

Johan Åkerman

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4077861/publications.pdf>

Version: 2024-02-01

279
papers

10,733
citations

38742

50
h-index

40979

93
g-index

283
all docs

283
docs citations

283
times ranked

7163
citing authors

#	ARTICLE	IF	CITATIONS
1	Memristive control of mutual spin Hall nano-oscillator synchronization for neuromorphic computing. <i>Nature Materials</i> , 2022, 21, 81-87.	27.5	63
2	Impact of Random Grain Structure on Spin-Hall Nano-Oscillator Modal Stability. <i>IEEE Electron Device Letters</i> , 2022, 43, 312-315.	3.9	5
3	Phase-Binarized Spin Hall Nano-Oscillator Arrays: Towards Spin Hall Ising Machines. <i>Physical Review Applied</i> , 2022, 17, .	3.8	33
4	Femtosecond laser comb driven perpendicular standing spin waves. <i>Applied Physics Letters</i> , 2022, 120, .	3.3	3
5	Fabrication of voltage-gated spin Hall nano-oscillators. <i>Nanoscale</i> , 2022, 14, 1432-1439.	5.6	16
6	Advances in Magnetics Roadmap on Spin-Wave Computing. <i>IEEE Transactions on Magnetics</i> , 2022, 58, 1-72.	2.1	179
7	Experimental confirmation of the delayed Ni demagnetization in FeNi alloy. <i>Applied Physics Letters</i> , 2022, 120, .	3.3	8
8	Ultrathin Ferrimagnetic GdFeCo Films with Low Damping. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	11
9	Observation of magnetic droplets in magnetic tunnel junctions. <i>Science China: Physics, Mechanics and Astronomy</i> , 2022, 65, .	5.1	11
10	Freezing and thawing magnetic droplet solitons. <i>Nature Communications</i> , 2022, 13, 2462.	12.8	6
11	Magnetic force microscopy of an operational spin nano-oscillator. <i>Microsystems and Nanoengineering</i> , 2022, 8, .	7.0	3
12	Optothermal control of spin Hall nano-oscillators. <i>Applied Physics Letters</i> , 2022, 120, .	3.3	8
13	Mutual Synchronization of Constriction-Based Spin Hall Nano-Oscillators in Weak In-Plane Magnetic Fields. <i>Physical Review Applied</i> , 2022, 18, .	3.8	3
14	Femtosecond Laser Pulse Driven Caustic Spin Wave Beams. <i>Physical Review Letters</i> , 2021, 126, 037204.	7.8	17
15	Femtosecond laser driven precessing magnetic gratings. <i>Nanoscale</i> , 2021, 13, 3746-3756.	5.6	9
16	Compositional effect on auto-oscillation behavior of Ni _{100-x} Fe _x /Pt spin Hall nano-oscillators. <i>Applied Physics Letters</i> , 2021, 118, .	3.3	9
17	Ultrafast Ising Machines using spin torque nano-oscillators. <i>Applied Physics Letters</i> , 2021, 118, .	3.3	45
18	Impact of intragrain spin wave reflections on nanocontact spin torque oscillators. <i>Physical Review B</i> , 2021, 103, .	3.2	6

#	ARTICLE	IF	CITATIONS
19	Roadmap of Spin-Orbit Torques. IEEE Transactions on Magnetics, 2021, 57, 1-39.	2.1	225
20	Using the photoinduced L3 resonance shift in Fe and Ni as time reference for ultrafast experiments at low flux soft x-ray sources. Structural Dynamics, 2021, 8, 044304.	2.3	1
21	Measuring spin wave resonance in Ni ₁₀₀ x Fe _x films: compositional and temperature dependence. Journal Physics D: Applied Physics, 2021, 54, 445002.	2.8	3
22	Microwave Oscillators and Detectors Based on Magnetic Tunnel Junctions. , 2021, , 3-44.		4
23	Brillouin light scattering investigations of films and magnetic tunnel junctions with perpendicular magnetic anisotropy at the CoFe/MgO interface. Journal Physics D: Applied Physics, 2021, 54, 135005.	2.8	2
24	Enhanced Modulation Bandwidth of a Magnetic Tunnel Junction-Based Spin Torque Nano-Oscillator Under Strong Current Modulation. IEEE Electron Device Letters, 2021, 42, 1886-1889.	3.9	2
25	Two-dimensional mutually synchronized spin Hall nano-oscillator arrays for neuromorphic computing. Nature Nanotechnology, 2020, 15, 47-52.	31.5	181
26	A Magnetic Field-to-Digital Converter Employing a Spin-Torque Nano-Oscillator. IEEE Nanotechnology Magazine, 2020, 19, 565-570.	2.0	5
27	Giant voltage-controlled modulation of spin Hall nano-oscillator damping. Nature Communications, 2020, 11, 4006.	12.8	48
28	Opportunities and challenges for spintronics in the microelectronics industry. Nature Electronics, 2020, 3, 446-459.	26.0	471
29	Tuning Magnetic Droplets in Nanocontact Spin-Torque Oscillators Using Electric Fields. Physical Review Applied, 2020, 14, .	3.8	6
30	Sustained coherent spin wave emission using frequency combs. Physical Review B, 2020, 101, .	3.2	10
31	Width dependent auto-oscillating properties of constriction based spin Hall nano-oscillators. Applied Physics Letters, 2020, 116, .	3.3	21
32	Influence of interfacial magnetic ordering and field-cooling effect on perpendicular exchange bias and magnetoresistance in nanoporous IrMn/[Co/Pd] films. Journal of Applied Physics, 2020, 127, .	2.5	6
33	Enhanced skyrmion motion via strip domain wall. Physical Review B, 2020, 101, .	3.2	23
34	Correlation of magnetic and magnetoresistive properties of nanoporous Co/Pd thin multilayers fabricated on anodized TiO ₂ templates. Scientific Reports, 2020, 10, 10838.	3.3	4
35	Nonreciprocal spin pumping damping in asymmetric magnetic trilayers. Physical Review B, 2020, 101, .	3.2	13
36	Reduced spin torque nano-oscillator linewidth using He + irradiation. Applied Physics Letters, 2020, 116, 072403.	3.3	19

