Sunjae Chung

List of Publications by Year
in descending order

55	1,193	361413	395702
papers	citations	20 h-index	33 g-index

57	57	57	1026
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Spin Torqueâ€“Generated Magnetic Droplet Solitons. Science, 2013, 339, 1295-1298.	12.6	237
2	High frequency operation of a spinâ€torque oscillator at low field. Physica Status Solidi - Rapid Research Letters, 2011, 5, 432-434.	2.4	75
3	Low operational current spin Hall nano-oscillators based on NiFe/W bilayers. Applied Physics Letters, 2016, 109, .	3.3	54
4	Confined Dissipative Droplet Solitons in Spin-Valve Nanowires with Perpendicular Magnetic Anisotropy. Physical Review Letters, 2014, 112, 047201.	7.8	53
5	Spin transfer torque generated magnetic droplet solitons (invited). Journal of Applied Physics, 2014, 115, .	2.5	47
6	Magnetic droplet nucleation boundary in orthogonal spin-torque nano-oscillators. Nature Communications, 2016, 7, 11209.	12.8	46
7	Role of boron diffusion in CoFeB/MgO magnetic tunnel junctions. Physical Review B, 2015, 91, .	3.2	40
8	Magnetic droplet solitons in orthogonal nano-contact spin torque oscillators. Physica B: Condensed Matter, 2014, 435, 84-87.	2.7	35
9	Giant magnetoresistance and long-range antiferromagnetic interlayer exchange coupling in (Ga,Mn)As/GaAs:Be multilayers. Physical Review B, 2010, 82, .	3.2	33
10	Parametric autoexcitation of magnetic droplet soliton perimeter modes. Physical Review B, 2017, 95, .	3.2	32
11	Tunable spin configuration in [Co/Ni]-NiFe spring magnets. Journal Physics D: Applied Physics, 2013, 46, 125004.	2.8	31
12	Dependence of the colored frequency noise in spin torque oscillators on current and magnetic field. Applied Physics Letters, 2014, 104, 092405.	3.3	28
13	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
14	Direct Observation of Zhang-Li Torque Expansion of Magnetic Droplet Solitons. Physical Review Letters, 2018, 120, 217204.	7.8	27
15	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
16	Effect of flattened surface morphology of anodized aluminum oxide templates on the magnetic properties of nanoporous Co/Pt and Co/Pd thin multilayered films. Applied Surface Science, 2018, 427, 649-655.	6.1	25
17	Magnetic structure and anisotropy of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow><mml:mo>[</mml:mo> Physical Review B, 2015, 91, .	3.2	24
18	Merging droplets in double nanocontact spin torque oscillators. Physical Review B, 2016, 93, .	3.2	24

#	Article	IF	Citations
19	Depth-Dependent Magnetization Profiles of Hybrid Exchange Springs. Physical Review Applied, 2014, 2, .	3.8	22
20	Magnetic droplet solitons in orthogonal spin valves. Low Temperature Physics, 2015, 41, 833-837.	0.6	21
21	Reduced spin torque nano-oscillator linewidth using He + irradiation. Applied Physics Letters, 2020, 116, 072403.	3.3	19
22	The effect of carrier density on magnetic anisotropy of the ferromagnetic semiconductor (Ga, Mn)As. Solid State Communications, 2009, 149, 1739-1742.	1.9	17
23	Order of magnitude improvement of nano-contact spin torque nano-oscillator performance. Nanoscale, 2017, 9, 1896-1900.	5.6	17
24	Magnetic droplet soliton nucleation in oblique fields. Physical Review B, 2018, 97, .	3.2	17
25	Four discrete Hall resistance states in single-layer Fe film for quaternary memory devices. Applied Physics Letters, 2009, 95, 202505.	3.3	16
26	Microwave Signal Generation in Single-Layer Nano-Contact Spin Torque Oscillators. IEEE Transactions on Magnetics, 2013, 49, 4331-4334.	2.1	15
27	Magnetic graphene/Ni-nano-crystal hybrid for small field magnetoresistive effect synthesized via electrochemical exfoliation/deposition technique. Journal of Materials Science: Materials in Electronics, 2018, 29, 4171-4178.	2.2	15
28	Quantitative analysis of the angle dependence of planar Hall effect observed in ferromagnetic GaMnAs film. Journal of Applied Physics, 2009, 105, .	2.5	12
29	A Nonvolatile Spintronic Memory Element with a Continuum of Resistance States. Advanced Functional Materials, 2013, 23, 1919-1922.	14.9	12
30	Magnetization reorientation inGaxMn1âˆ’xAsfilms: Planar Hall effect measurements. Physical Review B, 2010, 81, .	3.2	11
31	Thick Double-Biased IrMn/NiFe/IrMn Planar Hall Effect Bridge Sensors. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	11
32	Magnetodynamics in orthogonal nanocontact spin-torque nano-oscillators based on magnetic tunnel junctions. Applied Physics Letters, 2019, 115, .	3.3	11
33	Chiral excitations of magnetic droplet solitons driven by their own inertia. Physical Review B, 2020, 101, .	3.2	9
34	Magnetotransport properties of GaMnAs based trilayer structures with different thicknesses of InGaAs spacer layer. Journal of Applied Physics, 2009, 105, 07C505.	2.5	8
35	Asymmetry in the planar Hall resistance of Fe films grown on vicinal GaAs substrates. Journal of Applied Physics, 2010, 107, 09C505.	2.5	8
36	The critical role of next-nearest-neighbor interlayer interaction in the magnetic behavior of magnetic/non-magnetic multilayers. New Journal of Physics, 2013, 15, 123025.	2.9	8

