

# Tim Mewes

## List of Publications by Year in descending order

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95  
papers

2,582  
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172457

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95  
docs citations

95  
times ranked

2724  
citing authors

#	ARTICLE	IF	CITATIONS
1	Room-temperature intrinsic and extrinsic damping in polycrystalline Fe thin films. Physical Review B, 2022, 105, .	3.2	8
2	Structural and magnetic properties of NiFe <sub>2</sub> O <sub>4</sub> thin films grown on isostructural lattice-matched substrates. Applied Physics Letters, 2021, 118, .	3.3	11
3	In Situ Thermomechanical Loading for TEM Studies of Nanocrystalline Alloys. Microscopy and Microanalysis, 2021, 27, 2420-2424.	0.4	0
4	Evaluating the effect of Mn composition on chemical partitioning in Co(78 $\hat{x}$ )Fe <sub>2</sub> Mn <sub>x</sub> B <sub>14</sub> Si <sub>2</sub> Nb <sub>4</sub> magnetic amorphous nanocomposites. Journal of Alloys and Compounds, 2021, 875, 159976.	5.5	2
5	Magnetism and spin dynamics in room-temperature van der Waals magnet Fe <sub>5</sub> GeTe <sub>2</sub> . 2D Materials, 2021, 8, 045030.	4.4	32
6	Ferromagnetic Resonance. , 2021, , 431-452.		1
7	Magnetic domain wall substructures in Pt/Co/Ni/Ir multi-layers. Journal of Applied Physics, 2021, 130, .	2.5	5
8	Low Gilbert damping and linewidth in magnetostrictive FeGa thin films. Journal of Magnetism and Magnetic Materials, 2020, 496, 165906.	2.3	15
9	Broadband characterization of stress induced anisotropy in nanocomposite Co <sub>74.6</sub> Fe <sub>2.7</sub> Mn <sub>2.7</sub> Nb <sub>4</sub> Si <sub>2</sub> B <sub>14</sub> . Journal of Magnetism and Magnetic Materials, 2020, 500, 166307.	2.3	6
10	Element-Specific Detection of Sub-Nanosecond Spin-Transfer Torque in a Nanomagnet Ensemble. Nano Letters, 2020, 20, 7828-7834.	9.1	5
11	Limitations of the macrospin approximation of materials with inhomogeneous perpendicular anisotropy. Journal of Applied Physics, 2020, 128, 073910.	2.5	4
12	Synthesis and characterization of iron oxide superparticles with various polymers. Journal of Magnetism and Magnetic Materials, 2020, 515, 167265.	2.3	5
13	Formation of zero-field skyrmion arrays in asymmetric superlattices. Applied Physics Letters, 2020, 117, .	3.3	9
14	Ferromagnetic Resonance Study of the Verwey Phase Transition of Magnetite Thin Film on MgGa <sub>2</sub> O <sub>4</sub> (001) Substrate. IEEE Transactions on Magnetics, 2020, 56, 1-6.	2.1	6
15	Magnetic Damping in Epitaxial $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"} \rangle \langle \text{mml:mi} \rangle \text{Iron} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ Alloyed with Vanadium and Aluminum. Physical Review Applied, 2020, 14, .	3.8	13
16	Room-temperature skyrmions in strain-engineered FeGe thin films. Physical Review B, 2020, 101, .	3.2	15
17	Conductivitylike Gilbert Damping due to Intraband Scattering in Epitaxial Iron. Physical Review Letters, 2020, 124, 157201.	7.8	41
18	Soft magnetic and structural properties of (FeCo) $\hat{e}$ (AlSi) alloy thin films. Journal of Magnetism and Magnetic Materials, 2020, 507, 166852.	2.3	3

