetic bubbles and domain evolution in Fe/Gd multilayer nanodots. Journal of Magnetism and Magnetic Materials, 2018, 451, 660-664.	1.0	2
35	High-Mobility Spin-Polarized Two-Dimensional Electron Gases at <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>EuO</mml:mi><mml:mo>/</mml:mo><mml:msub><mml:mrow><mml:mi>KTaO</mml:mi></mml:mrow> Interfaces. Physical Review Letters, 2018, 121, 116803.	2.9	79
36	Room temperature magnetoresistance properties in self-assembled epitaxial La_{0.7}Sr_{0.3}MnO₃:NiO nanocomposite thin films. Materials Research Letters, 2018, 6, 489-494.	4.1	8

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37	Enhanced spin-orbit torques and perpendicular magnetic anisotropy in CoFeB/MgO structures with Ta/W bilayer. AIP Advances, 2018, 8, .	0.6	7
38	Magnetization reversal and magnetic interactions in anisotropic Ndâ€“Dyâ€“Feâ€“Coâ€“B/MgO/Î±-Fe disks and multilayers. Nanoscale, 2017, 9, 7385-7390.	2.8	8
39	Enhanced coercivity and grain boundary chemistry in diffusion-processed Ce13Fe79B8 ribbons. Materials Letters, 2017, 191, 210-213.	1.3	15
40	Orientation-modulated exchange coupling in La0.67Ca0.33MnO3/CaMnO3 bilayer films. Journal of Magnetism and Magnetic Materials, 2017, 428, 372-376.	1.0	2
41	Single orthorhombic b axis orientation and antiferromagnetic ordering type in multiferroic CaMnO3 thin film with La0.67Ca0.33MnO3 buffer layer. Applied Physics Letters, 2017, 111, .	1.5	6
42	Magnetization reversal of vortex states driven by out-of-plane field in the nanocomposite Co/Pd/Ru/Py disks. Applied Physics Letters, 2017, 111, 022404.	1.5	7
43	Anisotropic nanocomposite soft/hard multilayer magnets. Chinese Physics B, 2017, 26, 117502.	0.7	5
44	Oxygen vacancy formation, crystal structures, and magnetic properties of three SrMnO3â˜'Î´ films. Applied Physics Letters, 2016, 109, .	1.5	32
45	Magnetic interactions in anisotropic Nd-Dy-Fe-Co-B/Î±-Fe multilayer magnets. Journal of Applied Physics, 2016, 120, .	1.1	15
46	Weak dipolar interaction between CoPd multilayer nanodots for bit-patterned media application. Materials Letters, 2016, 182, 185-189.	1.3	3
47	Magnetic properties of sputtered anisotropic Prâ€“Feâ€“B thin films with different structures and antiferromagnetic materials. Rare Metals, 2016, 35, 926-929.	3.6	9
48	Abnormal magnetic ordering and ferromagnetism in perovskite ScMnO3 film. Applied Physics Letters, 2015, 106, .	1.5	6
49	Effect of antiferromagnetic layer thickness on exchange bias, training effect, and magnetotransport properties in ferromagnetic/antiferromagnetic antidot arrays. Journal of Applied Physics, 2014, 115, .	1.1	12
50	Exchange bias effect in epitaxial La0.67Ca0.33MnO3/SrMnO3 thin film structure. Journal of Applied Physics, 2014, 116, 083908.	1.1	10
51	Ordering temperature of L10-FePd film reduced by Ag underlayer. Materials Letters, 2013, 100, 58-61.	1.3	11
52	Exchange couplings in magnetic films. Chinese Physics B, 2013, 22, 027104.	0.7	25
53	Dynamic magnetoelastic properties of epoxy-bonded Sm0.88Nd0.12Fe1.93 pseudo-1-3 negative magnetostrictive particulate composite. Journal of Applied Physics, 2012, 111, 07A940.	1.1	4
54	Exchange bias and its thermal stability in ferromagnetic/antiferromagnetic antidot arrays. Applied Physics Letters, 2012, 101, .	1.5	20

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55	Enhancing the perpendicular anisotropy of NdDyFeB films by Dy diffusion process. Journal of Applied Physics, 2012, 111, 07A729.	1.1	14
56	Exchange coupling in hard/soft-magnetic multilayer films with non-magnetic spacer layers. Journal of Applied Physics, 2012, 111, .	1.1	16
57	Anomalous magnetic and magnetotransport properties in nanostructured networks of Co/NiO/Fe trilayers. Thin Solid Films, 2012, 526, 278-281.	0.8	2
