Marco Madami

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2742994/publications.pdf

Version: 2024-02-01

115 papers	3,537 citations	147801 31 h-index	149698 56 g-index
117 all docs	117 docs citations	117 times ranked	2492 citing authors

#	Article	IF	Citations
1	Direct observation of a propagating spin wave induced by spin-transfer torque. Nature Nanotechnology, 2011, 6, 635-638.	31.5	321
2	Brillouin light scattering studies of planar metallic magnonic crystals. Journal Physics D: Applied Physics, 2010, 43, 264003.	2.8	187
3	Interfacial Dzyaloshinskii-Moriya Interaction in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Pt</mml:mi><mml:mo>/</mml:mo><mml:mi>CoFeB</mml:mi></mml:mrow></mml:math> Films: Effect of the Heavy-Metal Thickness. Physical Review Letters, 2017, 118, 147201.	7.8	165
4	Nanopatterning reconfigurable magnetic landscapes via thermally assisted scanning probe lithography. Nature Nanotechnology, 2016, 11, 545-551.	31.5	134
5	Anisotropic Propagation and Damping of Spin Waves in a Nanopatterned Antidot Lattice. Physical Review Letters, 2010, 105, 067208.	7.8	122
6	Excitation of unidirectional exchange spin waves by a nanoscale magnetic grating. Physical Review B, 2019, 100, .	3.2	111
7	Forbidden Band Gaps in the Spin-Wave Spectrum of a Two-Dimensional Bicomponent Magnonic Crystal. Physical Review Letters, 2012, 109, 137202.	7.8	102
8	Band Diagram of Spin Waves in a Two-Dimensional Magnonic Crystal. Physical Review Letters, 2011, 107, 127204.	7.8	93
9	Snellâ€™s Law for Spin Waves. Physical Review Letters, 2016, 117, 037204.	7.8	87
10	Control of spin-wave transmission by a programmable domain wall. Nature Communications, 2018, 9, 4853.	12.8	82
11	Analysis of collective spin-wave modes at different points within the hysteresis loop of a one-dimensional magnonic crystal comprising alternative-width nanostripes. Physical Review B, 2010, 82, .	3.2	77
12	Anisotropic dynamical coupling for propagating collective modes in a two-dimensional magnonic crystal consisting of interacting squared nanodots. Physical Review B, 2010, 82, .	3.2	75
13	Biomechanics of fibrous proteins of the extracellular matrix studied by Brillouin scattering. Journal of the Royal Society Interface, 2014, 11, 20140739.	3.4	72
14	Bragg diffraction of spin waves from a two-dimensional antidot lattice. Physical Review B, 2012, 85, .	3.2	71
15	Spatial control of spin-wave modes in Ni80Fe20 antidot lattices by embedded Co nanodisks. Applied Physics Letters, 2011, 99, .	3.3	69
16	Magnonic minibands in antidot lattices with large spin-wave propagation velocities. Physical Review B, 2011, 84, .	3.2	69
17	Magnonic band structures in two-dimensional bi-component magnonic crystals with in-plane magnetization. Journal Physics D: Applied Physics, 2013, 46, 495003.	2.8	69
18	Rotatable magnetic anisotropy in a Fe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow /><mml:mrow><mml:mn>0.8</mml:mn></mml:mrow></mml:msub></mml:math>Ga<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow /><mml:mrow><mml:mn>0.2</mml:mn></mml:mrow></mml:msub></mml:math>thin film with stripe domains: Dynamics versus statics. Physical Review B, 2014, 89, .	3.2	67

