Sang-Koog Kim

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8533423/publications.pdf

Version: 2024-02-01

117 papers	4,093 citations	126907 33 h-index	123424 61 g-index
118 all docs	118 docs citations	118 times ranked	2722 citing authors

#	Article	IF	Citations
1	Robust finite-temperature magnetization dynamics in ferrimagnetic Gd (FeCo)1â^' (xÂ=ÂÂ0Ââ^¼Â0.44) nanospheres across angular-momentum and magnetization compensation points: An atomistic model simulation. Journal of Magnetism and Magnetic Materials, 2022, 542, 168583.	2.3	1
2	Highly efficient heat-dissipation power driven by ferromagnetic resonance in MFe2O4 (Mâ€‰=â€‰Fe, Mn, Ni) ferrite nanoparticles. Scientific Reports, 2022, 12, 5232.	3.3	13
3	Intrinsic DMI-free skyrmion formation and robust dynamic behaviors in magnetic hemispherical shells. Scientific Reports, 2021, 11, 3886.	3.3	17
4	Broadband photonâ€“magnon coupling using arrays of photon resonators. Journal of Applied Physics, 2021, 129, .	2.5	10
5	Optimizing machine learning models for granular NdFeB magnets by very fast simulated annealing. Scientific Reports, 2021, 11, 3792.	3.3	12
6	Ultra-high rate of temperature increment from superparamagnetic nanoparticles for highly efficient hyperthermia. Scientific Reports, 2021, 11, 4969.	3.3	28
7	Channeling of spin waves in antiferromagnetic domain walls. Physical Review B, 2021, 103, .	3.2	8
8	Synthesis and multiferroic properties of high-purity CoFe2O4â€“BiFeO3 nanocomposites. Journal of Alloys and Compounds, 2021, 867, 159008.	5.5	12
9	Charge-transfer-induced 2D ferromagnetism and realization of thermo-remnant memory effect in ultrathin ÃŸ-NiOOH-encapsulated graphene. Nanotechnology, 2021, 32, 385705.	2.6	2
10	Conceptual design of demultiplexer using coupled-gyration-mode signals in vortex-state disk arrays. Journal of Applied Physics, 2021, 130, 013901.	2.5	1
11	Macroscopic-Scale Periodic Arrays of Partially Spherical Magnetic Nanodots Fabricated by Pulsed-Laser-Induced Dewetting. Journal of Physical Chemistry C, 2021, 125, 18071-18076.	3.1	1
12	Robust formation of skyrmion and skyrmionium in magnetic hemispherical shells and their dynamic switching. Physical Review B, 2021, 104, .	3.2	3
13	Reservoir computing using photon-magnon coupling. Applied Physics Letters, 2021, 119, .	3.3	4
14	Recursive evolution of spin-wave multiplets in magnonic crystals of antidot-lattice fractals. Scientific Reports, 2021, 11, 22604.	3.3	0
15	Stability of skyrmion formation and its abnormal dynamic modes in magnetic nanotubes. Physical Review B, 2020, 102, .	3.2	10
16	Roadmap for photon-magnon coupling and its applications. Solid State Physics, 2020, , 39-71.	0.5	13
17	Wireless Control of Two- and Three-Dimensional Actuations of Kirigami Patterns Composed of Magnetic-Particlesâ€“Polymer Composites. ACS Nano, 2020, 14, 17589-17596.	14.6	30
18	Conceptual design of magnonic majority-logic gate based on channeling of spin waves in domain walls. Journal of Applied Physics, 2020, 128, .	2.5	1

