

# Saswati Barman

## List of Publications by Year in descending order

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47  
papers

942  
citations

471509

17  
h-index

477307

29  
g-index

47  
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47  
docs citations

47  
times ranked

738  
citing authors

#	ARTICLE	IF	CITATIONS
1	Operation of Magnetic Vortex Transistor by Spin-Polarized Current: A Micromagnetic Approach. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2022, 219, .	1.8	2
2	Nanochannels for spin-wave manipulation in Ni <sub>80</sub> Fe <sub>20</sub> nanodot arrays. <i>Journal of Magnetism and Magnetic Materials</i> , 2021, 522, 167550.	2.3	5
3	Magnonic crystals with complex geometry. <i>Physical Review B</i> , 2021, 103, .	3.2	7
4	Comparison of Spin-Wave Modes in Connected and Disconnected Artificial Spin Ice Nanostructures Using Brillouin Light Scattering Spectroscopy. <i>ACS Nano</i> , 2021, 15, 11734-11742.	14.6	8
5	Observation of magnon-magnon coupling with high cooperativity in Ni <sub>80</sub> Fe <sub>20</sub> cross-shaped nanoring array. <i>Nanotechnology</i> , 2021, 32, 395706.	2.6	9
6	Anisotropic spin-wave propagation in asymmetric width modulated Ni <sub>80</sub> Fe <sub>20</sub> nanostructures. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2021, 272, 115385.	3.5	8
7	Reconfigurable spin-wave dynamics in two-dimensional quasiperiodic magnonic crystals. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2021, 134, 114901.	2.7	2
8	Dynamic configurational anisotropy in Ni <sub>80</sub> Fe <sub>20</sub> antidot lattice with complex geometry. <i>Journal of Alloys and Compounds</i> , 2021, 884, 161105.	5.5	1
9	Spin-texture driven reconfigurable magnonics in chains of connected Ni <sub>80</sub> Fe <sub>20</sub> submicron dots. <i>Physical Review B</i> , 2020, 101, .	3.2	12
10	Magnetic vortex transistor based tri-state buffer Switch. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 502, 166520.	2.3	9
11	Tunability of Domain Structure and Magnonic Spectra in Antidot Arrays of Heusler Alloy. <i>Physical Review Applied</i> , 2019, 12, .	3.8	9
12	Anisotropic spin waves in two-dimensional triangular shaped bi-component magnonic crystal. <i>Journal of Magnetism and Magnetic Materials</i> , 2019, 490, 165484.	2.3	6
13	Controlled evolution of spin waves in unconventional defective honeycomb antidot lattices. <i>Journal of Magnetism and Magnetic Materials</i> , 2019, 489, 165408.	2.3	7
14	Shape dependent high frequency spin-wave dynamics in nanoscale magnonic crystals. <i>Journal of Magnetism and Magnetic Materials</i> , 2019, 487, 165263.	2.3	7
15	Influence of anisotropic dipolar interaction on the spin dynamics of Ni <sub>80</sub> Fe <sub>20</sub> nanodot arrays arranged in honeycomb and octagonal lattices. <i>Journal of Magnetism and Magnetic Materials</i> , 2018, 458, 95-104.	2.3	11
16	Active Control of Mode Crossover and Mode Hopping of Spin Waves in a Ferromagnetic Antidot Lattice. <i>Physical Review Applied</i> , 2018, 10, .	3.8	14
17	Tunable Angle-Dependent Magnetization Dynamics in Ni <sub>80</sub> Fe <sub>20</sub> Nanocross Structures of Varying Size. <i>Physical Review Applied</i> , 2018, 10, .	3.8	15
18	Field-controlled ultrafast magnetization dynamics in two-dimensional nanoscale ferromagnetic antidot arrays. <i>Beilstein Journal of Nanotechnology</i> , 2018, 9, 1123-1134.	2.8	10