58	Influence of ferromagnetic layer on the exchange coupling of antiferromagnetic NiO-based films. Journal of Magnetism and Magnetic Materials, 2012, 324, 3933-3936.	1.0	3
59	Magnetic Properties of Anisotropic Prâ€“Feâ€“B/Fe/Prâ€“Feâ€“B Films. Journal of Superconductivity and Novel Magnetism, 2012, 25, 2059-2062.	0.8	0
60	Magnetic properties of Râ€“Feâ€“B/Mn films with different structures. Materials Letters, 2012, 69, 52-54.	1.3	8
61	Quasilogarithmic magnetic viscosity in perpendicularly anisotropic Ndâ€“Feâ€“B films. Journal of Magnetism and Magnetic Materials, 2012, 324, 2854-2857.	1.0	0
62	Magnetomechanical properties of epoxy-bonded Sm1â^'xNdxFe1.55 (0â‰¤xâ‰¤0.56) pseudo-1â€“3 magnetostrictive particulate composites. Journal of Alloys and Compounds, 2011, 509, 4954-4957.	2.8	9
63	Temperature dependence of the exchange coupling in CO/SI(or Ge)/Fe trilayers. Physica B: Condensed Matter, 2011, 406, 1969-1972.	1.3	0
64	Structure, magnetic and magnetostrictive properties of Sm0.7Pr0.3Fex alloys. Materials Letters, 2010, 64, 608-610.	1.3	5
65	Ordering temperature of L10-type FePt films reduced by CuO addition. Journal of Magnetism and Magnetic Materials, 2010, 322, 2027-2030.	1.0	5
66	Structural, magnetic properties and magnetostriction studies of Sm1â^'xNdxFe1.55 alloys. Journal of Magnetism and Magnetic Materials, 2010, 322, 2095-2098.	1.0	9
67	Carbon-doping effects on the metamagnetic transition and magnetocaloric effect in MnAsCx. Journal of Magnetism and Magnetic Materials, 2010, 322, 2223-2226.	1.0	14
68	Strong effects of magnetic anisotropy on exchange coupling and magnetotransport properties of ferromagnetic/NiO/ferromagnetic trilayers. Applied Physics Letters, 2010, 97, 072502.	1.5	7
69	Effects of anisotropy and spin-asymmetry of ferromagnetic materials in ferromagnetic/Cr2O3/ferromagnetic trilayers. Applied Physics Letters, 2010, 96, .	1.5	12
70	Magnetic properties of nickel hydroxide nanoparticles. Journal of Applied Physics, 2010, 107, .	1.1	35
71	Exchange bias and its training effect in Ni/NiO nanocomposites. Journal of Alloys and Compounds, 2010, 497, 10-13.	2.8	33
72	Field-induced reversible magnetocaloric effect in CoCl2. Journal of Alloys and Compounds, 2010, 507, 26-28.	2.8	4

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73	The origin of large overestimation of the magnetic entropy changes calculated directly by Maxwell relation. Applied Physics Letters, 2010, 96, .	1.5	35
74	Temperature dependence of competition between interlayer and interfacial exchange couplings in ferromagnetic/antiferromagnetic/ferromagnetic trilayers. Applied Physics Letters, 2009, 95, .	1.5	18
75	Growth mechanism and magnetic properties for the out-of-planeâ€“oriented Ndâ€“Feâ€“B films. Journal of Materials Research, 2009, 24, 2802-2812.	1.2	6
76	Structure and magnetic properties of high coercive [PrFeB /Cu] films with out-of-plane orientation. Materials Letters, 2009, 63, 1866-1868.	1.3	11
77	Magnetic properties of Ndâ€“Feâ€“B/FeMn multilayer films. Materials Letters, 2009, 63, 2652-2654.	1.3	12
78	Effective anisotropy field in anisotropic nanostructured ferromagnetic materials. Physica Status Solidi (B): Basic Research, 2009, 246, 1709-1715.	0.7	1
79	Cooling-field dependence of exchange bias in Mg-diluted Ni1â^'xMgxO/Ni granular systems. Journal of Magnetism and Magnetic Materials, 2009, 321, 1943-1946.	1.0	15
80	Effect of Co and Dy substitutions on the structure and magnetic properties of Ndâ€“Feâ€“C alloys prepared by a re-milling process. Journal of Alloys and Compounds, 2009, 468, L33-L36.	2.8	3
81	Exchange bias and phase transformation in Î±-Fe2O3/Fe3O4 nanocomposites. Journal of Alloys and Compounds, 2009, 475, 42-45.	2.8	26
82	Effects of Mn addition on the structures, magnetic properties and phase transformation of SmCo6.7â^'xMnxCr0.3 magnets. Journal of Alloys and Compounds, 2009, 476, 19-23.	2.8	3
