Thomas Thomson

List of Publications by Year
in descending order

63	2,973	394421 19	168389 53
papers	citations	h-index	g-index

65	65	65	4078
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Nanofabricated and self-assembled magnetic structures as data storage media. Journal Physics D: Applied Physics, 2005, 38, R199-R222.	2.8	745
2	Spin-half paramagnetism in graphene induced by point defects. Nature Physics, 2012, 8, 199-202.	16.7	743
3	Intrinsic Distribution of Magnetic Anisotropy in Thin Films Probed by Patterned Nanostructures. Physical Review Letters, 2006, 96, 257204.	7.8	298
4	Separating dipolar broadening from the intrinsic switching field distribution in perpendicular patterned media. Applied Physics Letters, 2007, 90, 162516.	3.3	143
5	Characterization of the magnetic modification of Co/Pt multilayer films by He+, Ar+, and Ga+ ion irradiation. Applied Physics Letters, 2002, 80, 279-281.	3.3	105
6	Coercivity tuning in Co/Pd multilayer based bit patterned media. Applied Physics Letters, 2009, 95, 232505.	3.3	90
7	Directed self-assembly of block copolymers for use in bit patterned media fabrication. Journal Physics D: Applied Physics, 2013, 46, 503001.	2.8	87
8	Magnetic characterization and recording properties of patterned Co/sub 70/Cr/sub 18/Pt/sub 12/ perpendicular media. IEEE Transactions on Magnetics, 2002, 38, 1725-1730.	2.1	71
9	Magnetic-field tailoring of the terahertz polarization emitted from a spintronic source. Applied Physics Letters, 2019, 114, .	3.3	56
10	Magnetization reversal in Coâ•Pd nanostructures and films. Journal of Applied Physics, 2005, 97, 10J702.	2.5	45
11	Magnetic and recording properties of Co/Pd islands on prepatterned substrates. Journal of Applied Physics, 2004, 95, 7013-7015.	2.5	43
12	Spintronic terahertz emitters: Status and prospects from a materials perspective. APL Materials, 2021, 9, .	5.1	43
13	Recording and reversal properties of nanofabricated magnetic islands. IEEE Transactions on Magnetics, 2005, 41, 2822-2827.	2.1	42
14	High field ferromagnetic resonance measurements of the anisotropy field of longitudinal recording thin-film media. Journal of Applied Physics, 2002, 91, 1417-1422.	2.5	41
15	Substrate Induced Strain Field in FeRh Epilayers Grown on Single Crystal MgO (001) Substrates. Scientific Reports, 2017, 7, 44397.	3.3	40
16	Zero-field Optic Mode Beyond 20ÂGHz in a Synthetic Antiferromagnet. Physical Review Applied, 2020, 13, .	3.8	36
17	Nanoscale switch for vortex polarization mediated by Bloch core formation in magnetic hybrid systems. Nature Communications, 2015, 6, 7836.	12.8	32
18	Size-dependent reversal of grains in perpendicular magnetic recording media measured by small-angle polarized neutron scattering. Applied Physics Letters, 2010, 97, 112503.	3.3	24

#	Article	IF	Citations
19	Magnetic response of FeRh to static and dynamic disorder. RSC Advances, 2020, 10, 14386-14395.	3.6	21
20	Magnetic anisotropy and reversal mechanisms in dual layer exchanged coupled perpendicular media. Journal of Applied Physics, 2008, 103, 07F548.	2.5	19
21	Topologically confined vortex oscillations in hybrid [Co/Pd]8-Permalloy structures. Applied Physics Letters, 2014, 104, .	3.3	18
22	Modeling the thickness dependence of the magnetic phase transition temperature in thin FeRh films. Physical Review B, 2017, 95, .	3.2	17
23	Magnetization reversal mechanisms and time-dependent processes in thin Tb/Fe multilayer films. Journal Physics D: Applied Physics, 1997, 30, 1577-1587.	2.8	15
24	Depth selective magnetic phase coexistence in FeRh thin films. APL Materials, 2020, 8, .	5.1	15
25	Spatial sensitivity mapping of Hall crosses using patterned magnetic nanostructures. Journal of Applied Physics, 2010, 108, 043920.	2.5	14
26	PNR study of the phase transition in FeRh thin films. APL Materials, 2019, 7, .	5.1	14
27	Anisotropy-induced spin reorientation in chemically modulated amorphous ferrimagnetic films. Physical Review Materials, 2020, 4, .	2.4	14
28	Topography dependence of the metamagnetic phase transition in FeRh thin films. Scientific Reports, 2020, 10, 4030.	3.3	12
29	Angle dependence of the switching field of recording media at finite temperatures. Journal of Applied Physics, 2011, 110, 103906.	2.5	11
30	Precise control of interface anisotropy during deposition of Co/Pd multilayers. Journal of Applied Physics, 2014, 116, .	2.5	10
31	Inter/intra granular exchange and thermal activation in nanoscale granular magnetic materials. Applied Physics Letters, 2011, 99, .	3.3	9
32	Quantifying exchange coupling in segregated granular materials. Journal Physics D: Applied Physics, 2013, 46, 475002.	2.8	9
33	Laser-driven formation of transient local ferromagnetism in FeRh thin films. Ultramicroscopy, 2017, 183, 104-108.	1.9	9
34	Small-angle polarized neutron studies of perpendicular magnetic recording media. Journal of Applied Physics, 2009, 106, .	2.5	8
35	Grain boundaries in granular materialsâ€”A fundamental limit for thermal stability. Applied Physics Letters, 2013, 102, .	3.3	8
36	Exchange coupling in hybrid anisotropy magnetic multilayers quantified by vector magnetometry. Journal of Applied Physics, 2015, 117, 17B526.	2.5	6

