

# Jaivardhan Sinha

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8716548/publications.pdf>

Version: 2024-02-01

58  
papers

2,618  
citations

331670

21  
h-index

223800

46  
g-index

61  
all docs

61  
docs citations

61  
times ranked

2689  
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhanced magnetisation with increased chromium concentration in FeCoCr <sub>x</sub> Ni <sub>2</sub> Al high-entropy alloy. <i>Materials Science and Technology</i> , 2022, 38, 12-18.	1.6	0
2	Magnetic Properties of Ultrathin As-deposited and Annealed Ta/CoFeB/TaO <sub>x</sub> Heterostructures. <i>IOP Conference Series: Materials Science and Engineering</i> , 2022, 1219, 012007.	0.6	0
3	Mechanism of femtosecond laser induced ultrafast demagnetization in ultrathin film magnetic multilayers. <i>Journal of Materials Science</i> , 2022, 57, 6212-6222.	3.7	6
4	Effect of Ta capping layer on spin dynamics in Co50Fe50 thin films. <i>Solid State Communications</i> , 2022, 348-349, 114743.	1.9	1
5	The 2021 Magnonics Roadmap. <i>Journal of Physics Condensed Matter</i> , 2021, 33, 413001.	1.8	287
6	Controlled Domain-Wall Pair to Skyrmion Conversion in Typical Junction Geometry Useful for Magnetic Memory Devices. <i>ECS Journal of Solid State Science and Technology</i> , 2021, 10, 081002.	1.8	5
7	Anisotropic spin-wave propagation in asymmetric width modulated Ni80Fe20 nanostripes. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2021, 272, 115385.	3.5	8
8	X-ray photoelectron spectroscopy investigation of Ta/CoFeB/TaO <sub>x</sub> heterostructures. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2021, 272, 115367.	3.5	5
9	Dzyaloshinskiiâ€Moriya Interaction induced hysteresis loop shift in perpendicularly magnetized triangular nanodot. <i>Materials Letters</i> , 2021, 303, 130492.	2.6	3
10	Influence of variation of tungsten layer thickness on interfacial Dzyaloshinskiiâ€Moriya interaction in W/CoFeB/SiO <sub>2</sub> heterostructures. <i>Bulletin of Materials Science</i> , 2021, 44, 1.	1.7	0
11	Observation of spectral narrowing and mode conversion in two-dimensional binary magnonic crystal. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 501, 166378.	2.3	2
12	Spin-texture driven reconfigurable magnonics in chains of connected $\text{Ni}_{80}\text{Fe}_{20}$ submicron dots. <i>Physical Review B</i> , 2020, 101, .	3.2	12
13	Cost effective liquid phase exfoliation of MoS <sub>2</sub> nanosheets and photocatalytic activity for wastewater treatment enforced by visible light. <i>Scientific Reports</i> , 2020, 10, 10759.	3.3	100
14	All-optical investigation of anisotropic spin pumping in W/CoFeB/W heterostructure. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 502, 166545.	2.3	3
15	Observation of angle-dependent mode conversion and mode hopping in 2D annular antidot lattice. <i>Scientific Reports</i> , 2019, 9, 12138.	3.3	4
16	All-optical detection of interfacial spin transparency from spin pumping in $\hat{I}^2$ -Ta/CoFeB thin films. <i>Science Advances</i> , 2019, 5, eaav7200.	10.3	60
17	Flipping anisotropy and changing magnetization reversal modes in nano-confined Cobalt structures. <i>Journal of Magnetism and Magnetic Materials</i> , 2019, 476, 412-416.	2.3	8
18	Effects of nanodots shape and lattice constants on the spin wave dynamics of patterned permalloy dots. <i>AIP Advances</i> , 2019, 9, .	1.3	1

#	ARTICLE	IF	CITATIONS
19	Spin Dynamics and Damping in Ferromagnetic Thin Films and Nanostructures. , 2018, , .		56
20	All optical detection of picosecond spin-wave dynamics in 2D annular antidot lattice. Journal Physics D: Applied Physics, 2018, 51, 055004.	2.8	6
21	Magnetic Damping. , 2018, , 27-46.		1
22	Electrical and Optical Control of Spin Dynamics. , 2018, , 101-126.		0
23	Summary and Future Direction. , 2018, , 153-156.		0
24	Dependence of Interfacial Dzyaloshinskii-Moriya Interaction on Layer Thicknesses in $\text{Ta}/\text{Co}/\text{B}/\text{TaO}$ Heterostructures from Brillouin Light. Physical Review Applied, 2018, 9, .	3.8	29
25	Experimental Techniques to Investigate Spin Dynamics. , 2018, , 47-82.		0
26	Relativistic torques induced by currents in magnetic materials: physics and experiments. RSC Advances, 2018, 8, 25079-25093.	3.6	3
27	Ultrafast magnetization dynamics in nanoscale two-dimensional Permalloy annular antidot lattices. , 2018, , .		0
28	Evidence of magneto-structural coupling affecting magnetic anisotropy in a cobalt nano-composite. Journal of Physics Condensed Matter, 2017, 29, 425804.	1.8	1
29	Extrinsic Spin-Orbit Coupling-Induced Large Modulation of Gilbert Damping Coefficient in CoFeB Thin Film on the Graphene Stack with Different Defect Density. Journal of Physical Chemistry C, 2017, 121, 17442-17449.	3.1	8
30	Pseudo-One-Dimensional Magnonic Crystals for High-Frequency Nanoscale Devices. Physical Review Applied, 2017, 8, .	3.8	26
31	All-optical detection of the spin Hall angle in $\text{W}/\text{CoFeB}$ with varying thickness of the tungsten layer. Physical Review B. 2017, 96, .	3.2	47
32	Efficient terahertz anti-reflection properties of metallic anti-dot structures. Optics Letters, 2017, 42, 1764.	3.3	6
33	Direct Observation of Interfacial Dzyaloshinskii-Moriya Interaction from Asymmetric Spin-wave Propagation in $\text{W}/\text{CoFeB}/\text{SiO}_2$ Heterostructures Down to Sub-nanometer CoFeB Thickness. Scientific Reports, 2016, 6, 32592.	3.3	67
34	Spin-Orbit Effects in $\text{CoFeB}/\text{MgO}$ Heterostructures with Heavy Metal Underlayers. Spin, 2016, 06, 1640002.	1.3	6
35	Giant nonreciprocal emission of spin waves in Ta/Py bilayers. Science Advances, 2016, 2, e1501892.	10.3	41
36	Enhanced orbital magnetic moments in magnetic heterostructures with interface perpendicular magnetic anisotropy. Scientific Reports, 2015, 5, 14858.	3.3	33