#	Article	IF	Citations
19	Mechanical mapping with chemical specificity by confocal Brillouin and Raman microscopy. Analyst, The, 2014, 139, 729-733.	3.5	62
20	Collective spin modes in chains of dipolarly interacting rectangular magnetic dots. Physical Review B, 2011, 83, .	3.2	59
21	Magnetization reversal and soft modes in nanorings: Transitions between onion and vortex states studied by Brillouin light scattering. Physical Review B, 2008, 78, .	3.2	58
22	Mode conversion from quantized to propagating spin waves in a rhombic antidot lattice supporting spin wave nanochannels. Physical Review B, 2012, 86, .	3.2	58
23	Angular Dependence of Magnetic Normal Modes in NiFe Antidot Lattices With Different Lattice Symmetry. IEEE Transactions on Magnetics, 2010, 46, 1440-1443.	2.1	56
24	Normal mode splitting in interacting arrays of cylindrical permalloy dots. Journal of Applied Physics, 2006, 99, 08C701.	2.5	54
25	Splitting of Spin Excitations in Nanometric Rings Induced by a Magnetic Field. Physical Review Letters, 2006, 97, 247203.	7.8	48
26	Collective spin waves in a bicomponent two-dimensional magnonic crystal. Applied Physics Letters, 2012, 100, 162407.	3.3	48
27	Magnetic Normal Modes in Squared Antidot Array With Circular Holes: A Combined Brillouin Light Scattering and Broadband Ferromagnetic Resonance Study. IEEE Transactions on Magnetics, 2010, 46, 172-178.	2.1	45
28	Universal dependence of the spin wave band structure on the geometrical characteristics of two-dimensional magnonic crystals. Scientific Reports, 2015, 5, 10367.	3.3	43
29	In situBrillouin scattering study of the thickness dependence of magnetic anisotropy in uncovered and Cu-covered Fe/GaAs(100) ultrathin films. Physical Review B, 2004, 69, .	3.2	42
30	Brillouin light scattering studies of 2D magnonic crystals. Journal of Physics Condensed Matter, 2017, 29, 073001.	1.8	36
31	Experimental and theoretical analysis of Landauer erasure in nano-magnetic switches of different sizes. Nano Energy, 2016, 19, 108-116.	16.0	34
32	Propagating spin waves excited by spin-transfer torque: A combined electrical and optical study. Physical Review B, 2015, 92, .	3.2	32
33	Application of Microfocused Brillouin Light Scattering to the Study of Spin Waves in Low-Dimensional Magnetic Systems. Solid State Physics, 2012, 63, 79-150.	0.5	30
34	Asymmetry of spin wave dispersions in a hexagonal magnonic crystal. Applied Physics Letters, 2013, 102, .	3.3	27
35	Chemicoâ€mechanical imaging of Barrett's oesophagus. Journal of Biophotonics, 2016, 9, 694-700.	2.3	27
36	Collective spin excitations in bicomponent magnonic crystals consisting of bilayer permalloy/Fe nanowires. Physical Review B, 2016, 93, .	3.2	27

#	Article	IF	Citations
37	Spin wave excitations in exchange-coupled [Co/Pd]-NiFe films with tunable tilting of the magnetization. Physical Review B, 2013, 87, .	3.2	25
38	Spin wave eigenmodes of square permalloy dots studied by Brillouin light scattering. Journal of Magnetism and Magnetic Materials, 2007, 316, e338-e341.	2.3	24
39	Magnetodynamical response of large-area close-packed arrays of circular dots fabricated by nanosphere lithography. Physical Review B, 2013, 87, .	3.2	23
40	Field dependence of spin excitations inNiFeâ•Cuâ•NiFetrilayered circular dots. Physical Review B, 2006, 73, .	3.2	22
41	Setup of a new Brillouin light scattering apparatus with submicrometric lateral resolution and its application to the study of spin modes in nanomagnets. Journal of Applied Physics, 2009, 105, 07D521.	2.5	22
42	Spin waves in perpendicularly magnetized Co/Ni(111) multilayers in the presence of magnetic domains. Physical Review B, 2012, 86, .	3.2	21
43	From micro- to nanomagnetic dots: evolution of the eigenmode spectrum on reducing the lateral size. Journal Physics D: Applied Physics, 2014, 47, 265001.	2.8	20
44	Angle-resolved spin wave band diagrams of square antidot lattices studied by Brillouin light scattering. Applied Physics Letters, 2015, 106, .	3.3	19
45	Coupled spin waves in trilayer films and nanostripes of permalloy separated by nonmagnetic spacers: Brillouin light scattering and theory. Physical Review B, 2013, 87, .	3.2	18
46	Effect of Interdot Separation on Collective Magnonic Modes in Chains of Rectangular Dots. IEEE Transactions on Magnetics, 2011, 47, 1563-1566.	2.1	17
47	Effect of dipolar interaction on the magnetization state of chains of rectangular particles located either head-to-tail or side-by-side. Journal of Nanoparticle Research, 2011, 13, 5691-5698.	1.9	17
48	Magnetic normal modes of bicomponent permalloy/cobalt structures in the parallel and antiparallel ground state. Physical Review B, 2014, 90, .	3.2	17
49	[Co/Pd]-CoFeB exchange spring magnets with tunable gap of spin wave excitations. Journal Physics D: Applied Physics, 2014, 47, 495004.	2.8	17
50	Fundamental energy limits in the physics of nanomagnetic binary switches. Nano Energy, 2015, 15, 313-320.	16.0	17
51	Towards zero-power ICT. Nanotechnology, 2015, 26, 222001.	2.6	17
52	Effect of interdot dipolar coupling on the magnetic properties of permalloy nano-cylinders. Surface Science, 2006, 600, 4143-4146.	1.9	16
53	Propagation of Spin Waves Excited in a Permalloy Film by a Finite-Ground Coplanar Waveguide: A Combined Phase-Sensitive Micro-Focused Brillouin Light Scattering and Micromagnetic Study. IEEE Transactions on Magnetics, 2013, 49, 1033-1036.	2.1	16
54	In situ investigation of ultrathin Fe/Cu(110) films by Brillouin light scattering. Journal of Applied Physics, 2001, 89, 7383-7385.	2.5	15

