

L H Lewis

List of Publications by Year in descending order

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60
papers

2,303
citations

236612

25
h-index

214527

47
g-index

62
all docs

62
docs citations

62
times ranked

2246
citing authors

#	ARTICLE	IF	CITATIONS
1	On the relationship of high coercivity and L10 ordered phase in CoPt and FePt thin films. Journal of Applied Physics, 1999, 86, 4527-4533.	1.1	313
2	Magnetostructural transition and magnetocaloric effect in Ni ₅₅ Mn ₂₀ Ga ₂₅ single crystals. Physical Review B, 2005, 72, .	1.1	246
3	On the relationship of magnetocrystalline anisotropy and stoichiometry in epitaxial L10 CoPt (001) and FePt (001) thin films. Journal of Applied Physics, 2005, 98, 033904.	1.1	190
4	Large magnetic entropy change in the metallic antiperovskite Mn ₃ GaC. Journal of Applied Physics, 2003, 93, 10128-10130.	1.1	135
5	High coercivity cobalt carbide nanoparticles processed via polyol reaction: a new permanent magnet material. Journal Physics D: Applied Physics, 2010, 43, 165003.	1.3	107
6	Coupled magnetic, structural, and electronic phase transitions in FeRh. Journal Physics D: Applied Physics, 2016, 49, 323002.	1.3	99
7	Inspired by nature: investigating tetrataenite for permanent magnet applications. Journal of Physics Condensed Matter, 2014, 26, 064213.	0.7	86
8	Predicting magnetostructural trends in FeRh-based ternary systems. Applied Physics Letters, 2013, 103, .	1.5	71
9	Direct chemical synthesis of high coercivity air-stable SmCo nanoblades. Applied Physics Letters, 2008, 93, .	1.5	64
10	Hall-effect characterization of the metamagnetic transition in FeRh. New Journal of Physics, 2013, 15, 013008.	1.2	59
11	Structural evidence for stabilized ferromagnetism in epitaxial FeRh nanoislands. Journal Physics D: Applied Physics, 2013, 46, 162002.	1.3	49
12	Magnetism and the defect state in the magnetocaloric antiperovskite Mn ₃ GaC _{1-x} Y _x . Journal of Physics Condensed Matter, 2006, 18, 1677-1686.	0.7	47
13	Towards tailoring the magnetocaloric response in FeRh-based ternary compounds. Journal of Applied Physics, 2014, 115, .	1.1	42
14	Spatial texture distribution in thermomechanically deformed Fe ₁₄ -based magnets. Journal of Applied Physics, 1997, 82, 3430-3441.	1.1	40
15	Recoil hysteresis of Sm ²⁺ /Co ²⁺ /Fe exchange-spring bilayers. Journal of Applied Physics, 2005, 98, 113906.	1.1	39
16	Bulk and near-surface magnetic properties of FeRh thin films. Journal of Applied Physics, 2008, 103, .	1.1	36
17	Exchange anisotropy in the nanostructured MnAl system. Applied Physics Letters, 2012, 100, .	1.5	35
18	Temperature controlled motion of an antiferromagnet-ferromagnet interface within a dopant-graded FeRh epilayer. APL Materials, 2015, 3, .	2.2	31

#	ARTICLE	IF	CITATIONS
19	Antiferromagnetic phase of the gapless semiconductor $\sqrt{3} \times \sqrt{3} \times \sqrt{3}$ Al ₃ Physical Review B, 2015, 91, .	1.1	31
20	Observation of a temperature dependent asymmetry in the domain structure of a Pd-doped FeRh epilayer. New Journal of Physics, 2014, 16, 113073.	1.2	29
21	Alignment and analyses of MnBi ¹¹¹ •Bi nanostructures. Applied Physics Letters, 2005, 87, 062505.	1.5	28
22	Structural and magnetic characterization of ion-beam deposited NiFe/NixFe _{1-x} O composite films. Journal of Applied Physics, 2003, 93, 6590-6592.	1.1	27
23	A sample holder design and calibration technique for the quantum design magnetic properties measurement system superconducting quantum interference device magnetometer. Review of Scientific Instruments, 1996, 67, 3537-3542.	0.6	26
24	Surface influenced magnetostructural transition in FeRh films. Applied Physics Letters, 2009, 95, 222515.	1.5	26
25	Effect of annealing on magnetic exchange coupling in CoPt/Co bilayer thin films. Journal of Applied Physics, 2000, 87, 6140-6142.	1.1	25
26	Strain-tuning of the magnetocaloric transition temperature in model FeRh films. Journal Physics D: Applied Physics, 2018, 51, 024003.	1.3	24
27	Intrinsic Properties of Fe-Substituted $L1_0$ Magnets. IEEE Transactions on Magnetics, 2013, 49, 5194-5198.	1.2	23
28	Asymmetric melting and freezing kinetics of the magnetostructural phase transition in B2-ordered FeRh epilayers. Applied Physics Letters, 2014, 104, .	1.5	23
29	Synthesis of low-moment CrVTiAl: A potential room temperature spin filter. Applied Physics Letters, 2016, 109, .	1.5	23
30	Modeling of permanent magnets: Interpretation of parameters obtained from the Jiles-Atherton hysteresis model. Journal of Applied Physics, 1996, 79, 6470.	1.1	22
31	Magnetic field calibration of a transmission electron microscope using a permanent magnet material. Review of Scientific Instruments, 2002, 73, 2298-2304.	0.6	22
32	Simple enhancement of the magnetocaloric effect in giant magnetocaloric materials. Applied Physics Letters, 2003, 83, 515-517.	1.5	22
33	Tailoring the FeRh magnetostructural response with Au diffusion. Journal of Applied Physics, 2012, 112, .	1.1	21
34	Magnetic entropy in Ni ₂ MnGa single crystals. Journal of Applied Physics, 2004, 95, 6918-6920.	1.1	20
35	Crystal structure and magnetic properties of MnBi•Bi nanocomposite. Journal of Applied Physics, 2005, 97, 10K302.	1.1	19
36	MnBi nanostructures: Size dependence of magnetostructural transition and matrix templating. Applied Physics Letters, 2007, 90, 153112.	1.5	19