#	ARTICLE	IF	CITATIONS
37	Complex magnetic ordering in nanoporous [Co/Pd] ₅ -IrMn multilayers with perpendicular magnetic anisotropy and its impact on magnetization reversal and magnetoresistance. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 3661-3674.	2.8	8
38	Chiral excitations of magnetic droplet solitons driven by their own inertia. <i>Physical Review B</i> , 2020, 101, .	3.2	9
39	Analysis of the linear relationship between asymmetry and magnetic moment at the edge of transition metals. <i>Physical Review Research</i> , 2020, 2, .	3.6	16
40	Frequency comb enhanced Brillouin microscopy. <i>Optics Express</i> , 2020, 28, 29540.	3.4	6
41	Compact Macrospin-Based Model of Three-Terminal Spin-Hall Nano Oscillators. <i>IEEE Transactions on Magnetics</i> , 2019, 55, 1-8.	2.1	5
42	Tuning exchange-dominated spin-waves using lateral current spread in nanocontact spin-torque nano-oscillators. <i>Journal of Magnetism and Magnetic Materials</i> , 2019, 492, 165503.	2.3	3
43	Magnetodynamics in orthogonal nanocontact spin-torque nano-oscillators based on magnetic tunnel junctions. <i>Applied Physics Letters</i> , 2019, 115, .	3.3	11
44	Time-resolved imaging of magnetization dynamics in double nanocontact spin torque vortex oscillator devices. <i>Physical Review B</i> , 2019, 100, .	3.2	3
45	Subterahertz ferrimagnetic spin-transfer torque oscillator. <i>Physical Review B</i> , 2019, 100, .	3.2	34
46	Spin-orbit torque-driven propagating spin waves. <i>Science Advances</i> , 2019, 5, eaax8467.	10.3	77
47	A single layer spin-orbit torque nano-oscillator. <i>Nature Communications</i> , 2019, 10, 2362.	12.8	66
48	Magnetization reversal of antiferromagnetically coupled (Co/Ni) and (Co/Pt) multilayers. <i>Journal of Magnetism and Magnetic Materials</i> , 2019, 479, 27-31.	2.3	10
49	Enhanced Perpendicular Exchange Bias in Co/Pd Antidot Arrays. <i>Journal of Electronic Materials</i> , 2019, 48, 1492-1497.	2.2	7
50	Origin of Magnetization Auto-Oscillations in Constriction-Based Spin Hall Nano-Oscillators. <i>Physical Review Applied</i> , 2018, 9, .	3.8	52
51	Influence of MgO barrier quality on spin-transfer torque in magnetic tunnel junctions. <i>Applied Physics Letters</i> , 2018, 112, .	3.3	8
52	Magnetic droplet soliton nucleation in oblique fields. <i>Physical Review B</i> , 2018, 97, .	3.2	17
53	Effect of flattened surface morphology of anodized aluminum oxide templates on the magnetic properties of nanoporous Co/Pt and Co/Pd thin multilayered films. <i>Applied Surface Science</i> , 2018, 427, 649-655.	6.1	25
54	Magnetic graphene/Ni-nano-crystal hybrid for small field magnetoresistive effect synthesized via electrochemical exfoliation/deposition technique. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 4171-4178.	2.2	15

#	ARTICLE	IF	CITATIONS
55	Spatial mapping of torques within a spin Hall nano-oscillator. Physical Review B, 2018, 98, .	3.2	15
56	Using Magnetic Droplet Nucleation to Determine the Spin Torque Efficiency and Asymmetry in $\langle \text{Co} \rangle_x \langle \text{Ni} \rangle_y$ Thin Films. Physical Review Applied, 2018, 10, .	3.8	7
57	Auto-oscillating Spin-Wave Modes of Constriction-Based Spin Hall Nano-oscillators in Weak In-Plane Fields. Physical Review Applied, 2018, 10, .	3.8	28
58	Time resolved imaging of the non-linear bullet mode within an injection-locked nano-contact spin Hall nano-oscillator. Applied Physics Letters, 2018, 113, .	3.3	10
59	Ultra-fast logic devices using artificial neuron-based on antiferromagnetic pulse generators. Journal of Applied Physics, 2018, 124, .	2.5	36
60	Spin Transfer Torque Driven Magnetodynamical Solitons. Springer Series in Solid-state Sciences, 2018, , 335-356.	0.3	1
61	Ultra-fast artificial neuron: generation of picosecond-duration spikes in a current-driven antiferromagnetic auto-oscillator. Scientific Reports, 2018, 8, 15727.	3.3	61
62	Spin transfer torque driven higher-order propagating spin waves in nano-contact magnetic tunnel junctions. Nature Communications, 2018, 9, 4374.	12.8	43
63	[Co/Ni] multilayers with robust post-annealing performance for spintronics device applications. Journal Physics D: Applied Physics, 2018, 51, 465002.	2.8	10
64	Improving the magnetodynamical properties of NiFe/Pt bilayers through Hf dusting. Applied Physics Letters, 2018, 113, .	3.3	12
65	Direct Observation of Zhang-Li Torque Expansion of Magnetic Droplet Solitons. Physical Review Letters, 2018, 120, 217204.	7.8	27
66	CMOS compatible W/CoFeB/MgO spin Hall nano-oscillators with wide frequency tunability. Applied Physics Letters, 2018, 112, .	3.3	47
67	Impact of the Oersted Field on Droplet Nucleation Boundaries. IEEE Magnetics Letters, 2018, 9, 1-4.	1.1	8
68	Investigation of magnetic droplet solitons using x-ray holography with extended references. Scientific Reports, 2018, 8, 11533.	3.3	3
69	Tuning the magnetodynamic properties of all-perpendicular spin valves using He+ irradiation. AIP Advances, 2018, 8, 065309.	1.3	3
70	Microwave probe stations with three-dimensional control of the magnetic field to study high-frequency dynamics in nanoscale devices. Review of Scientific Instruments, 2018, 89, 064701.	1.3	3
71	Ferromagnetic and Spin-Wave Resonance on Heavy-Metal-Doped Permalloy Films: Temperature Effects. IEEE Magnetics Letters, 2017, 8, 1-4.	1.1	18
72	Order of magnitude improvement of nano-contact spin torque nano-oscillator performance. Nanoscale, 2017, 9, 1896-1900.	5.6	17

