

# 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	Exchange Bias in Bulk $\hat{I}_{\pm}\text{-Fe}/\hat{I}_{\pm}\text{-Fe}_{70}\text{Mn}_{30}$ Nanocomposites for Permanent Magnet Applications. ACS Applied Nano Materials, 2019, 2, 1940-1950.	2.4	8
2	Strain-tuning of the magnetocaloric transition temperature in model FeRh films. Journal Physics D: Applied Physics, 2018, 51, 024003.	1.3	24
3	Synthesis of low-moment CrVTiAl: A potential room temperature spin filter. Applied Physics Letters, 2016, 109, .	1.5	23
4	Coupled magnetic, structural, and electronic phase transitions in FeRh. Journal Physics D: Applied Physics, 2016, 49, 323002.	1.3	99
5	Temperature controlled motion of an antiferromagnet-ferromagnet interface within a dopant-graded FeRh epilayer. APL Materials, 2015, 3, .	2.2	31
6	Antiferromagnetic phase of the gapless semiconductor $V_3Al$ . Physical Review B, 2015, 91, .	1.1	31
7	Aberration corrected STEM of iron rhodium nanoislands. Journal of Physics: Conference Series, 2014, 522, 012039.	0.3	1
8	Tailoring exchange coupling and phase separation in Fe-Co-Mn nanocomposites. Journal of Applied Physics, 2014, 115, .	1.1	3
9	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
10	Towards tailoring the magnetocaloric response in FeRh-based ternary compounds. Journal of Applied Physics, 2014, 115, .	1.1	42
11	Asymmetric melting and freezing kinetics of the magnetostructural phase transition in B2-ordered FeRh epilayers. Applied Physics Letters, 2014, 104, .	1.5	23
12	Inspired by nature: investigating tetraetaenite for permanent magnet applications. Journal of Physics Condensed Matter, 2014, 26, 064213.	0.7	86
13	Intrinsic Properties of Fe-Substituted $L1_0$ Magnets. IEEE Transactions on Magnetism, 2013, 49, 5194-5198.	1.2	23
14	Predicting magnetostructural trends in FeRh-based ternary systems. Applied Physics Letters, 2013, 103, .	1.5	71
15	Structural evidence for stabilized ferromagnetism in epitaxial FeRh nanoislands. Journal Physics D: Applied Physics, 2013, 46, 162002.	1.3	49
16	Tuning the magnetostructural phase transition in FeRh nanocomposites. Journal of Applied Physics, 2013, 113, 023910.	1.1	12
17	Nanophase stability in a granular FeRh-Cu system. Journal of Applied Physics, 2013, 113, 17B523.	1.1	8
18	Hall-effect characterization of the metamagnetic transition in FeRh. New Journal of Physics, 2013, 15, 013008.	1.2	59

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19	L10 structure formation in slow-cooled Fe-Au nanoclusters. Applied Physics Letters, 2012, 100, 211911.	1.5	16
20	Exchange anisotropy in the nanostructured MnAl system. Applied Physics Letters, 2012, 100, .	1.5	35
21	Tailoring the FeRh magnetostructural response with Au diffusion. Journal of Applied Physics, 2012, 112, .	1.1	21
22	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
23	Surface influenced magnetostructural transition in FeRh films. Applied Physics Letters, 2009, 95, 222515.	1.5	26
24	Direct chemical synthesis of high coercivity air-stable SmCo nanoblades. Applied Physics Letters, 2008, 93, .	1.5	64
25	Bulk and near-surface magnetic properties of FeRh thin films. Journal of Applied Physics, 2008, 103, .	1.1	36
26	MnBi nanostructures: Size dependence of magnetostructural transition and matrix templating. Applied Physics Letters, 2007, 90, 153112.	1.5	19
27	Enhanced magnetism in Fe-doped TiO <sub>2</sub> anatase nanorods. Journal of Applied Physics, 2007, 102, 123902.	1.1	15
28	Magnetism and metastability of melt-spun Pd <sub>40</sub> (Fe,Ni) <sub>40</sub> P <sub>20</sub> metallic glass. Journal of Applied Physics, 2006, 99, 08F117.	1.1	15
29	Magnetism and the defect state in the magnetocaloric antiperovskite Mn <sub>3</sub> GaC <sub>11</sub> . Journal of Physics Condensed Matter, 2006, 18, 1677-1686.	0.7	47
30	Magnetic and transport properties of MnBi <sup>~</sup> •Bi nanocomposites. Journal of Applied Physics, 2006, 99, 08N703.	1.1	4
31	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
32	Crystal structure and magnetic properties of MnBi <sup>~</sup> •Bi nanocomposite. Journal of Applied Physics, 2005, 97, 10K302.	1.1	19
33	Recoil hysteresis of Sm <sup>~</sup> •Co <sup>~</sup> •Fe exchange-spring bilayers. Journal of Applied Physics, 2005, 98, 113906.	1.1	39
34	Alignment and analyses of MnBi <sup>~</sup> •Bi nanostructures. Applied Physics Letters, 2005, 87, 062505.	1.5	28
35	Magnetostructural transition and magnetocaloric effect in Ni <sub>55</sub> Mn <sub>20</sub> Ga <sub>25</sub> single crystals. Physical Review B, 2005, 72, .	1.1	246
36	Interphase exchange effects in CoPt/Co bilayer thin films. Journal Physics D: Applied Physics, 2004, 37, 2638-2642.	1.3	10

