

Isaak D Mayergoyz

List of Publications by Year in descending order

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87
papers

993
citations

567281

15
h-index

477307

29
g-index

87
all docs

87
docs citations

87
times ranked

637
citing authors

#	ARTICLE	IF	CITATIONS
1	Scanning Tunneling Microscopy Detection of Surface Spin-Polarized Electron Accumulations in Topological Insulators. IEEE Magnetics Letters, 2021, 12, 1-4.	1.1	1
2	Effect of Sn Doping on Surface States of Bi ₂ Se ₃ Thin Films. Journal of Physical Chemistry C, 2020, 124, 27082-27088.	3.1	12
3	Study of Surface Spin-Polarized Electron Accumulation in Topological Insulators Using Scanning Tunneling Microscopy. IEEE Magnetics Letters, 2020, 11, 1-4.	1.1	1
4	Transient Chaos in Nanomagnets Subject to Elliptically Polarized AC Applied Fields. IEEE Transactions on Magnetics, 2019, 55, 1-5.	2.1	2
5	Scanning tunneling microscopy measurements of the spin Hall effect in tungsten films by using iron-coated tungsten tips. AIP Advances, 2018, 8, 055914.	1.3	3
6	Scanning Tunneling Microscopy Study of the Spin Hall Effect in Platinum and Highly Resistive Tungsten Films. IEEE Magnetics Letters, 2018, 9, 1-5.	1.1	2
7	On Local Sensing of Spin Hall Effect in Tungsten Films by Using STM-Based Measurements. IEEE Nanotechnology Magazine, 2018, 17, 914-919.	2.0	5
8	Power Spectral Density of Magnetization Dynamics Driven by a Jump-Noise Process. IEEE Transactions on Magnetics, 2017, 53, 1-5.	2.1	1
9	Quantum Dynamics as Landau-Lifshitz-Type Dynamics and Random Wave Function Collapse. IEEE Magnetics Letters, 2017, 8, 1-4.	1.1	0
10	Analytical Treatment of Nonlinear Ferromagnetic Resonance in Nanomagnets. IEEE Transactions on Magnetics, 2017, 53, 1-5.	2.1	6
11	Fabrication and Evaluation of PCB-Embedded Broadband Signal Transformers With Custom Machined Racetrack-Shaped Ferrite Cores for Ethernet Applications. IEEE Transactions on Magnetics, 2017, 53, 1-5.	2.1	7
12	A scanning tunneling microscopy based potentiometry technique and its application to the local sensing of the spin Hall effect. AIP Advances, 2017, 7, 125205.	1.3	5
13	A simple implementation of scanning tunneling potentiometry with a standard scanning tunneling microscope. , 2017, , .		0
14	Inductance Maximization by Mitigation of Encapsulation Stresses of PCB Embedded Ferrite Broadband Transformers. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	5
15	Numerical Modeling of Random Magnetization Dynamics. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	1
16	Heteroclinic tangle phenomena in nanomagnets subject to time-harmonic excitations. Journal of Applied Physics, 2015, 117, .	2.5	6
17	Phase-Flow Interpretation of Magnetization Relaxation in Nanomagnets. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	5
18	Analysis of Reliable Ultrafast Precessional Switching in the Presence of Transverse Applied Magnetic Fields. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	0

#	ARTICLE	IF	CITATIONS
19	Analysis of plasmon resonances in metallic nanostructures in proximity to dielectric objects with application to heat-assisted magnetic recording. Journal of Applied Physics, 2014, 115, 17B705.	2.5	0
20	Plasmon resonance enhancement of Faraday rotation of liquid phase epitaxy grown garnet films populated with gold nanoparticles on the film surfaces. Journal of Applied Physics, 2014, 115, 17A932.	2.5	3
21	Conservative effects in spin-transfer-driven magnetization dynamics. Physical Review B, 2014, 90, .	3.2	1
22	Zero-footprint Ethernet transformers using circuit-board embedded ferrites. Journal of Applied Physics, 2014, 115, .	2.5	7
23	Performance effects of device scale and core aspect-ratio on dielectric-core circuit board transformers. Journal of Applied Physics, 2014, 115, 17E717.	2.5	1
24	Monte Carlo Simulations of Random Magnetization Dynamics Driven by a Jump-Noise Process on General Purpose Graphics Processing Units (GPUs). IEEE Transactions on Magnetics, 2013, 49, 3133-3136.	2.1	4
25	Probabilistic Aspects of Magnetization Relaxation in Single-Domain Nanomagnets. Physical Review Letters, 2013, 110, 147205.	7.8	16
26	Deposition of gold nanoparticles on liquid phase epitaxy grown garnet films and Faraday rotation enhancement. Journal of Applied Physics, 2013, 113, .	2.5	2
27	Circularly polarized plasmon modes in spheroidal nanoshells for applications to all-optical magnetic recording. Journal of Applied Physics, 2012, 111, 07A915.	2.5	1
28	Monte Carlo simulations of Landau-Lifshitz dynamics driven by a jump-noise process. Journal of Applied Physics, 2012, 111, .	2.5	4
29	Jump-noise process-driven magnetization dynamics and random switching of magnetization. Journal of Applied Physics, 2012, 111, .	2.5	3
30	Analysis of Nested Winding Dielectric-Core Transformers for Ethernet Applications. IEEE Transactions on Magnetics, 2012, 48, 4127-4130.	2.1	5
31	Calculation of eddy currents in magnetically nonlinear anisotropic conductors. Journal of Applied Physics, 2012, 111, 07E719.	2.5	0
32	Anisotropy study of garnet films grown over substrates populated with gold nanoparticles. Journal of Applied Physics, 2012, 111, 07A505.	2.5	2
33	Random magnetization dynamics at elevated temperatures. Journal of Applied Physics, 2012, 111, 07D501.	2.5	6
34	Current-driven chaotic magnetization dynamics in microwave assisted switching of spin-valve elements. Journal of Applied Physics, 2011, 109, 07D349.	2.5	6
35	Analysis of eddy currents in magnetically nonlinear conductors. Journal of Applied Physics, 2011, 109, 07E703.	2.5	5
36	Plasmon resonance enhancement of Faraday rotation in thin garnet films. Journal of Applied Physics, 2011, 109, 07B717.	2.5	25