#	ARTICLE	IF	CITATIONS
73	A 20 nm spin Hall nano-oscillator. <i>Nanoscale</i> , 2017, 9, 1285-1291.	5.6	55
74	Parametric autoexcitation of magnetic droplet soliton perimeter modes. <i>Physical Review B</i> , 2017, 95, .	3.2	32
75	Current Modulation of Nanoconstriction Spin-Hall Nano-Oscillators. <i>IEEE Magnetics Letters</i> , 2017, 8, 1-4.	1.1	19
76	Phase-locking of multiple magnetic droplets by a microwave magnetic field. <i>AIP Advances</i> , 2017, 7, .	1.3	8
77	Spin transfer torque ferromagnetic resonance induced spin pumping in the Fe/Pd bilayer system. <i>Physical Review B</i> , 2017, 95, .	3.2	36
78	Ni thickness influence on magnetic properties (Co/Ni/Co/Pt) multilayers with perpendicular magnetic anisotropy. <i>Journal of Magnetism and Magnetic Materials</i> , 2017, 441, 585-589.	2.3	3
79	Interfacial Dzyaloshinskii-Moriya Interaction in $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{mml:mrow} \langle \text{mml:mi} \text{Pt} \langle \text{mml:mi} \langle \text{mml:mo} \rangle \langle \text{mml:mo} \rangle \langle \text{mml:mi} \text{CoFeB} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle \text{Films: Effect of the Heavy-Metal Thickness. } \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle \text{Physical Review Letters. 2017. 118. 147201.} \rangle \rangle \rangle \rangle \rangle$	7.8	165
80	Imaging magnetisation dynamics in nano-contact spin-torque vortex oscillators exhibiting gyrotropic mode splitting. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 164003.	2.8	11
81	Controlled skyrmion nucleation in extended magnetic layers using a nanocontact geometry. <i>Physical Review B</i> , 2017, 96, .	3.2	16
82	Anisotropy constant and exchange coupling strength of perpendicularly magnetized CoFeB/Pd multilayers and exchange springs. <i>Physical Review B</i> , 2017, 95, .	3.2	4
83	Time-domain stability of parametric synchronization in a spin-torque nano-oscillator based on a magnetic tunnel junction. <i>Physical Review B</i> , 2017, 96, .	3.2	11
84	Antidamping spin-orbit torques in epitaxial-Py(100)/ Ta . <i>Applied Physics Letters</i> , 2017, 111, .	3.3	15
85	A high-speed single sideband generator using a magnetic tunnel junction spin torque nano-oscillator. <i>Scientific Reports</i> , 2017, 7, 13422.	3.3	17
86	Paving Spin-Wave Fibers in Magnonic Nanocircuits Using Spin-Orbit Torque. <i>Physical Review Applied</i> , 2017, 7, .	3.8	16
87	Long-range mutual synchronization of spin Hall nano-oscillators. <i>Nature Physics</i> , 2017, 13, 292-299.	16.7	221
88	Order of magnitude improvement of nano-contact spin torque nano-oscillator performance. , 2017, , .		0
89	Magnetic droplet nucleation boundary in orthogonal spin-torque nano-oscillators. <i>Nature Communications</i> , 2016, 7, 11209.	12.8	46
90	Enhancement of spin-torque diode sensitivity in a magnetic tunnel junction by parametric synchronization. <i>Applied Physics Letters</i> , 2016, 108, .	3.3	22

#	ARTICLE	IF	CITATIONS
91	Low operational current spin Hall nano-oscillators based on NiFe/W bilayers. Applied Physics Letters, 2016, 109, .	3.3	54
92	Low-current, narrow-linewidth microwave signal generation in NiMnSb based single-layer nanocontact spin-torque oscillators. Applied Physics Letters, 2016, 109, .	3.3	3
93	Superharmonic injection locking of nanocontact spin-torque vortex oscillators. Physical Review B, 2016, 94, .	3.2	12
94	Free- and reference-layer magnetization modes versus in-plane magnetic field in a magnetic tunnel junction with perpendicular magnetic easy axis. Physical Review B, 2016, 94, .	3.2	4
95	Ferromagnetic resonance measurements of (Co/Ni/Co/Pt) multilayers with perpendicular magnetic anisotropy. Journal Physics D: Applied Physics, 2016, 49, 425002.	2.8	16
96	Direct observation of magnetization dynamics generated by nanocontact spin-torque vortex oscillators. Physical Review B, 2016, 94, .	3.2	18
97	Variable variance Preisach model for multilayers with perpendicular magnetic anisotropy. Physical Review B, 2016, 94, .	3.2	3
98	Controlling Gilbert damping in a YIG film using nonlocal spin currents. Physical Review B, 2016, 94, .	3.2	13
99	Magnetostatically driven domain replication in Ni/Co based perpendicular pseudo-spin-valves. Journal Physics D: Applied Physics, 2016, 49, 415004.	2.8	3
100	All-optical study of tunable ultrafast spin dynamics in [Co/Pd]/NiFe systems: the role of spin-twist structure on Gilbert damping. RSC Advances, 2016, 6, 80168-80173.	3.6	11
101	Merging droplets in double nanocontact spin torque oscillators. Physical Review B, 2016, 93, .	3.2	24
102	Homodyne-detected ferromagnetic resonance of in-plane magnetized nanocontacts: Composite spin-wave resonances and their excitation mechanism. Physical Review B, 2016, 93, .	3.2	10
103	Spin-Torque and Spin-Hall Nano-Oscillators. Proceedings of the IEEE, 2016, 104, 1919-1945.	21.3	276
104	Holographic Magnetic Imaging of Single-Layer Nanocontact Spin-Transfer Oscillators. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	3
105	Modulation of the Spectral Characteristics of a Nano-Contact Spin-Torque Oscillator via Spin Waves in an Adjacent Yttrium-Iron Garnet Film. IEEE Magnetics Letters, 2016, 7, 1-4.	1.1	7
106	Spin-wave-beam driven synchronization of nanocontact spin-torque oscillators. Nature Nanotechnology, 2016, 11, 280-286.	31.5	119
107	Monte Carlo Modeling of Mixed-Anisotropy $\text{[Co/Ni]}_2/\text{NiFe}$ Multilayers. IEEE Magnetics Letters, 2016, 7, 1-5.	1.1	3
108	Ferromagnetic resonance measurements of (Co/Ni/Co/Pt) multilayers with perpendicular magnetic anisotropy. Journal Physics D: Applied Physics, 2016, 49, .	2.8	0