83	Structural, magnetic, and magnetostrictive properties of Laves (Tb0.3Dy0.7)1â^'xPrxFe1.55 (0â‰¤xâ‰¤0.4) alloys. Journal of Alloys and Compounds, 2009, 476, 24-27.	2.8	11
84	Coercivity enhancement in sputtered Prâ€“Feâ€“B/FeMn thin films. Journal of Alloys and Compounds, 2009, 485, 33-35.	2.8	9
85	Magnetocaloric effects and reduced thermal hysteresis in Si-doped MnAs compounds. Journal of Alloys and Compounds, 2009, 479, 189-192.	2.8	25
86	Unconventional exchange bias in CoCr2O4/Cr2O3 nanocomposites. Journal of Applied Physics, 2009, 105, 064702.	1.1	18
87	Structure, magnetic properties and magnetostriction of laves compounds Nd1â^'xPrx(Fe0.35Co0.55B0.1)2. Journal of Magnetism and Magnetic Materials, 2008, 320, 2373-2375.	1.0	3
88	Thickness dependence of the magnetic properties of high-coercive Prâ€“Feâ€“B thin films with perpendicular magnetic anisotropy. Physica B: Condensed Matter, 2008, 403, 3631-3634.	1.3	16
89	Exchange bias and phase transformation in Î±â€Fe2O3+NiO nanocomposites. Journal of Applied Physics, 2008, 103, 103906.	1.1	17
90	Anisotropic behavior of exchange coupling in textured Nd2Fe14B/Î±-Fe multilayer films. Journal of Applied Physics, 2008, 104, 053903.	1.1	37

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91	Exchange bias in antiferromagnetic coupled Fe₃O₄+Cr₂O₃nanocomposites. Journal Physics D: Applied Physics, 2008, 41, 105005.	1.3	19
92	Structure, magnetic properties and coercivity mechanism of the Mo-spacered Nd₂Fe₁₄B/Î±-Fe textured multilayer films. Journal Physics D: Applied Physics, 2008, 41, 245007.	1.3	12
93	Giant reversible magnetocaloric effect in cobalt hydroxide nanoparticles. Applied Physics Letters, 2008, 93, .	1.5	25
94	Enhanced coercivity in Ndâ€“Feâ€“C alloys prepared by a re-milling process. Journal of Alloys and Compounds, 2007, 436, 392-395.	2.8	10
95	Phase formation and magnetic properties of Nd2Fe14B-type Nd16Co76B8âˆ’xCx alloys and their hydrides. Physica B: Condensed Matter, 2007, 400, 273-277.	1.3	2
96	Decomposition of B4C and magnetic properties of Ndâ€“Feâ€“(B,C) alloys synthesized by mechanical alloying. Journal of Alloys and Compounds, 2006, 415, 271-275.	2.8	5
97	Microstructure and magnetic properties of anisotropic Ndâ€“Feâ€“B thin films fabricated with different deposition rates. Journal of Magnetism and Magnetic Materials, 2006, 302, 306-309.	1.0	17
98	Synthesis of a new type of GdAl2nanocapsule with a large cryogenic magnetocaloric effect and novel coral-like aggregates self-assembled by nanocapsules. Nanotechnology, 2006, 17, 5406-5411.	1.3	29
99	Structure, phase transformation, and magnetic properties of SmCo7âˆ’xCrx magnets. Journal of Applied Physics, 2006, 99, 053905.	1.1	18
100	Structural and magnetic properties of Laves compounds Dy1âˆ’xPrx(Fe0.35Co0.55B0.1)2 (0â©½xâ©½1). Journal of Applied Physics, 2006, 99, 08M701.	1.1	13
101	Direct experimental evidence for anisotropy compensation between Dy3+ and Pr3+ ions. Applied Physics Letters, 2006, 89, 122506.	1.5	47
102	Enhanced coercivity in thermally processed (Nd,Dy)(Fe,Co,Nb,B)5.5âˆ•Î±-Fe nanoscale multilayer magnets. Journal of Applied Physics, 2005, 97, 104308.	1.1	6
103	Coercivity mechanism of anisotropicPr2Fe14Bthin films with perpendicular texture. Physical Review B, 2005, 72, .	1.1	29
104	Effect of heat treatment on microstructure and magnetic properties of anisotropic Ndâ€“Feâ€“B films with Mo or Ti buffer layer. Journal of Applied Physics, 2005, 98, 113905.	1.1	17
105	High Pr-content (Tb0.2Pr0.8)(Fe0.4Co0.6)1.93âˆ’xBx magnetostrictive alloys. Applied Physics Letters, 2005, 87, 082506.	1.5	24
106	Effects of buffer layer and substrate temperature on the surface morphology, the domain structure and magnetic properties of c-axis-oriented Nd2Fe14B films. Journal of Applied Physics, 2005, 98, 033907.	1.1	21