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19	Higher-order perpendicular magnetic anisotropy and interfacial damping of Co/Ni multilayers. <i>Physical Review B</i> , 2020, 102, .	3.2	7
20	Temperature dependence of magnetic properties on switching energy in magnetic tunnel junction devices with tilted magnetization. <i>Applied Surface Science</i> , 2019, 472, 36-39.	6.1	4
21	Magnetic Properties of Semiconducting Spinel CdCr <sub>2</sub> S <sub>4</sub> Nanostructured Films Grown by Low-Pressure Metal-Organic Chemical Vapor Deposition. <i>ACS Applied Electronic Materials</i> , 2019, 1, 1424-1432.	4.3	15
22	Studies of electrical and magnetic properties across the Verwey transition in epitaxial magnetite thin films. <i>Journal of Applied Physics</i> , 2019, 126, .	2.5	9
23	Strong interfacial perpendicular anisotropy and interfacial damping in Ni <sub>0.8</sub> Fe <sub>0.2</sub> films adjacent to Ru and SiO <sub>2</sub> . <i>Journal of Applied Physics</i> , 2019, 125, 023901.	2.5	4
24	Vectorial observation of the spin Seebeck effect in epitaxial NiFe <sub>2</sub> O <sub>4</sub> thin films with various magnetic anisotropy contributions. <i>Applied Physics Letters</i> , 2019, 114, .	3.3	12
25	Magnetic domain wall skyrmions. <i>Physical Review B</i> , 2019, 99, .	3.2	51
26	Unidirectional and uniaxial anisotropies in the MnN/CoFeB exchange bias system. <i>Journal of Magnetism and Magnetic Materials</i> , 2019, 485, 374-380.	2.3	8
27	Thickness dependence of dynamic magnetic properties of soft (FeCo)-Si alloy thin films. <i>Physical Review B</i> , 2019, 99, .	3.2	8
28	The thickness and growth temperature dependences of soft magnetic properties and an effective damping parameter of (FeCo)-Si alloy thin films. <i>AIP Advances</i> , 2019, 9, 035139.	1.3	4
29	The growth temperature and measurement temperature dependences of soft magnetic properties and effective damping parameter of (FeCo)-Al alloy thin films. <i>AIP Advances</i> , 2018, 8, .	1.3	6
30	Bulk Single Crystal-Like Structural and Magnetic Characteristics of Epitaxial Spinel Ferrite Thin Films with Elimination of Antiphase Boundaries. <i>Advanced Materials</i> , 2017, 29, 1701222.	21.0	54
31	Soft magnetic properties and damping parameter of (FeCo)-Al alloy thin films. <i>AIP Advances</i> , 2017, 7, .	1.3	15
32	Broadband ferromagnetic resonance characterization of anisotropies and relaxation in exchange-biased IrMn/CoFe bilayers. <i>Physical Review B</i> , 2017, 95, .	3.2	25
33	Enhanced spin pumping near a magnetic ordering transition. <i>Physical Review B</i> , 2017, 96, .	3.2	25
34	Interlayer Exchange Coupling in Asymmetric $\text{Co}/\text{Mn}/\text{Fe}/\text{Mn}$ Trilayers Investigated with Broadband Temperature-Dependent Ferromagnetic Resonance. <i>Physical Review Applied</i> , 2017, 8, .	1.8	12
35	The Thickness Dependence of Soft Magnetic Properties of (FeCo)-Al Alloy Thin Films. <i>IEEE Transactions on Magnetics</i> , 2017, 53, 1-4.	2.1	8
36	Investigation of electromagnetic interference effects by ESD simulator on test parameters of tunneling magnetic recording heads. <i>Journal of Magnetism and Magnetic Materials</i> , 2017, 421, 453-456.	2.3	1