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37	L10 structure formation in slow-cooled Fe-Au nanoclusters. Applied Physics Letters, 2012, 100, 211911.	1.5	16
38	Magnetism and metastability of melt-spun Pd ₄₀ (Fe,Ni) ₄₀ P ₂₀ metallic glass. Journal of Applied Physics, 2006, 99, 08F117.	1.1	15
39	Enhanced magnetism in Fe-doped TiO ₂ anatase nanorods. Journal of Applied Physics, 2007, 102, 123902.	1.1	15
40	Microstructural and magnetic investigations into the origins of high coercivity in dielectric praseodymium-cobalt-carbon based magnets. Journal of Applied Physics, 1996, 79, 351-360.	1.1	13
41	Robust exchange coupling in bilayer exchange-spring thin films. Journal of Applied Physics, 2003, 93, 7235-7237.	1.1	13
42	Electron microscopy of grain boundaries: An application to RE-Fe-B (RE = Pr or Nd) magnetic materials. Philosophical Magazine Letters, 1995, 71, 297-305.	0.5	12
43	Magnetic exchange effects in a nanocomposite Ni/NiO film. Journal of Applied Physics, 2002, 91, 7233.	1.1	12
44	Tuning the magnetostructural phase transition in FeRh nanocomposites. Journal of Applied Physics, 2013, 113, 023910.	1.1	12
45	Interphase exchange effects in CoPt/Co bilayer thin films. Journal Physics D: Applied Physics, 2004, 37, 2638-2642.	1.3	10
46	Nanophase stability in a granular FeRh-Cu system. Journal of Applied Physics, 2013, 113, 17B523.	1.1	8
47	Exchange Bias in Bulk $\text{Fe}_{70}\text{Mn}_{30}$ Nanocomposites for Permanent Magnet Applications. ACS Applied Nano Materials, 2019, 2, 1940-1950.	2.4	8
48	Magnetic signature of compositional gradient in exchange-spring bilayer films of CoPt/Co. Journal of Applied Physics, 2001, 89, 7528-7530.	1.1	7
49	Magnetic Exchange-Coupling in CoPt/Co Bilayer thin Films. Materials Research Society Symposia Proceedings, 1999, 577, 353.	0.1	6
50	Manipulation of the metamagnetic transition and entropy change in Gd ₅ (Si,Ge) ₄ . Journal of Applied Physics, 2004, 95, 6912-6914.	1.1	4
51	Magnetic and transport properties of MnBi-Bi nanocomposites. Journal of Applied Physics, 2006, 99, 08N703.	1.1	4
52	Anomalous high-temperature coercivities in hard nanocomposite alloys. Journal of Applied Physics, 1998, 83, 6274-6276.	1.1	3
53	Atomic structure of the amorphous state of TiC-modified Nd ₂ Fe ₁₄ B as revealed by positron annihilation spectroscopy. Journal of Applied Physics, 1999, 85, 5929-5931.	1.1	3
54	Compositional clustering in Nd ₂ Fe ₁₄ B melt-spun ribbons. Journal of Applied Physics, 2000, 87, 4735-4737.	1.1	3

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55	Tailoring exchange coupling and phase separation in Fe-Co-Mn nanocomposites. Journal of Applied Physics, 2014, 115, .	1.1	3
56	Effect of degree of die upset on magnetic behavior in Nd _{13.9} (Fe _{0.92} Co _{0.08}) _{80.3} B _{5.3} Ga _{0.5} . Journal of Applied Physics, 2000, 87, 6570-6572.	1.1	2
57	A Study On High Coercivity And Lio Ordered Phase In Copt And Fept Thin Films. Materials Research Society Symposia Proceedings, 1999, 562, 321.	0.1	1
58	Aberration corrected STEM of iron rhodium nanoislands. Journal of Physics: Conference Series, 2014, 522, 012039.	0.3	1
59	Crystallographic texture determinations from inverse susceptibility measurements. Journal of Applied Physics, 1997, 81, 5091-5093.	1.1	0
60	Magnetization Reversal In Melt-Ouenced NdFeB. Materials Research Society Symposia Proceedings, 1999, 577, 321.	0.1	0