#	Article	IF	Citations
19	Interaction of spin waves propagating along narrow domain walls with a magnetic vortex in a thin-film-nanostrip cross-structure. Journal of Applied Physics, 2020, 127, 183906.	2.5	13
20	Annealing effect of sputter-grown Pt/Ni80Fe20/Pt sandwich trilayer films on Gilbert damping. Journal of Applied Physics, 2020, 128, 223901.	2.5	2
21	Fabrication, Structure, and Magnetic Properties of Pure-Phase BiFeOâ‚ƒ and MnFeâ‚‚Oâ‚„ Nanoparticles and their Nanocomposites. Journal of Magnetics, 2020, 25, 140-149.	0.4	3
22	Spin-wave excitation and critical angles in a hybrid photon-magnon-coupled system. Journal of Applied Physics, 2019, 126, 163902.	2.5	3
23	Photon-magnon coupling: Historical perspective, status, and future directions. Solid State Physics, 2019, , 1-77.	0.5	26
24	Reset-set latch logic operation using vortex-gyration-coupled modes and its driven switching in magnetic-dot networks: A micromagnetic simulation study. AIP Advances, 2019, 9, 055028.	1.3	1
25	Effect of misalignments of individual grainsâ€™ easy axis on magnetization-reversal process in granular NdFeB magnets: A finite-element micromagnetic simulation study. Journal of Magnetism and Magnetic Materials, 2019, 486, 165257.	2.3	14
26	Abnormal anticrossing effect in photon-magnon coupling. Physical Review B, 2019, 99, .	3.2	95
27	Tunable specific-loss power of magnetic nano-spheres in vortex state for high-efficiency hyperthermia bio-applications: A theoretical and simulation study. Journal of Applied Physics, 2019, 125, 063901.	2.5	5
28	Structural and Magnetic Properties of Gd-Ni-co-doped BiFeOâ‚ƒ Nanoparticles. Journal of Magnetics, 2019, 24, 371-378.	0.4	1
29	Coupled breathing modes in one-dimensional Skyrmion lattices. Journal of Applied Physics, 2018, 123, .	2.5	26
30	Single-crystalline Gd-doped BiFeO₃ nanowires: R3c-to-Pn2₁a phase transition and enhancement in high-coercivity ferromagnetism. Journal of Materials Chemistry C, 2018, 6, 526-534.	5.5	33
31	Effects of isovalent substitution on structural and magnetic properties of nanocrystalline Y3â^'xGdxFe5O12 (0â€²â‰¤â€²xâ€²â‰¤â€²3) garnets. Journal of Magnetism and Magnetic Materials, 2018, 452, 48-54.	2.3	15
32	Spin-wave duplexer studied by finite-element micromagnetic simulation. Scientific Reports, 2018, 8, 16511.	3.3	3
33	Dynamical Origin of Highly Efficient Energy Dissipation in Soft Magnetic Nanoparticles for Magnetic Hyperthermia Applications. Physical Review Applied, 2018, 9, .	3.8	17
34	Stress-induced magnetic properties of PLD-grown high-quality ultrathin YIG films. Journal of Applied Physics, 2018, 123, .	2.5	30
35	Hetero-interface effect on Gilbert damping in nonmagnetic metal/permalloy/nonmagnetic metal trilayers. Journal of Magnetism and Magnetic Materials, 2018, 465, 399-405.	2.3	5
36	Coupled gyration modes in one-dimensional skyrmion arrays in thin-film nanostrips as new type of information carrier. Scientific Reports, 2017, 7, 45185.	3.3	30

#	Article	IF	Citations
37	Robust magnon-photon coupling in a planar-geometry hybrid of inverted split-ring resonator and YIG film. Scientific Reports, 2017, 7, 11930.	3.3	40
38	Magnetization reversal mechanism and coercivity enhancement in three-dimensional granular Nd-Fe-B magnets studied by micromagnetic simulations. Journal of Applied Physics, 2017, 122, .	2.5	8
39	Nutation-like-mode excitation of coupled vortex cores in magnetic spherical shells. Journal of Applied Physics, 2017, 122, 233903.	2.5	5
40	Magnetic-vortex Dynamic Quasi-crystal Formation in Soft Magnetic Nano-disks. Journal of Magnetics, 2017, 22, 29-33.	0.4	1
41	Vortex-State Nanoparticles for Bio-Imaging and Magnetic Hyperthermia. , 2016, , .		0
42	Resonant vortex-core reversal in magnetic nano-spheres as robust mechanism of efficient energy absorption and emission. Scientific Reports, 2016, 6, 31513.	3.3	8
43	Hydrothermal synthesis, structural analysis and room-temperature ferromagnetism of Y2O3:Co2+ nanorods. Journal of Magnetism and Magnetic Materials, 2016, 408, 67-72.	2.3	13
44	Structural and magnetic properties of Co-doped Gd2O3 nanorods. Journal of Magnetism and Magnetic Materials, 2016, 403, 155-160.	2.3	41
45	Resonantly excited precession motion of three-dimensional vortex core in magnetic nanospheres. Scientific Reports, 2015, 5, 11370.	3.3	18
46	Temperature effect on vortex-core reversals in magnetic nanodots. Journal of Applied Physics, 2015, 117, 173910.	2.5	1
47	Azimuthal-spin-wave-mode-driven vortex-core reversals. Journal of Applied Physics, 2015, 117, .	2.5	15
48	Enhanced gyration-signal propagation speed in one-dimensional vortex-antivortex lattices and its control by perpendicular bias field. Applied Physics Letters, 2014, 105, 222410.	3.3	10
49	Excited eigenmodes in magnetic vortex states of soft magnetic half-spheres and spherical caps. Journal of Applied Physics, 2014, 116, 223902.	2.5	7
50	Resonant amplification of vortex-core oscillations by coherent magnetic-field pulses. Scientific Reports, 2013, 3, 1301.	3.3	13
51	Wave modes of collective vortex gyration in dipolar-coupled-dot-array magnonic crystals. Scientific Reports, 2013, 3, 2262.	3.3	66
52	ROLLED-UP PERMALLOY NANOMEMBRANES WITH MULTIPLE WINDINGS. Spin, 2013, 03, 1340001.	1.3	20
53	Lee, Han, and Kim Reply:. Physical Review Letters, 2013, 111, 149702.	7.8	6
54	Information-signal-transfer rate and energy loss in coupled vortex-state networks. Applied Physics Letters, 2012, 101, 092403.	3.3	18