#	ARTICLE	IF	CITATIONS
109	Planar hall effect bridge sensor with NiFeX (X = Cu, Ag and Au) sensing layer. , 2015, , .		0
110	Propagating spin waves excited by spin-transfer torque: A combined electrical and optical study. Physical Review B, 2015, 92, .	3.2	32
111	Tunable damping, saturation magnetization, and exchange stiffness of half-Heusler NiMnSb thin films. Physical Review B, 2015, 92, .	3.2	49
112	Magnetic droplet solitons in orthogonal spin valves. Low Temperature Physics, 2015, 41, 833-837.	0.6	21
113	Spin Hall effect-controlled magnetization dynamics in NiMnSb. Journal of Applied Physics, 2015, 117, 17E103.	2.5	12
114	Mode-coupling mechanisms in nanocontact spin-torque oscillators. Physical Review B, 2015, 91, .	3.2	21
115	Au/NiFe magnetoplasmonics: Large enhancement of magneto-optical kerr effect for magnetic field sensors and memories. Electronic Materials Letters, 2015, 11, 440-446.	2.2	25
116	Modulation rate study in spin torque oscillator based wireless communication system. , 2015, , .		0
117	Planar Hall-Effect Bridge Sensor With NiFeX (X <math>\in</math> Cu, Ag and Au) Sensing Layer. Transactions on Magnetics, 2015, 51, 1-4.	2.1	3
118	Measuring acoustic mode resonance alone as a sensitive technique to extract antiferromagnetic coupling strength. Physical Review B, 2015, 92, .	3.2	10
119	Modulation Rate Study in a Spin-Torque Oscillator-Based Wireless Communication System. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	18
120	Tunable permalloy-based films for magnonic devices. Physical Review B, 2015, 92, .	3.2	61
121	Ultrasensitive and label-free molecular-level detection enabled by light phase control in magnetoplasmonic nanoantennas. Nature Communications, 2015, 6, 6150.	12.8	172
122	Magnetic structure and anisotropy of Fe_2P . Physical Review B, 2015, 91, .	3.2	21
123	Comprehensive and Macrospin-Based Magnetic Tunnel Junction Spin Torque Oscillator Model- Part II: Verilog-A Model Implementation. IEEE Transactions on Electron Devices, 2015, 62, 1045-1051.	3.0	11
124	Exponentially decaying magnetic coupling in sputtered thin film FeNi/Cu/FeCo trilayers. Applied Physics Letters, 2015, 106, .	3.3	22
125	Graphene spintronics: the European Flagship perspective. 2D Materials, 2015, 2, 030202.	4.4	243
126	Comprehensive and Macrospin-Based Magnetic Tunnel Junction Spin Torque Oscillator Model-Part I: Analytical Model of the MTJ STO. IEEE Transactions on Electron Devices, 2015, 62, 1037-1044.	3.0	15

#	ARTICLE	IF	CITATIONS
127	Active Magnetoplasmonic Ruler. Nano Letters, 2015, 15, 3204-3211.	9.1	48
128	Thickness- and temperature-dependent magnetodynamic properties of yttrium iron garnet thin films. Journal of Applied Physics, 2015, 117, .	2.5	46
129	Integration of GMR-based spin torque oscillators and CMOS circuitry. Solid-State Electronics, 2015, 111, 91-99.	1.4	11
130	Domain structures and magnetization reversal in Co/Pd and CoFeB/Pd multilayers. Journal of Applied Physics, 2015, 117, .	2.5	14
131	Role of boron diffusion in CoFeB/MgO magnetic tunnel junctions. Physical Review B, 2015, 91, .	3.2	40
132	Exchange coupling in hybrid anisotropy magnetic multilayers quantified by vector magnetometry. Journal of Applied Physics, 2015, 117, 17B526.	2.5	6
133	Temperature effect on exchange coupling and magnetization reversal in antiferromagnetically coupled (Co/Pd) multilayers. Journal of Applied Physics, 2015, 118, .	2.5	7
134	Magneto-optical observation of mutual phase-locking in a pair of spin-torque vortex oscillators. , 2015, , .		0
135	Spin pumping and the inverse spin-hall effect via magnetostatic surface spin-wave modes in Yttrium-Iron garnet/platinum bilayers. IEEE Magnetics Letters, 2015, 6, 1-4.	1.1	6
136	Dynamically stabilized magnetic skyrmions. Nature Communications, 2015, 6, 8193.	12.8	173
137	Effect of Excitation Fatigue on the Synchronization of Multiple Nanocontact Spin-Torque Oscillators. IEEE Magnetics Letters, 2014, 5, 1-4.	1.1	5
138	Linear Phase Tuning of Spin Torque Oscillators Using In-Plane Microwave Fields. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	1
139	A highly tunable microwave oscillator based on MTJ STO technology. Microwave and Optical Technology Letters, 2014, 56, 2092-2095.	1.4	7
140	Mode-hopping mechanism generating colored noise in a magnetic tunnel junction based spin torque oscillator. Applied Physics Letters, 2014, 105, 132404.	3.3	20
141	Modulation-mediated unlocking of a parametrically phase-locked spin torque oscillator. Applied Physics Letters, 2014, 105, 252404.	3.3	7
142	Spin reorientation via antiferromagnetic coupling. Journal of Applied Physics, 2014, 115, 17C103.	2.5	4
143	Accessing different spin-disordered states using first-order reversal curves. Physical Review B, 2014, 90, .	3.2	16
144	Magnetoplasmonic Design Rules for Active Magneto-Optics. Nano Letters, 2014, 14, 7207-7214.	9.1	94