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37	Angular Dependence of Spin Transfer Switching in Spin Valve Nanopillar Based Heusler Alloy. Advances in Materials Science and Engineering, 2016, 2016, 1-7.	1.8	0
38	Low Gilbert damping in Co <sub>2</sub> FeSi and Fe <sub>2</sub> CoSi films. Journal of Applied Physics, 2016, 120, .	2.5	35
39	Electromagnetic interference-induced instability in CPP-GMR read heads. Journal of Magnetism and Magnetic Materials, 2016, 412, 42-48.	2.3	8
40	A comprehensive study of ferromagnetic resonance and structural properties of iron-rich nickel ferrite (Ni <sub>1-x</sub> Fe <sub>3x</sub> O <sub>4</sub> , x=0.1) films grown by chemical vapor deposition. Journal of Magnetism and Magnetic Materials, 2016, 417, 137-142.	2.3	25
41	Relaxation in Magnetic Materials for Spintronics. , 2015, , 71-96.		19
42	Study of structural and ferromagnetic resonance properties of spinel lithium ferrite (LiFe <sub>5</sub> O <sub>8</sub> ) single crystals. Journal of Applied Physics, 2015, 117, .	2.5	34
43	A novel technique to detect effects of electromagnetic interference by electrostatic discharge simulator to test parameters of tunneling magnetoresistive read heads. Journal of Applied Physics, 2015, 117, 17A908.	2.5	9
44	Measurements of the exchange stiffness of YIG films using broadband ferromagnetic resonance techniques. Journal Physics D: Applied Physics, 2015, 48, 015001.	2.8	123
45	Modeling of switching energy of magnetic tunnel junction devices with tilted magnetization. Journal of Magnetism and Magnetic Materials, 2015, 381, 220-225.	2.3	8
46	Magnetic damping and spin polarization of highly ordered B <sub>2</sub> Co <sub>2</sub> FeAl thin films. Journal of Applied Physics, 2014, 116, 073902.	2.5	15
47	Interfacial perpendicular magnetic anisotropy and damping parameter in ultra thin Co <sub>2</sub> FeAl films. Applied Physics Letters, 2013, 102, .	3.3	49
48	Structural and magnetic properties of Cr-diluted CoFeB. Journal of Applied Physics, 2013, 114, 153902.	2.5	4
49	Frequency-selective control of ferromagnetic resonance linewidth in magnetic multilayers. Applied Physics Letters, 2012, 100, 032402.	3.3	10
50	Microstructural and ferromagnetic resonance properties of epitaxial nickel ferrite films grown by chemical vapor deposition. Applied Physics Letters, 2012, 101, .	3.3	22
51	Influence of capping layers on CoFeB anisotropy and damping. Journal of Applied Physics, 2012, 112, .	2.5	39
52	Progress and Prospects of Spin Transfer Torque Random Access Memory. IEEE Transactions on Magnetism, 2012, 48, 3025-3030.	2.1	35
53	Radiation Studies of Spin-Transfer Torque Materials and Devices. IEEE Transactions on Nuclear Science, 2012, 59, 3027-3033.	2.0	42
54	Magnetic Instability in Tunneling Magnetoresistive Heads Due to Temperature Increase During Electrostatic Discharge. IEEE Transactions on Device and Materials Reliability, 2012, 12, 570-575.	2.0	10

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55	Switching Distributions for Perpendicular Spin-Torque Devices Within the Macrospin Approximation. IEEE Transactions on Magnetics, 2012, 48, 4684-4700.	2.1	137
56	Ferrimagnetic Sr <sub>1.5</sub> Fe <sub>0.5</sub> Zn <sub>2</sub> O <sub>12</sub> Single Crystals. IEEE Magnetics Letters, 2011, 2, 5000104-5000104.	1.1	5
57	Magnetic and microwave properties of ferrimagnetic Zr-substituted Ba <sub>2</sub> Zn <sub>2</sub> Fe <sub>12</sub> O <sub>22</sub> (Zn-Y) single crystals. Journal of Applied Physics, 2011, 109, 07A509.	2.5	15
58	Instability of storage and temperature increment in nanopillars due to human body model electrostatic discharge. Journal of Electrostatics, 2011, 69, 618-622.	1.9	1
59	Relaxation of Polymer Coated {m Fe}_3{m O}_4 Magnetic Nanoparticles in Aqueous Solution. IEEE Transactions on Magnetics, 2010, 46, 1541-1543.	2.1	22
60	Advances and Future Prospects of Spin-Transfer Torque Random Access Memory. IEEE Transactions on Magnetics, 2010, 46, 1873-1878.	2.1	311
61	Perpendicular magnetic tunnel junctions using Co-based multilayers. Journal of Applied Physics, 2010, 107, .	2.5	38
62	Unidirectional Magnetization Relaxation in Exchange-Biased Films. IEEE Magnetics Letters, 2010, 1, 3500204-3500204.	1.1	22
63	Magnetization relaxation and structure of CoFeGe alloys. Applied Physics Letters, 2009, 95, .	3.3	48
64	Origin of low Gilbert damping in half metals. Applied Physics Letters, 2009, 95, .	3.3	95
65	Growth and characterization of 144-µm thick barium ferrite single crystalline film for microwave device application. Journal of Applied Physics, 2009, 105, 07A511.	2.5	13
66	Magnetic and Microwave Properties of Sm-Doped SrFe <sub>12</sub> O <sub>19</sub> Single Crystals. IEEE Transactions on Magnetics, 2008, 44, 2978-2981.	2.1	21
67	Spin pumping in Co <sub>56</sub> Fe <sub>24</sub> B <sub>20</sub> multilayer systems. Journal Physics D: Applied Physics, 2008, 41, 215001.	2.8	40
68	Efficient Numerical Schemes for Electronic States in Coupled Quantum Dots. Journal of Nanoscience and Nanotechnology, 2008, 8, 3695-3709.	0.9	31
69	Thermal stability of synthetic antiferromagnet and hard magnet coupled spin valves. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2008, 26, 735-738.	2.1	4
70	Detection of higher order modulation harmonics in magnetic resonance force microscopy. Journal of Applied Physics, 2007, 102, .	2.5	5
71	Temperature-dependent magnetic resonance force microscopy studies of a thin Permalloy film. Journal of Applied Physics, 2007, 101, 074905.	2.5	13
72	Ferromagnetic resonance force microscopy on a thin permalloy film. Applied Physics Letters, 2007, 90, 234105.	3.3	16

