Saswati Barman

List of Publications by Year
in descending order

47 papers	942 citations	471509 17 h-index	477307 29 g-index
47 all docs	47 docs citations	47 times ranked	738 citing authors

#	Article	IF	Citations
1	Tunable Magnonic Spectra in Twoâ€Dimensional Magnonic Crystals with Variable Lattice Symmetry. Advanced Functional Materials, 2013, 23, 2378-2386.	14.9	76
2	Long-wavelength nonequilibrium optical phonon dynamics in cubic and hexagonal semiconductors. Physical Review B, 2004, 69, .	3.2	71
3	Optically Induced Tunable Magnetization Dynamics in Nanoscale Co Antidot Lattices. ACS Nano, 2012, 6, 3397-3403.	14.6	63
4	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
5	Dynamic dephasing of magnetization precession in arrays of thin magnetic elements. Physical Review B, 2009, 79, .	3.2	53
6	Theory of the lattice thermal conductivity in bulk and films of GaN. Physical Review B, 2010, 81, .	3.2	47
7	Gyration mode splitting in magnetostatically coupled magnetic vortices in an array. Journal Physics D: Applied Physics, 2010, 43, 422001.	2.8	44
8	Effects of antidot shape on the spin wave spectra of two-dimensional Ni80Fe20 antidot lattices. Applied Physics Letters, 2013, 103, .	3.3	36
9	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
10	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
11	Temperature dependence of the thermal conductivity of different forms of diamond. Journal of Applied Physics, 2007, 101, 123507.	2.5	32
12	Efficient Modulation of Spin Waves in Two-Dimensional Octagonal Magnonic Crystal. ACS Nano, 2017, 11, 8814-8821.	14.6	30
13	Tunable spin wave dynamics in two-dimensional Ni80Fe20 nanodot lattices by varying dot shape. Applied Physics Letters, 2014, 105, .	3.3	27
14	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
15	Thermal conductivity of suspendedGaAsnanostructures: Theoretical study. Physical Review B, 2006, 73, .	3.2	19
16	Lifetime of nonequilibrium zone-center longitudinal optical phonons in zinc-blende materials. Applied Physics Letters, 2002, 81, 3395-3397.	3.3	18
17	Quantitative estimate of phonon scattering rates in different forms of diamond. Physical Review B, 2006, 73, .	3.2	18
18	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

#	Article	IF	Citations
19	Controlled propagation of locally excited vortex dynamics in linear nanomagnet arrays. Journal Physics D: Applied Physics, 2010, 43, 335001.	2.8	17
20	Tunable Angle-Dependent Magnetization Dynamics in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:msub><mml:mi>Ni</mml:mi><mml:mn>80</mml:mn></mml:msub><mml:msub><mml:mi>Fe</mml:mi><mml: Nanocross Structures of Varying Size. Physical Review Applied, 2018, 10, .	3.8	15
21	Time-domain study of spin-wave dynamics in two-dimensional arrays of bi-component magnetic structures. Applied Physics Letters, 2013, 102, .	3.3	14
22	Effect of the spin-twist structure on the spin-wave dynamics in Fe55Pt45/Ni80Fe20 exchange coupled bi-layers with varying Ni80Fe20 thickness. Journal of Applied Physics, 2014, 115, 17D105.	2.5	14
23	Active Control of Mode Crossover and Mode Hopping of Spin Waves in a Ferromagnetic Antidot Lattice. Physical Review Applied, 2018, 10, .	3.8	14
24	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
25	Spin-texture driven reconfigurable magnonics in chains of connected<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="normal">Ni</mml:mi><mml:mn>80</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">Fe</mml:mi><mml:mn>20</mml:mn></mml:msub></mml:mrow></mml:math>submicron dots. Physical Review B, 2020, 101, .	3.2	12
26	Enhanced Amplification and Fan-Out Operation in an All-Magnetic Transistor. Scientific Reports, 2016, 6, 33360.	3.3	11
27	Influence of anisotropic dipolar interaction on the spin dynamics of Ni 80 Fe 20 nanodot arrays arranged in honeycomb and octagonal lattices. Journal of Magnetism and Magnetic Materials, 2018, 458, 95-104.	2.3	11
28	Width dependent transition of quantized spin-wave modes in Ni80Fe20 square nanorings. Journal of Applied Physics, 2014, 116, 163912.	2.5	10
29	Field-controlled ultrafast magnetization dynamics in two-dimensional nanoscale ferromagnetic antidot arrays. Beilstein Journal of Nanotechnology, 2018, 9, 1123-1134.	2.8	10
30	Tunable picosecond spin dynamics in two dimensional ferromagnetic nanodot arrays with varying lattice symmetry. RSC Advances, 2015, 5, 34027-34031.	3.6	9
31	Tunability of Domain Structure and Magnonic Spectra in Antidot Arrays of Heusler Alloy. Physical Review Applied, 2019, 12, .	3.8	9
32	Magnetic vortex transistor based tri-state buffer Switch. Journal of Magnetism and Magnetic Materials, 2020, 502, 166520.	2.3	9
33	Observation of magnonâ€“magnon coupling with high cooperativity in Ni₈₀Fe₂₀ cross-shaped nanoring array. Nanotechnology, 2021, 32, 395706.	2.6	9
34	Comparison of Spin-Wave Modes in Connected and Disconnected Artificial Spin Ice Nanostructures Using Brillouin Light Scattering Spectroscopy. ACS Nano, 2021, 15, 11734-11742.	14.6	8
35	Anisotropic spin-wave propagation in asymmetric width modulated Ni80Fe20 nanostripes. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 272, 115385.	3.5	8
36	Controlled evolution of spin waves in unconventional defective honeycomb antidot lattices. Journal of Magnetism and Magnetic Materials, 2019, 489, 165408.	2.3	7

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37	Shape dependent high frequency spin-wave dynamics in nanoscale magnonic crystals. Journal of Magnetism and Magnetic Materials, 2019, 487, 165263.	2.3	7
38	Magnonic crystals with complex geometry. Physical Review B, 2021, 103, .	3.2	7
39	Tunable magnetic anisotropy in two-dimensional arrays of Ni80Fe20 elements. Applied Physics Letters, 2013, 103, .	3.3	6
40	Anisotropic spin waves in two-dimensional triangular shaped bi-component magnonic crystal. Journal of Magnetism and Magnetic Materials, 2019, 490, 165484.	2.3	6
41	Effect of isotopic purity on thermal conductivity of boron nitride: A theoretical study. Europhysics Letters, 2011, 96, 16004.	2.0	5
42	Nanochannels for spin-wave manipulation in Ni80Fe20 nanodot arrays. Journal of Magnetism and Magnetic Materials, 2021, 522, 167550.	2.3	5
43	Phonon heat conduction in Al x Ga 1-x N film. Europhysics Letters, 2012, 97, 36011.	2.0	3
44	Reconfigurable spin-wave dynamics in two-dimensional quasiperiodic magnonic crystals. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 134, 114901.	2.7	2
45	Operation of Magnetic Vortex Transistor by Spinâ€Polarized Current: A Micromagnetic Approach. Physica Status Solidi (A) Applications and Materials Science, 2022, 219, .	1.8	2
46	Dynamic configurational anisotropy in Ni80Fe20 antidot lattice with complex geometry. Journal of Alloys and Compounds, 2021, 884, 161105.	5.5	1
47	Thermal conduction in In x Ga 1â^'x N film. Europhysics Letters, 2014, 107, 56001.	2.0	0