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37	Landau–Lifshitz magnetization dynamics driven by a random jump-noise process (invited). Journal of Applied Physics, 2011, 109, .	2.5	15
38	Generalized H-theorems for magnetization dynamics driven by a jump-noise process. Journal of Applied Physics, 2011, 109, 07D327.	2.5	4
39	Magneto-Optic Indicator Films for Forensics. Materials Research Society Symposia Proceedings, 2011, 1291, 1.	0.1	0
40	Plasmon resonance enhancement of magneto-optic effects in garnets. Journal of Applied Physics, 2010, 107, 09A925.	2.5	12
41	Common Mode Analysis of Ethernet Transformers. IEEE Magnetics Letters, 2010, 1, 0500204-0500204.	1.1	5
42	Spin-Wave Instabilities in Spin-Transfer-Driven Magnetization Dynamics. IEEE Magnetics Letters, 2010, 1, 3000104-3000104.	1.1	6
43	Spin-wave analysis of uniaxial nanopillar devices. Journal of Applied Physics, 2009, 105, 07D104.	2.5	7
44	On design of air-core Ethernet transformers. Journal of Applied Physics, 2009, 105, 07A307.	2.5	6
45	Excitation and dephasing of circularly polarized plasmon modes in spherical nanoshells for application in all-optical magnetic recording. Journal of Applied Physics, 2009, 105, .	2.5	9
46	Magnetic-Field-Driven Ferromagnetic Resonance in Spin-Transfer Devices. IEEE Transactions on Magnetics, 2009, 45, 3445-3448.	2.1	2
47	Nonlinear Resonant and Chaotic Dynamics in Microwave Assisted Magnetization Switching. IEEE Transactions on Magnetics, 2009, 45, 3950-3953.	2.1	7
48	Modeling and Testing of Ethernet Transformers. IEEE Transactions on Magnetics, 2009, 45, 4793-4796.	2.1	4
49	Analytical treatment of synchronization of spin-torque oscillators by microwave magnetic fields. European Physical Journal B, 2009, 68, 221-231.	1.5	32
50	Nonlinear-dynamical-system approach to microwave-assisted magnetization dynamics (invited). Journal of Applied Physics, 2009, 105, .	2.5	53
51	Study of etched (210)-oriented thin garnet films. Journal of Applied Physics, 2008, 103, .	2.5	5
52	Path Integral Approach to Stochastic Magnetization Dynamics in Uniaxial Ferromagnetic Nanoparticles. IEEE Transactions on Magnetics, 2008, 44, 3157-3160.	2.1	6
53	Spin-Stand Imaging of Perpendicularly Recorded Data. IEEE Transactions on Magnetics, 2008, 44, 3237-3240.	2.1	0
54	The use of plasmon resonances in thermally assisted magnetic recording. Journal of Applied Physics, 2008, 103, .	2.5	5