#	Article	IF	Citations
55	Logic Operations Based on Magnetic-Vortex-State Networks. ACS Nano, 2012, 6, 3712-3717.	14.6	84
56	Radial-spin-wave-mode-assisted vortex-core magnetization reversals. Applied Physics Letters, 2012, 100, 172413.	3.3	54
57	Emergence of Room-Temperature Magnetic Ordering in Artificially Fabricated Ordered-Double-Perovskite Sr₂FeRuO₆. Chemistry of Materials, 2011, 23, 2693-2696.	6.7	24
58	Memory-bit selection and recording by rotating fields in vortex-core cross-point architecture. Applied Physics Letters, 2011, 98, .	3.3	60
59	Normal modes of coupled vortex gyration in two spatially separated magnetic nanodisks. Journal of Applied Physics, 2011, 110, .	2.5	30
60	Tunable negligible-loss energy transfer between dipolar-coupled magnetic disks by stimulated vortex gyration. Scientific Reports, 2011, 1, 59.	3.3	88
61	Polarization-selective vortex-core switching by tailored orthogonal Gaussian-pulse currents. Physical Review B, 2011, 83, .	3.2	13
62	Perpendicular-bias-field-dependent vortex-gyration eigenfrequency. Journal of Applied Physics, 2011, 109, .	2.5	17
63	Edge-Soliton-Mediated Vortex-Core Reversal Dynamics. Physical Review Letters, 2011, 106, 147201.	7.8	25
64	Layer-by-layer growth of SrFeO3- thin films on atomically flat single-terminated SrRuO3/SrTiO3 (111) surfaces. Journal of Crystal Growth, 2010, 312, 621-623.	1.5	8
65	Origin, criterion, and mechanism of vortex-core reversals in soft magnetic nanodisks under perpendicular bias fields. Physical Review B, 2010, 82, .	3.2	17
66	Observation of coupled vortex gyrations by 70-ps-time- and 20-nm-space-resolved full-field magnetic transmission soft x-ray microscopy. Applied Physics Letters, 2010, 97, .	3.3	47
67	Out-of-plane current controlled switching of the fourfold degenerate state of a magnetic vortex in soft magnetic nanodots. Applied Physics Letters, 2010, 96, 072507.	3.3	39
68	Micromagnetic computer simulations of spin waves in nanometre-scale patterned magnetic elements. Journal Physics D: Applied Physics, 2010, 43, 264004.	2.8	118
69	Quantitative understanding of magnetic vortex oscillations driven by spin-polarized out-of-plane dc current: Analytical and micromagnetic numerical study. Physical Review B, 2009, 79, .	3.2	34
70	A spin-wave frequency doubler by domain wall oscillation. Applied Physics Letters, 2009, 94, .	3.3	32
71	Layer-by-layer growth and growth-mode transition of SrRuO3 thin films on atomically flat single-terminated SrTiO3 (111) surfaces. Journal of Crystal Growth, 2009, 311, 3771-3774.	1.5	24
72	Physical Origin and Generic Control of Magnonic Band Gaps of Dipole-Exchange Spin Waves in Width-Modulated Nanostrip Waveguides. Physical Review Letters, 2009, 102, 127202.	7.8	226