107	Structure and magnetostriction of Tb1âˆ’xPrxFe1.93B0.15 alloys. Journal of Magnetism and Magnetic Materials, 2004, 269, 281-285.	1.0	13
108	Structure and magnetic properties of N-containing Prâ€“Feâ€“B alloys prepared by mechanical alloying. Journal of Magnetism and Magnetic Materials, 2004, 277, 153-158.	1.0	1

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109	Magnetostriction and anisotropy compensation in TbxDy1â^'xPr0.3(Fe0.9B0.1)1.93 alloys. Applied Physics Letters, 2004, 84, 562-564.	1.5	49
110	Structure and magnetic properties of sputtered hard/soft multilayer magnets. Journal of Applied Physics, 2003, 93, 8131-8133.	1.1	15
111	Nanocomposite (Nd,Dy)(Fe,Co,Nb,B)5.5/Â-Fe multilayer magnets with high performance. Journal Physics D: Applied Physics, 2003, 36, L63-L66.	1.3	15
112	Effect of boron on structure and magnetic properties of magnetostrictive compound Dy[sub 0.7]Pr[sub 0.3]Fe[sub 2]. Journal of Applied Physics, 2002, 91, 8207.	1.1	21
113	Structure and magnetic properties of sputtered (Nd,Dy)(Fe,Co,Nb,B)[sub 5.5]/M (M=FeCo,Co) multilayer magnets. Journal of Applied Physics, 2002, 91, 7890.	1.1	15
114	Exchange Coupling and Remanence Enhancement in Nanocomposite Multilayer Magnets. Advanced Materials, 2002, 14, 1832-1834.	11.1	114
115	Structure and magnetic properties of boron-oxide-coated Fe(B) nanocapsules prepared by arc discharge in diborane. Physical Review B, 2001, 64, .	1.1	49
116	Effect of nitrogen content on structure and magnetic properties of Nd16Fe84â^'xBxNy alloys prepared by mechanical alloying. Journal of Alloys and Compounds, 2000, 309, 172-175.	2.8	5
117	Magnetic phase transitions in Nd1â^'xPrxFe11â^'ySiyTi (y=0.5, 1.0) compounds. Journal of Alloys and Compounds, 2000, 296, 39-45.	2.8	2
118	Metastable phases in rare-earth permanent-magnet materials. Journal Physics D: Applied Physics, 2000, 33, R217-R246.	1.3	62
119	Decomposition of BN and formation of Nd2Fe14BNxphase prepared by mechanical alloying. Journal Physics D: Applied Physics, 1999, 32, 1591-1594.	1.3	15
120	Crystallographic and magnetic properties of the quaternary rare-earth-transition-metal boron nitrides R2Fe14BN0.1(R = Nd and Sm). Journal of Physics Condensed Matter, 1999, 11, 3951-3958.	0.7	9
121	Dependence of magnetic properties on grain size of Î±-Fe in nanocomposite (Nd,â€ŠDy)(Fe,â€ŠCo,â€ŠNb,â€ŠB)5.5/Î±-Fe magnets. Applied Physics Letters, 1999, 74, 1740-1742.	1.5	73
122	Structure and magnetic properties of Ndâ€“Feâ€“Bâ€“Ti prepared by mechanical alloying. Journal of Magnetism and Magnetic Materials, 1998, 184, 101-105.	1.0	19
123	Structure, phase transformation and magnetic properties of Ndâ€“Feâ€“C alloys made by mechanical alloying and subsequent annealing. Journal of Alloys and Compounds, 1998, 267, 215-223.	2.8	22
124	Magnetic phase transitions in compounds. Journal of Physics Condensed Matter, 1998, 10, 379-388.	0.7	1
125	High-coercivity Dy - Fe - X (X = C, B) alloys made by mechanical alloying. Journal of Physics Condensed Matter, 1997, 9, 9985-9991.	0.7	9
126	Mechanically alloyed isotropic (Nd,Dy)î—¸Feî—¸C magnets. Journal of Magnetism and Magnetic Materials, 1997, 170, L17-L21.	1.0	11

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127	Structural stability and magnetic properties of Nd2Fe14C synthesized by mechanical alloying. Journal of Magnetism and Magnetic Materials, 1997, 172, 285-290.	1.0	7
128	Nd - Fe - (C, B) permanent magnets made by mechanical alloying and subsequent annealing. Journal of Physics Condensed Matter, 1996, 8, 11231-11242.	0.7	29
129	Rotation alignment for measuring easy-plane magnetic anisotropy. Journal of Magnetism and Magnetic Materials, 1992, 109, 59-63.	1.0	37