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37	Magnetic entropy in Ni <sub>2</sub> MnGa single crystals. Journal of Applied Physics, 2004, 95, 6918-6920.	1.1	20
38	Manipulation of the metamagnetic transition and entropy change in Gd <sub>5</sub> (Si,Ge) <sub>4</sub> . Journal of Applied Physics, 2004, 95, 6912-6914.	1.1	4
39	Simple enhancement of the magnetocaloric effect in giant magnetocaloric materials. Applied Physics Letters, 2003, 83, 515-517.	1.5	22
40	Robust exchange coupling in bilayer exchange-spring thin films. Journal of Applied Physics, 2003, 93, 7235-7237.	1.1	13
41	Large magnetic entropy change in the metallic antiperovskite Mn <sub>3</sub> GaC. Journal of Applied Physics, 2003, 93, 10128-10130.	1.1	135
42	Structural and magnetic characterization of ion-beam deposited NiFe/NixFe <sub>1-x</sub> O composite films. Journal of Applied Physics, 2003, 93, 6590-6592.	1.1	27
43	Magnetic exchange effects in a nanocomposite Ni/NiO film. Journal of Applied Physics, 2002, 91, 7233.	1.1	12
44	Magnetic field calibration of a transmission electron microscope using a permanent magnet material. Review of Scientific Instruments, 2002, 73, 2298-2304.	0.6	22
45	Magnetic signature of compositional gradient in exchange-spring bilayer films of CoPt/Co. Journal of Applied Physics, 2001, 89, 7528-7530.	1.1	7
46	Compositional clustering in Nd <sub>2</sub> Fe <sub>14</sub> B melt-spun ribbons. Journal of Applied Physics, 2000, 87, 4735-4737.	1.1	3
47	Effect of annealing on magnetic exchange coupling in CoPt/Co bilayer thin films. Journal of Applied Physics, 2000, 87, 6140-6142.	1.1	25
48	Effect of degree of die upset on magnetic behavior in Nd <sub>13.9</sub> (Fe <sub>0.92</sub> Co <sub>0.08</sub> ) <sub>80.3</sub> B <sub>5.3</sub> Ga <sub>0.5</sub> . Journal of Applied Physics, 2000, 87, 6570-6572.	1.1	2
49	Atomic structure of the amorphous state of TiC-modified Nd <sub>2</sub> Fe <sub>14</sub> B as revealed by positron annihilation spectroscopy. Journal of Applied Physics, 1999, 85, 5929-5931.	1.1	3
50	On the relationship of high coercivity and L1 <sub>0</sub> ordered phase in CoPt and FePt thin films. Journal of Applied Physics, 1999, 86, 4527-4533.	1.1	313
51	A Study On High Coercivity And L <sub>10</sub> Ordered Phase In Copt And Fept Thin Films. Materials Research Society Symposia Proceedings, 1999, 562, 321.	0.1	1
52	Magnetization Reversal In Melt-Ouenced NdFeB. Materials Research Society Symposia Proceedings, 1999, 577, 321.	0.1	0
53	Magnetic Exchange-Coupling in CoPt/Co Bilayer thin Films. Materials Research Society Symposia Proceedings, 1999, 577, 353.	0.1	6
54	Anomalous high-temperature coercivities in hard nanocomposite alloys. Journal of Applied Physics, 1998, 83, 6274-6276.	1.1	3

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55	Crystallographic texture determinations from inverse susceptibility measurements. Journal of Applied Physics, 1997, 81, 5091-5093.	1.1	0
56	Spatial texture distribution in thermomechanically deformed 2 <sup>14</sup> -based magnets. Journal of Applied Physics, 1997, 82, 3430-3441.	1.1	40
57	Modeling of permanent magnets: Interpretation of parameters obtained from the Jiles <sup>14</sup> Atherton hysteresis model. Journal of Applied Physics, 1996, 79, 6470.	1.1	22
58	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
59	Microstructural and magnetic investigations into the origins of high coercivity in die <sup>14</sup> praseodymium <sup>14</sup> cobalt <sup>14</sup> carbon based magnets. Journal of Applied Physics, 1996, 79, 351-360.	1.1	13
60	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