#	ARTICLE	IF	CITATIONS
145	Effects of a non-absorbing substrate on the magneto-optical Kerr response of plasmonic ferromagnetic nanodisks. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2014, 211, 1067-1075.	1.8	23
146	Thick Double-Biased IrMn/NiFe/IrMn Planar Hall Effect Bridge Sensors. <i>IEEE Transactions on Magnetics</i> , 2014, 50, 1-4.	2.1	11
147	CoFeB-Based Spin Hall Nano-Oscillators. <i>IEEE Magnetics Letters</i> , 2014, 5, 1-4.	1.1	71
148	An inductorless wideband Balun-LNA for spin torque oscillator-based field sensing. , 2014, , .		12
149	XRD cation distribution and magnetic properties of mesoporous Zn-substituted CuFe ₂ O ₄ . <i>Ceramics International</i> , 2014, 40, 3619-3625.	4.8	102
150	Effect of nanoconfinement on the formation, structural transition and magnetic behavior of mesoporous copper ferrite. <i>Journal of Alloys and Compounds</i> , 2014, 598, 191-197.	5.5	18
151	Parametric excitation in a magnetic tunnel junction-based spin torque oscillator. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	18
152	Spin transfer torque generated magnetic droplet solitons (invited). <i>Journal of Applied Physics</i> , 2014, 115, .	2.5	47
153	Magnetic properties of crystalline mesoporous Zn-substituted copper ferrite synthesized under nanoconfinement in silica matrix. <i>Microporous and Mesoporous Materials</i> , 2014, 190, 346-355.	4.4	27
154	Magnetic droplet solitons in orthogonal nano-contact spin torque oscillators. <i>Physica B: Condensed Matter</i> , 2014, 435, 84-87.	2.7	35
155	Confined Dissipative Droplet Solitons in Spin-Valve Nanowires with Perpendicular Magnetic Anisotropy. <i>Physical Review Letters</i> , 2014, 112, 047201.	7.8	53
156	Generation linewidth of mode-hopping spin torque oscillators. <i>Physical Review B</i> , 2014, 89, .	3.2	28
157	[Co/Pd]-CoFeB exchange spring magnets with tunable gap of spin wave excitations. <i>Journal Physics D: Applied Physics</i> , 2014, 47, 495004.	2.8	17
158	Depth-Dependent Magnetization Profiles of Hybrid Exchange Springs. <i>Physical Review Applied</i> , 2014, 2, .	3.8	22
159	Oxidation states and quality of upper interfaces in magnetic tunnel junctions: oxygen effect on crystallization of interfaces. <i>Journal of Physics Condensed Matter</i> , 2014, 26, 026004.	1.8	4
160	The 2014 Magnetism Roadmap. <i>Journal Physics D: Applied Physics</i> , 2014, 47, 333001.	2.8	329
161	Magnetic coupling in asymmetric FeCoV/Ru/FeNi trilayers. <i>Journal of Applied Physics</i> , 2014, 115, .	2.5	9
162	Hysteretic Synchronization in Spin-Torque Nanocontact Oscillators: A Micromagnetic Study. <i>IEEE Nanotechnology Magazine</i> , 2014, 13, 532-536.	2.0	15

#	ARTICLE	IF	CITATIONS
163	Dependence of the colored frequency noise in spin torque oscillators on current and magnetic field. Applied Physics Letters, 2014, 104, 092405.	3.3	28
164	Investigation of the Tunability of the Spin Configuration Inside Exchange Coupled Springs of Hard/Soft Magnets. IEEE Transactions on Magnetics, 2014, 50, 1-6.	2.1	4
165	Channelling spin waves. Nature Nanotechnology, 2014, 9, 503-504.	31.5	19
166	Reversal mode instability and magnetoresistance in perpendicular (Co/Pd)/Cu/(Co/Ni) pseudo-spin-valves. Applied Physics Letters, 2013, 103, .	3.3	21
167	Tuning the Magneto-Optical Response of Nanosize Ferromagnetic Ni Disks Using the Phase of Localized Plasmons. Physical Review Letters, 2013, 111, 167401.	7.8	111
168	Microwave Signal Generation in Single-Layer Nano-Contact Spin Torque Oscillators. IEEE Transactions on Magnetics, 2013, 49, 4331-4334.	2.1	15
169	Decoherence, Mode Hopping, and Mode Coupling in Spin Torque Oscillators. IEEE Transactions on Magnetics, 2013, 49, 4398-4404.	2.1	17
170	Mutually synchronized bottom-up multi-nanocontact spin-torque oscillators. Nature Communications, 2013, 4, 2731.	12.8	98
171	Triple mode-jumping in a spin torque oscillator. , 2013, , .		3
172	Nano-Contact Spin-Torque Oscillators as Magnonic Building Blocks. Topics in Applied Physics, 2013, , 177-187.	0.8	19
173	A Nonvolatile Spintronic Memory Element with a Continuum of Resistance States. Advanced Functional Materials, 2013, 23, 1919-1922.	14.9	12
174	Spin Torque-Generated Magnetic Droplet Solitons. Science, 2013, 339, 1295-1298.	12.6	237
175	Spin wave excitations in exchange-coupled [Co/Pd]-NiFe films with tunable tilting of the magnetization. Physical Review B, 2013, 87, .	3.2	25
176	Resonant excitation of injection-locked spin-torque oscillators. Physical Review B, 2013, 87, .	3.2	5
177	Oxidation states and the quality of lower interfaces in magnetic tunnel junctions: oxygen effect on crystallization of interfaces. Journal of Physics Condensed Matter, 2013, 25, 135302.	1.8	3
178	Polarizability and magnetoplasmonic properties of magnetic general nanoellipsoids. Optics Express, 2013, 21, 9875.	3.4	34
179	Non-stationary excitation of two localized spin-wave modes in a nano-contact spin torque oscillator. Journal of Applied Physics, 2013, 114, 153906.	2.5	16
180	Spin-Wave-Mode Coexistence on the Nanoscale: A Consequence of the Oersted-Field-Induced Asymmetric Energy Landscape. Physical Review Letters, 2013, 110, 257202.	7.8	98