#	Article	IF	Citations
55	Magnetization reversal process in elliptical Permalloy nanodots. Thin Solid Films, 2006, 515, 727-730.	1.8	15
56	Shape and thickness effects on the magnetization reversal of Py/Cu/Co nanostructures. Journal of Magnetism and Magnetic Materials, 2009, 321, 3038-3041.	2.3	15
57	Magnetization Configurations in NiFe Slotted Rings Studied by Magneto-Optical Kerr Effect and Magnetic Force Microscopy. IEEE Transactions on Magnetics, 2012, 48, 1269-1272.	2.1	14
58	Collective spin waves on a nanowire array with step-modulated thickness. Journal Physics D: Applied Physics, 2014, 47, 105003.	2.8	14
59	Nanopatterning spin-textures: A route to reconfigurable magnonics. AIP Advances, 2017, 7, 055601.	1.3	14
60	Exchange coupling in FeTaN-FeSm-FeTaN multilayers: a Kerr effect study. IEEE Transactions on Magnetics, 2002, 38, 2779-2781.	2.1	13
61	Field evolution of the magnetic normal modes in elongated permalloy nanometric rings. Journal of Physics Condensed Matter, 2007, 19, 406229.	1.8	13
62	Tailoring the spin waves band structure of 1D magnonic crystals consisting of L-shaped iron/permalloy nanowires. Journal Physics D: Applied Physics, 2017, 50, 105002.	2.8	13
63	Spin-wave wavelength down-conversion at thickness steps. Applied Physics Express, 2018, 11, 053002.	2.4	13
64	Spin dynamics of multilayered nanoelements with different shapes studied by Brillouin light scattering technique. Journal Physics D: Applied Physics, 2008, 41, 134023.	2.8	12
65	Static and dynamical properties of circular NiFeâˆ•Cuâˆ•Co nanodisks. Journal of Applied Physics, 2008, 103, 07C512.	2.5	12
66	Study of the spin excitations in antidot lattices with line defects. Physica B: Condensed Matter, 2014, 435, 152-155.	2.7	12
67	Nonreciprocity of backward volume spin wave beams excited by the curved focusing transducer. Applied Physics Letters, 2018, 113, .	3.3	12
68	Tunable Damping in Magnetic Nanowires Induced by Chiral Pumping of Spin Waves. ACS Nano, 2021, 15, 9076-9083.	14.6	12
69	Magic-angle magnonic nanocavity in a magnetic moirÃ© superlattice. Physical Review B, 2022, 105, .	3.2	11
70	Structure and magnetism of Fe/Cu() thin films. Surface Science, 2002, 507-510, 324-329.	1.9	10
71	Experimental Evidence of Field-Induced Localization of Spin Excitations in NiFe Elliptical Rings by Micro-Focused Brillouin Light Scattering. IEEE Transactions on Magnetics, 2010, 46, 1531-1536.	2.1	10
72	Temperature evolution of self-organized stripe domains in ultrathin Fe films on MnAs/GaAs(001). Physical Review B, 2010, 82, .	3.2	10

