

Reinoud Lavrijsen

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2974131/publications.pdf>

Version: 2024-02-01

72
papers

2,663
citations

257101

24
h-index

182168

51
g-index

74
all docs

74
docs citations

74
times ranked

3007
citing authors

#	ARTICLE	IF	CITATIONS
1	Domain wall depinning governed by the spin-Hall effect. Nature Materials, 2013, 12, 299-303.	13.3	546
2	Thickness dependence of the interfacial Dzyaloshinskii-Moriya interaction in inversion symmetry broken systems. Nature Communications, 2015, 6, 7635.	5.8	256
3	Magnetic ratchet for three-dimensional spintronic memory and logic. Nature, 2013, 493, 647-650.	13.7	180
4	Deterministic all-optical switching of synthetic ferrimagnets using single femtosecond laser pulses. Physical Review B, 2017, 96, .	1.1	113
5	Asymmetric magnetic bubble expansion under in-plane field in Pt/Co/Pt: Effect of interface engineering. Physical Review B, 2015, 91, .	1.1	106
6	Magnetization dynamics and Gilbert damping in ultrathin Co ₄₈ Fe ₃₂ B ₂₀ films with out-of-plane anisotropy. Applied Physics Letters, 2009, 94, .	1.5	99
7	Integrating all-optical switching with spintronics. Nature Communications, 2019, 10, 110.	5.8	85
8	Long-range chiral exchange interaction in synthetic antiferromagnets. Nature Materials, 2019, 18, 703-708.	13.3	83
9	Versatile microfluidic flow generated by moulded magnetic artificial cilia. Sensors and Actuators B: Chemical, 2018, 263, 614-624.	4.0	62
10	Fabrication, Detection, and Operation of a Three-Dimensional Nanomagnetic Conduit. ACS Nano, 2017, 11, 11066-11073.	7.3	54
11	Domain-wall pinning by local control of anisotropy in Pt/Co/Pt strips. Journal of Physics Condensed Matter, 2012, 24, 024216.	0.7	53
12	Physical and Chemical Defects in WO ₃ Thin Films and Their Impact on Photoelectrochemical Water Splitting. ACS Applied Energy Materials, 2018, 1, 5887-5895.	2.5	53
13	Precise control of domain wall injection and pinning using helium and gallium focused ion beams. Journal of Applied Physics, 2011, 109, .	1.1	52
14	Tuning the interlayer exchange coupling between single perpendicularly magnetized CoFeB layers. Applied Physics Letters, 2012, 100, .	1.5	51
15	Boosting the Performance of WO ₃ /n-Si Heterostructures for Photoelectrochemical Water Splitting: from the Role of Si to Interface Engineering. Advanced Energy Materials, 2019, 9, 1900940.	10.2	48
16	Fe:O:C grown by focused-electron-beam-induced deposition: magnetic and electric properties. Nanotechnology, 2011, 22, 025302.	1.3	47
17	Visible-light-promoted gas-phase water splitting using porous WO ₃ /BiVO ₄ photoanodes. Electrochemistry Communications, 2017, 82, 47-51.	2.3	42
18	Chiral Spin Spirals at the Surface of the van der Waals Ferromagnet Fe ₃ GeTe ₂ . Nano Letters, 2020, 20, 8563-8568.	4.5	35