#	ARTICLE	IF	CITATIONS
181	Tunable spin configuration in [Co/Ni]-NiFe spring magnets. Journal Physics D: Applied Physics, 2013, 46, 125004.	2.8	31
182	Magnetization reversal signatures in the magnetoresistance of magnetic multilayers. Physical Review B, 2012, 86, .	3.2	15
183	Combined Wide-Narrow Double Modulation of Spin-Torque Oscillators for Improved Linewidth During Communication. IEEE Transactions on Magnetics, 2012, 48, 4077-4080.	2.1	7
184	Domain dynamics and fluctuations in artificial square ice at finite temperatures. New Journal of Physics, 2012, 14, 035014.	2.9	48
185	Multiple synchronization attractors of serially connected spin-torque nanooscillators. Physical Review B, 2012, 86, .	3.2	18
186	Temperature dependence of linewidth in nanocontact based spin torque oscillators: Effect of multiple oscillatory modes. Physical Review B, 2012, 86, .	3.2	24
187	Spin-Torque Oscillator in an Electromagnet Package. IEEE Transactions on Magnetics, 2012, 48, 4378-4381.	2.1	9
188	Macrospin and micromagnetic studies of tilted polarizer spin-torque nano-oscillators. Journal of Applied Physics, 2012, 112, 063903.	2.5	20
189	Utility of reactively sputtered CuNx films in spintronics devices. Journal of Applied Physics, 2012, 111, 073912.	2.5	12
190	[Co/Pd]4â€“Coâ€“Pdâ€“NiFe spring magnets with highly tunable and uniform magnetization tilt angles. Journal of Magnetism and Magnetic Materials, 2012, 324, 3929-3932.	2.3	23
191	Low-Dimensional Magnetic Systems. Advances in Condensed Matter Physics, 2012, 2012, 1-1.	1.1	0
192	Power and linewidth of propagating and localized modes in nanocontact spin-torque oscillators. Physical Review B, 2012, 85, .	3.2	49
193	Analytical investigation of modulated spin-torque oscillators in the framework of coupled differential equations with variable coefficients. Physical Review B, 2012, 85, .	3.2	15
194	Decoherence and Mode Hopping in a Magnetic Tunnel Junction Based Spin Torque Oscillator. Physical Review Letters, 2012, 108, 207203.	7.8	51
195	An In Situ Anneal Study of Graded Anisotropy FePtCu Films. IEEE Magnetics Letters, 2011, 2, 5500104-5500104.	1.1	9
196	Graded Anisotropy FePtCu Films. IEEE Transactions on Magnetics, 2011, 47, 1580-1586.	2.1	8
197	Spin Torque Oscillators and RF Currentsâ€”Modulation, Locking, and Ringing. Integrated Ferroelectrics, 2011, 125, 147-154.	0.7	38
198	Modulation of Individual and Mutually Synchronized Nanocontact-Based Spin Torque Oscillators. IEEE Transactions on Magnetics, 2011, 47, 1575-1579.	2.1	30

#	ARTICLE	IF	CITATIONS
199	Frequency modulation of spin torque oscillator pairs. Applied Physics Letters, 2011, 98, 192501.	3.3	41
200	Destabilization of serially connected spin-torque oscillators via non-Adlerian dynamics. Journal of Applied Physics, 2011, 110, 103910.	2.5	14
201	Current induced vortices in multi-nanocontact spin-torque devices. Journal of Applied Physics, 2011, 109, .	2.5	22
202	Designer Magnetoplasmonics with Nickel Nanoferrromagnets. Nano Letters, 2011, 11, 5333-5338.	9.1	203
203	Direct observation of a propagating spin wave induced by spin-transfer torque. Nature Nanotechnology, 2011, 6, 635-638.	31.5	321
204	High frequency operation of a spin-torque oscillator at low field. Physica Status Solidi - Rapid Research Letters, 2011, 5, 432-434.	2.4	75
205	Plasmonic Nickel Nanoantennas. Small, 2011, 7, 2341-2347.	10.0	175
206	Development of a polydimethylsiloxane film-based passive dosing method in the in vitro DRACALUX [®] assay. Environmental Toxicology and Chemistry, 2011, 30, 898-904.	4.3	17
207	Modulation of single and double spin torque oscillators. AIP Conference Proceedings, 2011, , .	0.4	8
208	Spin-torque oscillator linewidth narrowing under current modulation. Applied Physics Letters, 2011, 98, 192506.	3.3	42
209	Temperature-dependent interlayer coupling in Ni/Co perpendicular pseudo-spin-valve structures. Physical Review B, 2011, 84, .	3.2	20
210	Probing vertically graded anisotropy in FePtCu films. Physical Review B, 2011, 84, .	3.2	28
211	Bias dependence of perpendicular spin torque and of free- and fixed-layer eigenmodes in MgO-based nanopillars. Physical Review B, 2011, 83, .	3.2	43
212	[Co/Pd]-NiFe exchange springs with tunable magnetization tilt angle. Applied Physics Letters, 2011, 98, 172502.	3.3	82
213	Nanostructured MnGa films on Si/SiO ₂ with 20.5 kOe room temperature coercivity. Journal of Applied Physics, 2011, 110, .	2.5	40
214	Intrinsic frequency doubling in a magnetic tunnel junction-based spin torque oscillator. Journal of Applied Physics, 2011, 110, .	2.5	28
215	Micromagnetic study of switching boundary of a spin torque nanodevice. Applied Physics Letters, 2011, 98, 102501.	3.3	13
216	Hole mask colloidal lithography on magnetic multilayers for spin torque applications. Journal of Physics: Conference Series, 2010, 200, 072078.	0.4	1