#	Article	IF	Citations
73	Magnetic domain-wall motion by propagating spin waves. Applied Physics Letters, 2009, 94, .	3.3	134
74	A gigahertz-range spin-wave filter composed of width-modulated nanostrip magnonic-crystal waveguides. Applied Physics Letters, 2009, 95, .	3.3	141
75	Spin waves in circular soft magnetic dots at the crossover between vortex and single domain state. Physical Review B, 2009, 79, .	3.2	76
76	Dynamics of Domain Walls in Soft Magnetic Nanostripes: Topological Soliton Approach. IEEE Transactions on Magnetics, 2008, 44, 3079-3082.	2.1	17
77	Low-Power Selective Control of Ultrafast Vortex-Core Switching by Circularly Rotating Magnetic Fields: Circularâ€“Rotational Eigenmodes. IEEE Transactions on Magnetics, 2008, 44, 3071-3074.	2.1	15
78	Conceptual design of spin wave logic gates based on a Machâ€“Zehnder-type spin wave interferometer for universal logic functions. Journal of Applied Physics, 2008, 104, .	2.5	235
79	Understanding eigenfrequency shifts observed in vortex gyrotropic motions in a magnetic nanodot driven by spin-polarized out-of-plane dc current. Applied Physics Letters, 2008, 93, .	3.3	30
80	Reliable low-power control of ultrafast vortex-core switching with the selectivity in an array of vortex states by in-plane circular-rotational magnetic fields and spin-polarized currents. Applied Physics Letters, 2008, 92, .	3.3	159
81	Dynamic Origin of Vortex Core Switching in Soft Magnetic Nanodots. Physical Review Letters, 2008, 100, 027203.	7.8	200
82	Dynamic Origin of Azimuthal Modes Splitting in Vortex-State Magnetic Dots. Physical Review Letters, 2008, 101, 247203.	7.8	72
83	Oppositely rotating eigenmodes of spin-polarized current-driven vortex gyrotropic motions in elliptical nanodots. Applied Physics Letters, 2008, 92, .	3.3	13
84	Universal Criterion and Phase Diagram for Switching a Magnetic Vortex Core in Soft Magnetic Nanodots. Physical Review Letters, 2008, 101, 267206.	7.8	104
85	Giant asymmetry of soft x-ray magnetic scattering between opposite circular polarizations near the Brewster angle. Physical Review B, 2008, 78, .	3.2	1
86	Two circular-rotational eigenmodes and their giant resonance asymmetry in vortex gyrotropic motions in soft magnetic nanodots. Physical Review B, 2008, 78, .	3.2	57
87	Atomically flat single-terminated SrTiO3 (111) surface. Applied Physics Letters, 2008, 92, .	3.3	65
88	In situ observation of wet oxidation kinetics on Si(100) via ambient pressure x-ray photoemission spectroscopy. Journal of Applied Physics, 2008, 103, 044104.	2.5	11
89	Gyrotropic linear and nonlinear motions of a magnetic vortex in soft magnetic nanodots. Applied Physics Letters, 2007, 91, 132511.	3.3	62
90	Ultrafast vortex-core reversal dynamics in ferromagnetic nanodots. Physical Review B, 2007, 76, .	3.2	96