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19	Efficient Modulation of Spin Waves in Two-Dimensional Octagonal Magnonic Crystal. ACS Nano, 2017, 11, 8814-8821.	14.6	30
20	Transition from strongly collective to completely isolated ultrafast magnetization dynamics in two-dimensional hexagonal arrays of nanodots with varying inter-dot separation. RSC Advances, 2016, 6, 110393-110399.	3.6	12
21	Enhanced Amplification and Fan-Out Operation in an All-Magnetic Transistor. Scientific Reports, 2016, 6, 33360.	3.3	11
22	Shape- and Interface-Induced Control of Spin Dynamics of Two-Dimensional Bicomponent Magnonic Crystals. ACS Applied Materials & Interfaces, 2016, 8, 18339-18346.	8.0	33
23	Tunable picosecond spin dynamics in two dimensional ferromagnetic nanodot arrays with varying lattice symmetry. RSC Advances, 2015, 5, 34027-34031.	3.6	9
24	All-optical investigation of tunable picosecond magnetization dynamics in ferromagnetic nanostripes with a width down to 50 nm. Nanoscale, 2015, 7, 18312-18319.	5.6	25
25	Width dependent transition of quantized spin-wave modes in Ni <sub>80</sub> Fe <sub>20</sub> square nanorings. Journal of Applied Physics, 2014, 116, 163912.	2.5	10
26	Thermal conduction in In <sub>x</sub> Ga <sub>1-x</sub> N film. Europhysics Letters, 2014, 107, 56001.	2.0	0
27	Tunable spin wave dynamics in two-dimensional Ni <sub>80</sub> Fe <sub>20</sub> nanodot lattices by varying dot shape. Applied Physics Letters, 2014, 105, .	3.3	27
28	Effect of the spin-twist structure on the spin-wave dynamics in Fe <sub>55</sub> Pt <sub>45</sub> /Ni <sub>80</sub> Fe <sub>20</sub> exchange coupled bi-layers with varying Ni <sub>80</sub> Fe <sub>20</sub> thickness. Journal of Applied Physics, 2014, 115, 17D105.	2.5	14
29	Time-domain study of spin-wave dynamics in two-dimensional arrays of bi-component magnetic structures. Applied Physics Letters, 2013, 102, .	3.3	14
30	Tunable Magnonic Spectra in Two-Dimensional Magnonic Crystals with Variable Lattice Symmetry. Advanced Functional Materials, 2013, 23, 2378-2386.	14.9	76
31	Effects of antidot shape on the spin wave spectra of two-dimensional Ni <sub>80</sub> Fe <sub>20</sub> antidot lattices. Applied Physics Letters, 2013, 103, .	3.3	36
32	Tunable magnetic anisotropy in two-dimensional arrays of Ni <sub>80</sub> Fe <sub>20</sub> elements. Applied Physics Letters, 2013, 103, .	3.3	6
33	Phonon heat conduction in Al <sub>x</sub> Ga <sub>1-x</sub> N film. Europhysics Letters, 2012, 97, 36011.	2.0	3
34	Optically Induced Tunable Magnetization Dynamics in Nanoscale Co Antidot Lattices. ACS Nano, 2012, 6, 3397-3403.	14.6	63
35	Detection of Picosecond Magnetization Dynamics of 50 nm Magnetic Dots down to the Single Dot Regime. ACS Nano, 2011, 5, 9559-9565.	14.6	55
36	Effect of isotopic purity on thermal conductivity of boron nitride: A theoretical study. Europhysics Letters, 2011, 96, 16004.	2.0	5

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37	All-Optical Excitation and Detection of Picosecond Dynamics of Ordered Arrays of Nanomagnets with Varying Areal Density. Applied Physics Express, 2011, 4, 113003.	2.4	18
38	Controlled propagation of locally excited vortex dynamics in linear nanomagnet arrays. Journal Physics D: Applied Physics, 2010, 43, 335001.	2.8	17
39	Dynamics of 1-D Chains of Magnetic Vortices in Response to Local and Global Excitations. IEEE Transactions on Magnetics, 2010, 46, 1342-1345.	2.1	34
40	Gyration mode splitting in magnetostatically coupled magnetic vortices in an array. Journal Physics D: Applied Physics, 2010, 43, 422001.	2.8	44
41	Theory of the lattice thermal conductivity in bulk and films of GaN. Physical Review B, 2010, 81, .	3.2	47
42	Dynamic dephasing of magnetization precession in arrays of thin magnetic elements. Physical Review B, 2009, 79, .	3.2	53
43	Temperature dependence of the thermal conductivity of different forms of diamond. Journal of Applied Physics, 2007, 101, 123507.	2.5	32
44	Quantitative estimate of phonon scattering rates in different forms of diamond. Physical Review B, 2006, 73, .	3.2	18
45	Thermal conductivity of suspended GaAs nanostructures: Theoretical study. Physical Review B, 2006, 73, .	3.2	19
46	Long-wavelength nonequilibrium optical phonon dynamics in cubic and hexagonal semiconductors. Physical Review B, 2004, 69, .	3.2	71
47	Lifetime of nonequilibrium zone-center longitudinal optical phonons in zinc-blende materials. Applied Physics Letters, 2002, 81, 3395-3397.	3.3	18