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73	Magnetic resonance force microscopy studies in a thin permalloy film. Journal of Magnetism and Magnetic Materials, 2007, 310, e941-e943.	2.3	6
74	Ferromagnetic resonance force microscopy studies of arrays of micron size permalloy dots. Physical Review B, 2006, 74, .	3.2	39
75	Origin of fourfold anisotropy in square lattices of circular ferromagnetic dots. Physical Review B, 2006, 74, .	3.2	48
76	Fe(001) on vicinal Au(001): correlation of topography and magnetic surface anisotropy. Journal Physics D: Applied Physics, 2005, 38, 1047-1054.	2.8	4
77	Exchange bias of antiferromagnets with random anisotropies and perfectly compensated interfaces. Applied Physics Letters, 2004, 84, 3840-3842.	3.3	6
78	Correlation between topography and magnetic surface anisotropy in epitaxial Fe films on vicinal-to-(001) Au surfaces with different step orientation. Physical Review B, 2004, 70, .	3.2	7
79	Separation of the first- and second-order contributions in magneto-optic Kerr effect magnetometry of epitaxial FeMn/NiFe bilayers. Journal of Applied Physics, 2004, 95, 5324-5329.	2.5	17
80	Ion irradiation of exchange bias systems for magnetic sensor applications. Applied Physics A: Materials Science and Processing, 2003, 77, 51-56.	2.3	29
81	Probing interface magnetism in the FeMn/NiFe exchange bias system using magnetic second-harmonic generation. Europhysics Letters, 2003, 63, 819-825.	2.0	33
82	Phase diagrams and energy barriers of exchange-biased bilayers with additional anisotropies in the ferromagnet. Physical Review B, 2003, 67, .	3.2	17
83	Induced fourfold anisotropy and bias in compensated NiFe/FeMn double layers. Physical Review B, 2003, 68, .	3.2	19
84	Angular dependence and phase diagrams of exchange-coupled epitaxial Ni <sub>81</sub> Fe <sub>19</sub> /Fe <sub>50</sub> Mn <sub>50</sub> (001) bilayers. Physical Review B, 2002, 65, .	3.2	45
85	Tuning exchange bias and coercive fields in ferromagnet/antiferromagnet bilayers with ion irradiation. Journal of Applied Physics, 2002, 91, 6896.	2.5	39
86	Magnetization Reversal of Exchange Bias Double Layers Magnetically Patterned by Ion Irradiation. Physica Status Solidi A, 2002, 189, 439-447.	1.7	32
87	Comparative study of the epitaxial growth of Cu on MgO(001) and on hydrogen terminated Si(001). Surface Science, 2001, 481, 87-96.	1.9	28
88	Morphology of epitaxial metallic layers on MgO substrates: influence of submonolayer carbon contamination. Surface Science, 2001, 495, 68-76.	1.9	24
89	Local manipulation and reversal of the exchange bias field by ion irradiation in FeNi/FeMn double layers. Physical Review B, 2001, 63, .	3.2	135
90	Exchange bias effect and anisotropy analysis of FM/AF bilayers. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2000, 76, 59-62.	3.5	5

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91	Modification of the exchange bias effect by He ion irradiation. IEEE Transactions on Magnetics, 2000, 36, 2647-2649.	2.1	25
92	Structure and magnetic properties of exchange-biased polycrystalline Fe/MnPd bilayers. Physical Review B, 2000, 62, 8654-8657.	3.2	22
93	Suppression of exchange bias by ion irradiation. Applied Physics Letters, 2000, 76, 1057-1059.	3.3	97
94	Oscillatory exchange bias effect in FeNi/Cu/FeMn and FeNi/Cr/FeMn trilayer systems. Journal of Applied Physics, 2000, 87, 5064-5066.	2.5	65
95	Enhanced coercivity of exchange-bias Fe/MnPd bilayers. Applied Physics Letters, 1999, 75, 707-709.	3.3	47