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37	Impact of the Oersted Field on Droplet Nucleation Boundaries. IEEE Magnetics Letters, 2018, 9, 1-4.	1.1	8
38	Using Magnetic Droplet Nucleation to Determine the Spin Torque Efficiency and Asymmetry in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:msub><mml:mi>Co</mml:mi><mml:mi>x</mml:mi></mml:msub><mml:msub><mml:mrow><mml:mi>(Ni,</mml:mi></mml:mrow> Thin Films. Physical Review Applied, 2018, 10, .	3.8	7
39	Temperature dependence of magnetization in GaMnAs film with critical strain. Solid State Communications, 2009, 149, 1300-1303.	1.9	6
40	Vertical gradient of magnetic anisotropy in the ferromagnetic semiconductor (Ga,Mn)As film. Applied Physics Letters, 2010, 96, 092105.	3.3	6
41	Impact of intragrain spin wave reflections on nanocontact spin torque oscillators. Physical Review B, 2021, 103, .	3.2	6
42	Freezing and thawing magnetic droplet solitons. Nature Communications, 2022, 13, 2462.	12.8	6
43	Magnetotransport properties of ferromagnetic semiconductor GaMnAs-based superlattices. Current Applied Physics, 2012, 12, S31-S36.	2.4	5
44	Investigation of superlattices based on ferromagnetic semiconductor GaMnAs by planar Hall effect. Journal of Applied Physics, 2012, 111, 07D310.	2.5	4
45	Determination of interlayer exchange fields acting on individual (Ga,Mn)As layers in (Ga,Mn)As/GaAs multilayers. Japanese Journal of Applied Physics, 2015, 54, 033001.	1.5	4
46	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
47	Planar Hall-Effect Bridge Sensor With NiFeX (X <inline-formula> <tex-math) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 347 Transactions on Magnetics, 2015, 51, 1-4.	2.1	3
48	Low-current, narrow-linewidth microwave signal generation in NiMnSb based single-layer nanocontact spin-torque oscillators. Applied Physics Letters, 2016, 109, .	3.3	3
49	Magnetostatically driven domain replication in Ni/Co based perpendicular pseudo-spin-valves. Journal Physics D: Applied Physics, 2016, 49, 415004.	2.8	3
50	Monte Carlo Modeling of Mixed-Anisotropy $[ext{Co/Ni}]_{2}/ext{NiFe}$ Multilayers. IEEE Magnetics Letters, 2016, 7, 1-5.	1.1	3
51	Investigation of magnetic droplet solitons using x-ray holography with extended references. Scientific Reports, 2018, 8, 11533.	3.3	3
52	Tuning the magnetodynamic properties of all-perpendicular spin valves using He+ irradiation. AIP Advances, 2018, 8, 065309.	1.3	3
53	Mutual Synchronization of Constriction-Based Spin Hall Nano-Oscillators in Weak In-Plane Magnetic Fields. Physical Review Applied, 2022, 18, .	3.8	3
54	Reduction in the planar Hall resistance amplitude in the reversal process of Fe film with biaxial easy axes. Journal of Applied Physics, 2010, 107, 09C508.	2.5	2

#	Article	IF	Citations
55	Asymmetry in the reorientation process of magnetization for crossing the [11Â¯0] and the [110] directions in Ga1âˆ’xMnxAs epilayers. Journal of Applied Physics, 2010, 107, 09C304.	2.5	1