#	Article	IF	Citations
37	Nanometre imaging of Fe₃GeTe₂ ferromagnetic domain walls. Nanotechnology, 2021, 32, 205703.	2.6	6
38	Spintronic terahertz emitters exploiting uniaxial magnetic anisotropy for field-free emission and polarization control. Applied Physics Letters, 2022, 120, .	3.3	6
39	Complex spin configurations in hybrid magnetic multilayer structures due to mutual spin imprinting. Physical Review B, 2016, 94, .	3.2	5
40	Modelling interfacial coupling in thin film magnetic exchange springs at finite temperature. Journal of Applied Physics, 2013, 114, 153908.	2.5	4
41	Meronlike Spin Textures in In-Plane-Magnetized Thin Films. Physical Review Applied, 2020, 14, .	3.8	4
42	Magnetization dynamics in synthetic ferromagnetic thin films. Physical Review B, 2021, 104, .	3.2	4
43	Polarized neutron reflectometry characterization of interfacial magnetism in an FePt/FeRh exchange spring. Physical Review Materials, 2022, 6, .	2.4	4
44	Characterization of buried interfaces using Ga KÎ± hard X-ray photoelectron spectroscopy (HAXPES). Faraday Discussions, 2022, 236, 311-337.	3.2	4
45	Signal asymmetries in the anomalous Hall effect of bilayer magnetic nanostructures. Applied Physics Letters, 2016, 109, .	3.3	3
46	Fabrication and magnetization reversal of L10 FeMnPt dots surrounded by paramagnetic A1 phase formed by ion irradiation. Scripta Materialia, 2018, 142, 6-9.	5.2	3
47	X-ray investigation of long-range antiferromagnetic ordering in FeRh. AIP Advances, 2022, 12, 035048.	1.3	3
48	Analysing SANS data to determine magnetisation reversal processes in composite perpendicular magnetic recording media using TEM images. International Journal of Materials Research, 2011, 102, 1142-1146.	0.3	2
49	Effect of Fe under layer in ultrathin FeRh films. , 2015, , .		2
50	Magnetisation reversal in anisotropy graded Co/Pd multilayers. Journal of Applied Physics, 2015, 118, .	2.5	2
51	Exploring the potential of remote plasma sputtering for the production of L1₀ordered FePt thin films. Journal Physics D: Applied Physics, 2017, 50, 275005.	2.8	2
52	Temperature-Dependent Studies of Coupled <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:msub><mml:mi>Fe</mml:mi><mml:mn>55</mml:mn></mml:msub><mml:msub><mml:mi>Pt</mml:mi><mml: / <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:msub><mml:mi>Fe</mml:mi><mml:mn>49</mml:mn></mml:msub><mml:msub><mml:mi>Rh</mml:mi><mml: Thin Films. Physical Review Applied, 2018, 10, .	3.8	2
53	Influence of Ar Pressure on the Magnetic Properties of Amorphous FeGaSiB Thin Films. IEEE Transactions on Magnetics, 2017, , 1-1.	2.1	1
54	Role of magnetic field in THz emission from a spintronic source. , 2019, , .		1

#	Article	IF	Citations
55	Repeatable and deterministic all electrical switching in a mixed phase artificial multiferroic. Scientific Reports, 2022, 12, 5332.	3.3	1
56	Determination of sub-ps lattice dynamics in FeRh thin films. Scientific Reports, 2022, 12, .	3.3	1
57	Eleventh Joint MMMâ€"Intermag Conference 2010 IEEE Publication Chair's Preface. IEEE Transactions on Magnetics, 2010, 46, 1286-1286.	2.1	0
58	Skyrmions in perpendicular magnetic anisotropy dots: Imaging and simulations. , 2011, , .		0
59	Intermag Conference 2012 Publication Chair's Preface. IEEE Transactions on Magnetics, 2012, 48, 2735-2735.	2.1	0
60	Correlation between Magnetic Phase Transition Temperatures and Lattice Distortions in L1₀ FePtRh Thin Films. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2015, 79, 423-428.	0.4	0
61	Analysis of grain size in FePt films fabricated using remote plasma deposition. Journal of Magnetism and Magnetic Materials, 2017, 443, 67-72.	2.3	0
62	Magnetic-field patterning of a spintronic source for arbitrary terahertz polarization control. , 2018, , .		0
63	Characterisation of size distribution and positional misalignment of nanoscale islands by small-angle X-ray scattering. Journal of Applied Physics, 2019, 125, 014301.	2.5	0