#	ARTICLE	IF	CITATIONS
19	Deterministic all-optical magnetization writing facilitated by non-local transfer of spin angular momentum. <i>Nature Communications</i> , 2020, 11, 3835.	5.8	34
20	Asymmetric Pt/Co/Pt-stack induced sign-control of current-induced magnetic domain-wall creep. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	32
21	Correlation between Magnetism and Spin-Dependent Transport in CoFeB Alloys. <i>Physical Review Letters</i> , 2009, 102, 016602.	2.9	30
22	Controlled domain-wall injection in perpendicularly magnetized strips. <i>Applied Physics Letters</i> , 2010, 96, .	1.5	26
23	Fabrication of Scaffold-Based 3D Magnetic Nanowires for Domain Wall Applications. <i>Nanomaterials</i> , 2018, 8, 483.	1.9	26
24	Tuning Magnetic Chirality by Dipolar Interactions. <i>Physical Review Letters</i> , 2019, 123, 157201.	2.9	25
25	Picosecond optospintronic tunnel junctions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	3.3	25
26	Giant anomalous Hall effect in Fe-based microwires grown by focused-electron-beam-induced deposition. <i>Journal Physics D: Applied Physics</i> , 2012, 45, 035001.	1.3	24
27	Beam-induced Fe Nanopillars as Tunable Domain-Wall Pinning Sites. <i>Advanced Functional Materials</i> , 2014, 24, 3508-3514.	7.8	24
28	Thickness dependence of unidirectional spin-Hall magnetoresistance in metallic bilayers. <i>Applied Physics Letters</i> , 2017, 111, .	1.5	22
29	Investigating optically excited terahertz standing spin waves using noncollinear magnetic bilayers. <i>Physical Review B</i> , 2019, 99, .	1.1	22
30	Reduced domain wall pinning in ultrathin Pt/Co100 \times Bx/Pt with perpendicular magnetic anisotropy. <i>Applied Physics Letters</i> , 2010, 96, .	1.5	21
31	Extraction of Dzyaloshinskii-Moriya interaction from propagating spin waves. <i>Physical Review B</i> , 2020, 101, .	1.1	21
32	Controllable nucleation and propagation of topological magnetic solitons in CoFeB/Ru ferrimagnetic superlattices. <i>Physical Review B</i> , 2012, 86, .	1.1	20
33	Multi-bit operations in vertical spintronic shift registers. <i>Nanotechnology</i> , 2014, 25, 105201.	1.3	20
34	Enhanced field-driven domain-wall motion in Pt/Co68B32/Pt strips. <i>Applied Physics Letters</i> , 2011, 98, .	1.5	19
35	Magnetic Chirality Controlled by the Interlayer Exchange Interaction. <i>Physical Review Letters</i> , 2020, 124, 207203.	2.9	18
36	Tunable magnetic domain wall oscillator at an anisotropy boundary. <i>Applied Physics Letters</i> , 2011, 98, 102512.	1.5	17

#	ARTICLE	IF	CITATIONS
37	Magnetic states in low-pinning high-anisotropy material nanostructures suitable for dynamic imaging. Physical Review B, 2013, 87, .	1.1	17
38	DOMAIN IMAGING DURING SOLITON PROPAGATION IN A 3D MAGNETIC RATCHET. Spin, 2013, 03, 1340013.	0.6	17
39	Synthesis of Ni nanoparticles with controllable magnetic properties by atmospheric pressure microplasma assisted process. AIChE Journal, 2018, 64, 1540-1549. Local control of magnetic interface effects in chiral $\text{Ir}/\text{Co}/\text{Pt}$ multilayers using Ga	1.8	17
40	$\text{Ir}/\text{Co}/\text{Pt}$ multilayers using Ga	1.1	17
41	Enhanced all-optical switching and domain wall velocity in annealed synthetic-ferrimagnetic multilayers. Applied Physics Letters, 2020, 117, .	1.5	16
42	The electrochemistry of iron oxide thin films nanostructured by high ion flux plasma exposure. Electrochimica Acta, 2017, 258, 709-717.	2.6	15
43	Magnetism in $\text{Co}_{80}\text{Fe}_{20}$: Effect of crystallization. Journal of Applied Physics, 2011, 109, 093905.	1.1	14
44	Chiral magnetoresistance in $\text{Pt}/\text{Co}/\text{Pt}$ zigzag wires. Applied Physics Letters, 2017, 110, .	1.5	13
45	Optimizing propagating spin wave spectroscopy. Applied Physics Letters, 2019, 115, .	1.5	13
46	Spin motive forces due to magnetic vortices and domain walls. Physical Review B, 2011, 84, .	1.1	12
47	Plasma radiation studies in Magnum-PSI using resistive bolometry. Nuclear Fusion, 2018, 58, 106006.	1.6	12
48	Creep of chiral domain walls. Physical Review B, 2019, 100, .	1.1	12
49	Nanostructuring of iron thin films by high flux low energy helium plasma. Thin Solid Films, 2017, 631, 50-56.	0.8	11
50	Soliton propagation in micron-sized magnetic ratchet elements. Applied Physics Letters, 2014, 104, .	1.5	9
51	Scanning electron microscopy with polarization analysis for multilayered chiral spin textures. Applied Physics Letters, 2017, 111, .	1.5	9
52	Electrochemistry of Sputtered Hematite Photoanodes: A Comparison of Metallic DC versus Reactive RF Sputtering. ACS Omega, 2019, 4, 9262-9270.	1.6	7
53	Magnetic domain wall curvature induced by wire edge pinning. Applied Physics Letters, 2020, 117, .	1.5	7
54	Dynamics of all-optically switched magnetic domains in Co/Gd heterostructures with Dzyaloshinskii-Moriya interaction. Physical Review B, 2020, 102, .	1.1	7