#	ARTICLE	IF	CITATIONS
217	Manifestation of spin-Hall effect in multilayered M/N/M film structures. Journal of Physics: Conference Series, 2010, 200, 052023.	0.4	0
218	Exchange-bias-like effect in (111) FePt based pseudo spin valves. Journal of Physics: Conference Series, 2010, 200, 072110.	0.4	0
219	Pseudo spin valves based on (111) -oriented FePt and FePtCu fixed layer with tilted anisotropy. Journal of Physics: Conference Series, 2010, 200, 052036.	0.4	0
220	FORC studies of exchange biased NiFe in (111) FePt-based spin valve. Journal of Physics: Conference Series, 2010, 200, 072002.	0.4	0
221	Nanowaveguides and couplers based on hybrid plasmonic modes. Applied Physics Letters, 2010, 97, .	3.3	45
222	Surface-energy triggered phase formation and epitaxy in nanometer-thick $\text{Ni}_{1-x}\text{Pt}_x$ silicide films. Applied Physics Letters, 2010, 96, .	3.3	51
223	Nonlinear frequency and amplitude modulation of a nanocontact-based spin-torque oscillator. Physical Review B, 2010, 81, .	3.2	89
224	Oscillatory transient regime in the forced dynamics of a nonlinear auto oscillator. Physical Review B, 2010, 82, .	3.2	42
225	Experimental Evidence of Self-Localized and Propagating Spin Wave Modes in Obliquely Magnetized Current-Driven Nanocontacts. Physical Review Letters, 2010, 105, 217204.	7.8	176
226	Continuously graded anisotropy in single $(\text{Fe}_{53}\text{Pt}_{47})_{100-x}\text{Cu}_x$ films. Applied Physics Letters, 2010, 97, .	3.3	53
227	First-order reversal curve analysis of graded anisotropy FePtCu films. Applied Physics Letters, 2010, 97, 202501.	3.3	32
228	Pseudo Spin Valves Using a (111) -Textured $\text{D}_{0.22}\text{Mn}_{2.3-2.4}\text{Ga}$ Fixed Layer. IEEE Magnetics Letters, 2010, 1, 2500104-2500104.	1.1	14
229	Spin torque oscillator frequency versus magnetic field angle: The prospect of operation beyond 65 GHz. Applied Physics Letters, 2009, 94, .	3.3	158
230	Improved magnetoresistance through spacer thickness optimization in tilted pseudo spin valves based on L_{10} (111) -oriented FePtCu fixed layers. Journal of Applied Physics, 2009, 106, 053909.	2.5	24
231	Zero-field precession and hysteretic threshold currents in a spin torque nano device with tilted polarizer. New Journal of Physics, 2009, 11, 103028.	2.9	62
232	Pseudo-spin-valve with L_{10} (111) -oriented FePt fixed layer. Journal of Applied Physics, 2009, 105, 07E910.	2.5	23
233	Capacitance Enhanced Synchronization of Pairs of Spin-Transfer Oscillators. IEEE Transactions on Magnetics, 2009, 45, 2421-2423.	2.1	19
234	Capacitance Effect on Microwave Power Spectra of Spin-Torque Oscillator With Thermal Noise. IEEE Transactions on Magnetics, 2009, 45, 2773-2776.	2.1	2