#	ARTICLE	IF	CITATIONS
37	Tunable Magnetization Dynamics in Interfacially Modified Ni <sub>81</sub> Fe <sub>19</sub> /Pt Bilayer Thin Film Microstructures. Scientific Reports, 2015, 5, 17596.	3.3	39
38	Tunable spin wave properties in [Co/Ni <sub>80</sub> Fe <sub>20</sub> ] multilayers with the number of bilayer repetition. Journal Physics D: Applied Physics, 2015, 48, 395001.	2.8	6
39	Improved magnetic damping in CoFeB/MgO with an N-doped Ta underlayer investigated using the Brillouin light scattering technique. RSC Advances, 2015, 5, 57815-57819.	3.6	8
40	Current-driven asymmetric magnetization switching in perpendicularly magnetized CoFeB/MgO heterostructures. Physical Review B, 2015, 91, .	3.2	78
41	Influence of boron diffusion on the perpendicular magnetic anisotropy in Ta CoFeB MgO ultrathin films. Journal of Applied Physics, 2015, 117, .	2.5	74
42	Time-domain detection of current controlled magnetization damping in Pt/Ni <sub>81</sub> Fe <sub>19</sub> bilayer and determination of Pt spin Hall angle. Applied Physics Letters, 2014, 105, .	3.3	29
43	Interface control of the magnetic chirality in CoFeB/MgO heterostructures with heavy-metal underlayers. Nature Communications, 2014, 5, 4655.	12.8	327
44	Linewidth Variation of the Higher Harmonics in Spin-Torque Vortex Oscillators. IEEE Magnetics Letters, 2014, 5, 1-4.	1.1	1
45	Anomalous temperature dependence of current-induced torques in $\text{CoFeB}/\text{MgO}$ with Ta-based underlayers. Physical Review B, 2014, 89, .	1.2	1
46	Enhanced interface perpendicular magnetic anisotropy in Ta CoFeB MgO using nitrogen doped Ta underlayers. Applied Physics Letters, 2013, 102, .	3.3	117
47	Layer thickness dependence of the current-induced effective field vector in Ta CoFeB MgO. Nature Materials, 2013, 12, 240-245.	27.5	835
48	Spatial control of magnetic anisotropy for current induced domain wall injection in perpendicularly magnetized CoFeB MgO nanostructures. Applied Physics Letters, 2012, 100, 192411.	3.3	16
49	Large amplitude microwave emission and reduced nonlinear phase noise in Co <sub>2</sub> Fe(Ge <sub>0.5</sub> Ga <sub>0.5</sub> ) Heusler alloy based pseudo spin valve nanopillars. Applied Physics Letters, 2011, 99, .	3.3	28
50	Metastable magnetization response of the vortex state due to patterned blind hole pins. Physica C: Superconductivity and Its Applications, 2010, 470, S817-S818.	1.2	4
51	Evolution in the time series of vortex velocity fluctuations across different regimes of vortex flow. Physica C: Superconductivity and Its Applications, 2010, 470, S830-S831.	1.2	0
52	Driven weak to strong pinning crossover in a partially nanopatterned 2H-NbSe <sub>2</sub> single crystal. Superconductor Science and Technology, 2010, 23, 075002.	3.5	5
53	Large Low-Frequency Fluctuations in the Velocity of a Driven Vortex Lattice in a Single Crystal of 2H-NbSe <sub>2</sub> Superconductor. Physical Review Letters, 2009, 103, 167001.	7.8	25
54	A compact low temperature scanning tunneling microscope. Journal of Physics: Conference Series, 2009, 150, 012007.	0.4	0

#	ARTICLE	IF	CITATIONS
55	Mapping giant magnetic fields around dense solid plasmas by high-resolution magneto-optical microscopy. Physical Review E, 2008, 77, 046118.	2.1	9
56	Instabilities in the Vortex Matter and the Peak Effect Phenomenon. Physical Review Letters, 2007, 98, 027003.	7.8	31
57	Disorder-induced phase coexistence in bulk doped manganites and its suppression in nanometer-sized crystals: The case of La <sub>0.9</sub> Ca <sub>0.1</sub> MnO <sub>3</sub> . Physical Review B, 2007, 76, .	3.2	57
58	Pinning regimes in the vortex solid and crossover between them in single crystals of 2H-NbSe <sub>2</sub> . Physica C: Superconductivity and Its Applications, 2007, 460-462, 710-711.	1.2	0