#	Article	IF	Citations
73	Magnetic Fe stripes created by self-organized MnAs template: Stripe edge pinning and high-frequency properties. Physical Review B, 2009, 80, .	3.2	9
74	Dipolar interaction in dense chains of submicrometric rectangular dots. Journal of Physics: Conference Series, 2010, 200, 072089.	0.4	9
75	Micromagnetic study of minimum-energy dissipation during Landauer erasure of either isolated or coupled nanomagnetic switches. Physical Review B, 2014, 90, .	3.2	9
76	Exchange-dominated eigenmodes in sub-100â€‰nm permalloy dots: A micromagnetic study at finite temperature. Journal of Applied Physics, 2014, 115, 17D119.	2.5	9
77	Spin wave eigenmodes in single and coupled sub-150â€‰nm rectangular permalloy dots. Journal of Applied Physics, 2015, 117, 17A316.	2.5	9
78	Magnetization dynamics of single-domain nanodots and minimum energy dissipation during either irreversible or reversible switching. Journal Physics D: Applied Physics, 2017, 50, 453002.	2.8	9
79	Thickness dependence of magnetic anisotropy in ultrathin Co/GaAs(001) films. Surface Science, 2004, 566-568, 246-251.	1.9	8
80	Anisotropy effects on the magnetic excitations of epitaxial ultrathin films below and above the Curie temperature. Surface Science, 2006, 600, 4147-4150.	1.9	8
81	Waveguides as sources of short-wavelength spin waves for low-energy ICT applications. European Physical Journal B, 2018, 91, 1.	1.5	8
82	Influence of interlayer dipolar coupling on magnetization reversal and high-frequency dynamics in asymmetric NiFe/Cu/NiFe circular nanorings. Journal of Applied Physics, 2008, 104, 063510.	2.5	7
83	Spin Modes in Elliptical Nanorings in the Vortex State: Two-Dimensional Mapping by Micro-Focused Brillouin Light Scattering. IEEE Transactions on Magnetics, 2010, 46, 199-202.	2.1	7
84	Magnetization Reversal of Rectangular Particles: Closure States and Effect of Dipolar Coupling. IEEE Transactions on Magnetics, 2012, 48, 1593-1596.	2.1	7
85	Spin Wave Dispersion in Permalloy Antidot Array With Alternating Holes Diameter. IEEE Transactions on Magnetics, 2013, 49, 3093-3096.	2.1	7
86	Magnetic Anisotropy of Fe/Cu(110) Films Studied by in-situ Brillouin Light Scattering. Physica Status Solidi A, 2002, 189, 403-407.	1.7	6
87	Field dependence of collective spin modes in transversely magnetized stripes with homogeneous and alternating width. Journal of Applied Physics, 2009, 105, .	2.5	6
88	Spatial profile of spin excitations in multilayered rectangular nanodots studied by microfocused Brillouin light scattering. Journal of Applied Physics, 2011, 109, 07B901.	2.5	6
89	Micro-focused Brillouin light scattering study of the magnetization dynamics driven by Spin Hall effect in a transversely magnetized NiFe nanowire. Journal of Applied Physics, 2015, 117, 17D504.	2.5	6
90	Intrinsic magnetic anisotropy versus coupling in arrays of closely spaced circular Fe/GaAs(110) dots, patterned by focused ion beam. Thin Solid Films, 2006, 515, 739-743.	1.8	5