#	ARTICLE	IF	CITATIONS
55	Ultra-low energy threshold engineering for all-optical switching of magnetization in dielectric-coated Co/Gd based synthetic-ferrimagnet. Applied Physics Letters, 2021, 119, .	1.5	7
56	Stabilizing chiral spin structures via an alternating Dzyaloshinskii-Moriya interaction. Physical Review B, 2020, 102, .	1.1	6
57	A robust soliton ratchet using combined antiferromagnetic and ferromagnetic interlayer couplings. Applied Physics Letters, 2015, 106, 092404.	1.5	5
58	Magnetic properties and interlayer coupling of epitaxial Co/Cu films on Si. Journal of Applied Physics, 2014, 116, 063906.	1.1	4
59	Systematic layer-by-layer characterization of multilayers for three-dimensional data storage and logic. Nanotechnology, 2016, 27, 155203.	1.3	4
60	An investigation of the interface and bulk contributions to the magneto-optic activity in Co/Pt multi-layered thin films. Journal of Applied Physics, 2021, 129, .	1.1	4
61	Structural transitions of skyrmion lattices in synthetic antiferromagnets. Physical Review B, 2019, 100, .	1.1	3
62	An integrated photonic device for on-chip magneto-optical memory reading. Nanophotonics, 2022, 11, 3319-3329.	2.9	3
63	Tunneling spin polarization and annealing of Co ₇₂ Fe ₂₀ B ₈ . Journal of Magnetism and Magnetic Materials, 2007, 310, 2012-2014.	1.0	2
64	Sputter Grown Fe and Fe/Cr Multilayers With Fourfold Magnetic Anisotropy on GaAs. IEEE Transactions on Magnetics, 2018, 54, 1-5.	1.2	2
65	Design and Modelling of a Novel Integrated Photonic Device for Nano-Scale Magnetic Memory Reading. Applied Sciences (Switzerland), 2020, 10, 8267.	1.3	2
66	Accurate extraction of anisotropic spin-orbit torques from harmonic measurements. Applied Physics Letters, 2021, 118, 172403.	1.5	2
67	Zigzag Domain Wall Mediated Reversal in Antiferromagnetically Coupled Layers. IEEE Magnetics Letters, 2017, 8, 1-4.	0.6	1
68	Magnetic Solitons in Superlattices. Springer Series in Materials Science, 2016, , 219-238.	0.4	1
69	Non-magnetic control of domain-walls in ferromagnetic nano-wires with perpendicular magnetic anisotropy. , 2013, , .		0
70	Rashba-effect induced chiral magnetic domain-wall resistance. , 2015, , .		0
71	Vector magnetometry of Fe/Cr/Fe trilayers with biquadratic coupling. Journal Physics D: Applied Physics, 2017, 50, 19LT02.	1.3	0
72	Toward high all-optical data writing rates in synthetic ferrimagnets. Applied Physics Letters, 2022, 120, 252401.	1.5	0