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55	Power spectrum of current-induced magnetization dynamics in uniaxial nanomagnets. Journal of Applied Physics, 2007, 101, 09A507.	2.5	11
56	Numerical Analysis of Plasmon Resonances in Metallic Nanoshells. IEEE Transactions on Magnetism, 2007, 43, 1689-1692.	2.1	8
57	Numerical Analysis of Nanoparticle-Structured Plasmon Waveguides of Light. IEEE Transactions on Magnetism, 2007, 43, 1685-1688.	2.1	2
58	The Computation of Extinction Cross Sections of Resonant Metallic Nanoparticles Subject to Optical Radiation. IEEE Transactions on Magnetism, 2007, 43, 1681-1684.	2.1	10
59	Analysis of Dynamics of Excitation and Dephasing of Plasmon Resonance Modes in Nanoparticles. Physical Review Letters, 2007, 98, 147401.	7.8	70
60	Analytical study of magnetization dynamics driven by spin-polarized currents. European Physical Journal B, 2007, 59, 435-445.	1.5	21
61	Micromagnetic analysis of foldover, quasiperiodicity, and parametric instabilities in ultra-thin films. , 2006, , .		0
62	Thermally induced switching in uniaxial nanomagnets subject to spin-polarized currents. , 2006, , .		0
63	Modeling of the Electrostatic (Plasmon) Resonances in Metallic and Semiconductor Nanoparticles. Journal of Computational Electronics, 2005, 4, 139-143.	2.5	14
64	Influence of surface anisotropy on the magnetization precessional switching in nanoparticles. Journal of Applied Physics, 2005, 97, 10J302.	2.5	2
65	Numerical integration of Landau-Lifshitz-Gilbert equation based on the midpoint rule. Journal of Applied Physics, 2005, 97, 10E319.	2.5	24
66	Quasiperiodic magnetization dynamics in uniformly magnetized particles and films. Journal of Applied Physics, 2004, 95, 7052-7054.	2.5	24
67	Random Doping Fluctuations of Small-Signal Parameters in Nanoscale Semiconductor Devices. Journal of Computational Electronics, 2004, 3, 211-214.	2.5	2
68	Growth effects (rotation rate) on the characteristics of bismuth substituted lutetium iron garnets. Journal of Applied Physics, 2004, 95, 6885-6887.	2.5	7
69	Anisotropy characterization of garnet films by using vibrating sample magnetometer measurements. Journal of Applied Physics, 2003, 93, 7065-7067.	2.5	3
70	Quantum mechanical effects on random oxide thickness and random doping induced fluctuations in ultrasmall semiconductor devices. Journal of Applied Physics, 2003, 94, 7163-7172.	2.5	38
71	Analysis of spectral noise density of hysteretic systems driven by stochastic processes. Journal of Applied Physics, 2003, 93, 6826-6828.	2.5	13
72	Comparison of analytical solutions of Landau-Lifshitz equation for α -damping and α -precessional switchings. Journal of Applied Physics, 2003, 93, 6811-6813.	2.5	35

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73	Analysis of random-dopant induced fluctuations of frequency characteristics of semiconductor devices. Journal of Applied Physics, 2003, 93, 4646-4652.	2.5	18
74	NUMERICAL ANALYSIS OF RANDOM DOPANT-INDUCED EFFECTS IN SEMICONDUCTOR DEVICES. , 2003, , .		0
75	NUMERICAL ANALYSIS OF RANDOM DOPANT-INDUCED EFFECTS IN SEMICONDUCTOR DEVICES. International Journal of High Speed Electronics and Systems, 2002, 12, 551-562.	0.7	6
76	Dynamic generalization of Stonerâ€™Wohlfarth model. Journal of Applied Physics, 2001, 89, 7451-7453.	2.5	12
77	Nonlinear Magnetization Dynamics under Circularly Polarized Field. Physical Review Letters, 2001, 86, 724-727.	7.8	159
78	Nonlinear Landau-Lifshitz dynamics for circularly and elliptically polarized applied magnetic fields. IEEE Transactions on Magnetics, 2001, 37, 3065-3068.	2.1	2
79	Statistical analysis of semiconductor devices. Journal of Applied Physics, 2001, 90, 3019-3029.	2.5	56
80	Spin-stand imaging of overwritten data and its comparison with magnetic force microscopy. Journal of Applied Physics, 2001, 89, 6772-6774.	2.5	14
81	Spin-Wave Instabilities in Large-Scale Nonlinear Magnetization Dynamics. Physical Review Letters, 2001, 87, 217203.	7.8	30
82	Magnetic imaging on a spin-stand. Journal of Applied Physics, 2000, 87, 6824-6826.	2.5	41
83	Origin of the universality of long-time thermal relaxations in hysteretic systems. Journal of Applied Physics, 2000, 87, 4789-4791.	2.5	1
84	Rotationally symmetric solutions of the Landauâ€™Lifshitz and diffusion equations. Journal of Applied Physics, 2000, 87, 5511-5513.	2.5	11
85	Coupling between eddy currents and Landauâ€™Lifshitz dynamics. Journal of Applied Physics, 2000, 87, 5529-5531.	2.5	12
86	Noise in hysteretic systems and stochastic processes on graphs. Physical Review E, 2000, 62, 1850-1855.	2.1	15
87	Nonlinear Landau-Lifshitz dynamics for circularly and elliptically polarized applied magnetic fields. IEEE Transactions on Magnetics, 2000, 36, 3081-3083.	2.1	1