#	Article	IF	Citations
91	Spin waves in exchange-biased NiFeâˆ•IrMn circular nanorings. Journal of Applied Physics, 2008, 103, 07C103.	2.5	5
92	Magnetization reversal and spin waves in exchange coupled NiFe/Cu/Co nanodisks. Journal of Applied Physics, 2009, 105, 07C115.	2.5	5
93	Brillouin light scattering study of the spin dynamics in nanoscale permalloy stripes: Theory and experiment. Microelectronics Journal, 2009, 40, 598-600.	2.0	5
94	Magnetic normal modes of elliptical NiFe nanoring studied by micro-focused Brillouin light scattering. Journal of Physics: Conference Series, 2010, 200, 042008.	0.4	5
95	Spin Wave Band Structure in Two-Dimensional Magnonic Crystals. Topics in Applied Physics, 2013, , 205-221.	0.8	5
96	Study of spin waves in ultrathin Fe/Cu() films by in situ Brillouin light scattering. Surface Science, 2002, 507-510, 535-540.	1.9	4
97	Structural and magnetic properties of exchange-spring FeTaN/FeSm/FeTaN multilayers. Surface Science, 2004, 566-568, 285-290.	1.9	4
98	Magnetization reversal in exchange-coupled FeTaN/FeSm/FeTaN multilayers. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E949-E950.	2.3	4
99	Effect of eccentricity on the spin-wave spectrum of NiFeâˆ•Cuâˆ•NiFe pillars with elliptical cross section. Journal of Applied Physics, 2007, 101, 09F502.	2.5	4
100	Micromagnetic simulation of energy consumption and excited eigenmodes in elliptical nanomagnetic switches. Physica B: Condensed Matter, 2014, 435, 4-7.	2.7	4
101	Field dependence of the magnetic eigenmode frequencies in layered nanowires with ferromagnetic and antiferromagnetic ground states: experimental and theoretical study. Journal Physics D: Applied Physics, 2014, 47, 365001.	2.8	4
102	Simultaneous existence of two spin-wave modes in ultrathinFeâˆ•GaAs(001)films studied by Brillouin light scattering:â€,Experiment and theory. Physical Review B, 2004, 70, .	3.2	3
103	Brillouin light scattering study of magnetic anisotropy in epitaxial Fe/ZnSe(001) ultrathin films. Surface Science, 2007, 601, 4316-4320.	1.9	3
104	Magnetic dot clusters for application in magneto-electronics. Microelectronic Engineering, 2010, 87, 1614-1616.	2.4	3
105	Multiplets of Collective Spin-Wave Modes During Magnetization Reversal in a One-Dimensional Magnonic Crystal Consisting of Alternating-Width Nano-Stripes. IEEE Transactions on Magnetics, 2013, 49, 3089-3092.	2.1	3
106	Anomalous anisotropic spin-wave propagation in thin manganite films with uniaxial magnetic anisotropy. Applied Physics Letters, 2022, 120, .	3.3	3
107	Thickness dependence of magnetic anisotropy in uncovered and Cu-covered Feâˆ•GaAs(110) ultrathin films studied by in situ Brillouin light scattering. Journal of Applied Physics, 2006, 99, 08J701.	2.5	2
108	Measurement of spin waves and activation volumes in superparamagnetic Fe films on GaAs(100). Physical Review B, 2006, 74, .	3.2	2

#	Article	IF	Citations
109	Brillouin light scattering investigations of films and magnetic tunnel junctions with perpendicular magnetic anisotropy at the CoFeBâ€“MgO interface. Journal Physics D: Applied Physics, 2021, 54, 135005.	2.8	2
110	BRILLOUIN LIGHT SCATTERING STUDY OF SPIN DYNAMICS IN PATTERNED NANO-ELEMENTS: FROM SINGLE-LAYER TO MULTILAYERED STRUCTURES. , 0, , 41-79.		2
111	In situ brillouin scattering investigation of spin waves during the fcc to bcc transition of Fe/Cu[100] films. IEEE Transactions on Magnetics, 2003, 39, 2708-2710.	2.1	1
112	Epitaxial Fe films on ZnSe(001): effect of the substrate surface reconstruction on the magnetic anisotropy. Journal of Physics Condensed Matter, 2012, 24, 236006.	1.8	1
113	In situ Brillouin scattering investigation of thin Fe/Cu(1 1 1) films. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E807-E809.	2.3	0
114	Spin Waves Interference under Excitation by Focusing Transducers: Logic and Signal Processing. Semiconductors, 2020, 54, 1716-1720.	0.5	0
115	Spin textures patterned via thermally assisted magnetic scanning probe lithography for magnonics. , 2018, , .		0