#	ARTICLE	IF	CITATIONS
235	Study of Pseudo Spin Valves Based on $L1_{0}$ (111)-Oriented FePt and FePtCu Fixed Layer With Tilted Magnetocrystalline Anisotropy. IEEE Transactions on Magnetics, 2009, 45, 3491-3494.	2.1	15
236	Exchange Bias in $L1_{0}$ (111)-Oriented FePt-Based Pseudo Spin Valves. IEEE Transactions on Magnetics, 2009, 45, 3881-3884.	2.1	12
237	Pseudo spin valves based on $L1_{0}$ (111)-oriented FePt fixed layers with tilted anisotropy. Applied Physics Letters, 2009, 94, 163108.	3.3	48
238	Microwave generation of tilted-polarizer spin torque oscillator. Journal of Applied Physics, 2009, 105, 07D116.	2.5	45
239	Perpendicular spin torque promotes synchronization of magnetic tunnel junction based spin torque oscillators. Applied Physics Letters, 2009, 94, .	3.3	57
240	Spin-torque oscillator with tilted fixed layer magnetization. Applied Physics Letters, 2008, 92, .	3.3	102
241	Tunable intrinsic phase of a spin torque oscillator. Applied Physics Letters, 2008, 92, .	3.3	60
242	Temperature and angular dependences of dynamic spin-polarized resonant tunneling in $CoFeB/MgO/NiFe$ junctions. Journal of Applied Physics, 2008, 103, 07A904.	2.5	10
243	Tunable intrinsic phase shift between a spin torque nano-oscillator and an AC current. , 2007, , .		0
244	Separation of exchange anisotropy and magnetocrystalline anisotropy in $Co/MgO/Co$ bilayers by means of ac susceptibility measurements. Physical Review B, 2007, 76, .	3.2	9
245	Intrinsic phase shift between a spin torque oscillator and an alternating current. Journal of Applied Physics, 2007, 101, 09A510.	2.5	50
246	Impact of interfacial roughness on tunneling conductance and extracted barrier parameters. Applied Physics Letters, 2007, 90, 043513.	3.3	38
247	Impact of magnetoresistance and anisotropy on synchronized Spin Torque Oscillators. , 2007, , .		0
248	Intrinsic Phase Shift and Novel Dynamic Magnetization States of a Spin Torque Oscillator under ac Current Injection. Materials Research Society Symposia Proceedings, 2007, 998, 1.	0.1	0
249	Impact of Device Variability and Circuit Phase Shift in Synchronized Spin Torque Oscillators. Materials Research Society Symposia Proceedings, 2007, 998, 1.	0.1	0
250	Dynamic Spin-Polarized Resonant Tunneling in Magnetic Tunnel Junctions. Physical Review Letters, 2007, 99, 047206.	7.8	17
251	Phase-locked spin torque oscillators: Impact of device variability and time delay. Journal of Applied Physics, 2007, 101, 09A503.	2.5	69
252	MgO-based tunnel junction material for high-speed toggle magnetic random access memory. IEEE Transactions on Magnetics, 2006, 42, 1935-1939.	2.1	73

#	ARTICLE	IF	CITATIONS
253	Intrinsic Reliability of AlO _x -Based Magnetic Tunnel Junctions. IEEE Transactions on Magnetics, 2006, 42, 2661-2663.	2.1	13
254	Origin of the breakdown of Wentzel-Kramers-Brillouin-based tunneling models. Physical Review B, 2006, 74, .	3.2	27
255	Intrinsic Reliability of AlO _x -based Magnetic Tunnel Junctions. , 2006, , .		0
256	APPLIED PHYSICS: Toward a Universal Memory. Science, 2005, 308, 508-510.	12.6	488
257	A 4-Mb toggle MRAM based on a novel bit and switching method. IEEE Transactions on Magnetics, 2005, 41, 132-136.	2.1	394
258	Nonvolatile Magnetoresistive Random-Access Memory Based on Magnetic Tunnel Junctions. MRS Bulletin, 2004, 29, 818-821.	3.5	16
259	Reliability of 4-Mbit Toggle MRAM. Materials Research Society Symposia Proceedings, 2004, 853, 104.	0.1	0
260	Demonstrated Reliability of 4-Mb MRAM. IEEE Transactions on Device and Materials Reliability, 2004, 4, 428-435.	2.0	57
261	The oxidation state at tunnel junction interfaces. Journal of Magnetism and Magnetic Materials, 2003, 260, 78-83.	2.3	2
262	Origin of temperature dependence in tunneling magnetoresistance. Europhysics Letters, 2003, 63, 104-110.	2.0	40
263	Flux pinning by regular nanostructures in Nb thin films: Magnetic vs. structural effects. Europhysics Letters, 2003, 63, 118-124.	2.0	19
264	Collective dynamics of a highly dilute vortex lattice in YBa ₂ Cu ₃ O _{7-δ} thin films. Physical Review B, 2002, 65, .	3.2	8
265	Dynamics of dilute vortices in various high-T _[sub C] thin films. Journal of Applied Physics, 2002, 91, 7137.	2.5	0
266	Upper bound for the magnetic proximity effect extracted from Brillouin light scattering. Physical Review B, 2002, 65, .	3.2	7
267	Hysteresis and fractional matching in thin Nb films with rectangular arrays of nanoscaled magnetic dots. Physical Review B, 2002, 65, .	3.2	57
268	Nanostructures and the proximity effect. Journal Physics D: Applied Physics, 2002, 35, 2398-2402.	2.8	29
269	Quantitative x-ray photoelectron spectroscopy study of Al/AlO _[sub x] bilayers. Journal of Applied Physics, 2002, 91, 10163.	2.5	11
270	Criteria for ferromagneticâ€“insulatorâ€“ferromagnetic tunneling. Journal of Magnetism and Magnetic Materials, 2002, 240, 86-91.	2.3	54

#	ARTICLE	IF	CITATIONS
271	Low-field vortex dynamics in various high-T _c thin films. <i>Pramana - Journal of Physics</i> , 2002, 58, 985-993.	1.8	0
272	Partition Controlled Delivery of Hydrophobic Substances in Toxicity Tests Using Poly(dimethylsiloxane) (PDMS) Films. <i>Environmental Science & Technology</i> , 2001, 35, 4097-4102.	10.0	92
273	Re-entrant behavior of low-field flux creep in c-axis-oriented HgBa ₂ CaCu ₂ O ₆ thin films. <i>Physical Review B</i> , 2001, 64, .	3.2	6
274	Dislocation-mediated creep of highly separated vortices in a-axis-oriented HgBa ₂ CaCu ₂ O ₆ thin films. <i>Physical Review B</i> , 2001, 64, .	3.2	10
275	Two-stage crossover from thermal to quantum flux creep of dilute vortex ensembles in various high-T _c superconducting thin films. <i>Physical Review B</i> , 2001, 64, .	3.2	7
276	Tunneling criteria for magnetic-insulator-magnetic structures. <i>Applied Physics Letters</i> , 2001, 79, 3104-3106.	3.3	56
277	A 0.18 μm 4Mb toggling MRAM. , 0, , .		16
278	A 0.18 μm 4 Mbit toggling MRAM. , 0, , .		2
279	Reliability of 4MBIT MRAM. , 0, , .		7