#	Article	IF	Citations
91	Electric-current-driven vortex-core reversal in soft magnetic nanodots. Applied Physics Letters, 2007, 91, .	3.3	89
92	Strong Radiation of Spin Waves by Core Reversal of a Magnetic Vortex and Their Wave Behaviors in Magnetic Nanowire Waveguides. Physical Review Letters, 2007, 98, 087205.	7.8	151
93	Soft x-ray polarizer for optical productions of any orthogonal state of the linear and circular polarization modes. Applied Physics Letters, 2006, 88, 181109.	3.3	3
94	Vortex-antivortex pair driven magnetization dynamics. , 2005, , .		0
95	Radiation of spin waves from magnetic vortex cores by their dynamic motion and annihilation processes. Applied Physics Letters, 2005, 87, 192502.	3.3	62
96	Soft X-Ray Resonant Kerr Effect as a Depth-Sensitive Probe of Heteromagnetic Nanostructures. IEEE Transactions on Magnetics, 2004, 40, 2185-2187.	2.1	0
97	Voltage Control of Magnetization Easy-Axes: A Potential Candidate for Spin Switching in Future Ultrahigh-Density Nonvolatile Magnetic Random Access Memory. IEEE Transactions on Magnetics, 2004, 40, 2637-2639.	2.1	19
98	Voltage control of a magnetization easy axis in piezoelectric/ferromagnetic hybrid films. Journal of Magnetism and Magnetic Materials, 2003, 267, 127-132.	2.3	35
99	Spin engineering of CoPd alloy films via the inverse piezoelectric effect. Applied Physics Letters, 2003, 82, 2458-2460.	3.3	77
100	Magnetization switching of CoPd alloy film on piezoelectric substrate via inverse piezoelectric effect. IEEE Transactions on Magnetics, 2003, 39, 2782-2784.	2.1	1
101	In situ vectorial magnetization reversal study of ultrathin Co films on Pd (111) using magneto-optical Kerr effects. Applied Physics Letters, 2002, 81, 91-93.	3.3	12
102	Full vectorial spin-reorientation transition and magnetization reversal study in ultrathin ferromagnetic films using magneto-optical Kerr effects. Physical Review B, 2002, 65, .	3.2	29
103	Reversible spin-reorientation transition in Co0.35 Pd0.65/Pd multilayer films. Journal of Magnetism and Magnetic Materials, 2002, 240, 543-545.	2.3	2
104	Modified Magnetism at a BuriedCo/PdInterface Resolved with X-Ray Standing Waves. Physical Review Letters, 2001, 86, 1347-1350.	7.8	90
105	Alloy-like Co environment in Co/Pd multilayer films having perpendicular magnetic anisotropy. Journal of Applied Physics, 2001, 89, 3055-3057.	2.5	35
106	In situ magnetoelastic coupling and stress-evolution studies of epitaxial Co35Pd65 alloy films in the monolayer regime. Applied Physics Letters, 2001, 79, 3296-3298.	3.3	15
107	In situ vectorial magnetization study of ultrathin magnetic films using a surface magneto-optical Kerr effect measurement system. IEEE Transactions on Magnetics, 2001, 37, 2773-2775.	2.1	2
108	Soft-x-ray small-angle scattering as a sensitive probe of magnetic and charge heterogeneity. Physical Review B, 2001, 64, .	3.2	91

#	Article	IF	Citations
109	Vector magnetization imaging in ferromagnetic thin films using soft x-rays. Applied Physics Letters, 2001, 78, 2742-2744.	3.3	28
110	Spin engineering in ultrathin Co0.35Pd0.65 alloy films. Applied Physics Letters, 2001, 79, 1652-1654.	3.3	15
111	Experimental observation of magnetically dead layers in Ni/Pt multilayer films. Physical Review B, 2001, 64, .	3.2	27
112	Influence of substrate roughness on spin reorientation transition of ultrathin Co films on Pd(111). Applied Physics Letters, 2001, 79, 93-95.	3.3	16
113	Growth and magnetic properties of ultrathin Co films on Pd(111) investigated by ultrahigh vacuum in situ surface magneto-optical Kerr effect and scanning tunneling microscope. Journal of Applied Physics, 2001, 89, 7147-7149.	2.5	14
114	Comparison of atomic structure anisotropy between Co-Pd alloys and Co/Pd multilayer films. Physical Review B, 2000, 62, 3025-3028.	3.2	23
115	Anisotropic short-range structure of Co0.16Pd0.84 alloy films having perpendicular magnetic anisotropy. Applied Physics Letters, 1997, 71, 66-68.	3.3	20
116	Evidence for diffuse interfaces and tensile in-plane strains in evaporated CoPd (1 1 1) multilayers and their role in perpendicular magnetic anisotropy. Journal of Magnetism and Magnetic Materials, 1997, 170, L7-L12.	2.3	30
117	Spin engineering of ferromagnetic films via inverse piezoelectric effect. , 0, , .		0