

# Senfu Zhang

## List of Publications by Year in descending order

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37  
papers

1,004  
citations

567281

15  
h-index

434195

31  
g-index

38  
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38  
docs citations

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times ranked

1547  
citing authors

#	ARTICLE	IF	CITATIONS
1	Néel-type skyrmion in WTe <sub>2</sub> /Fe <sub>3</sub> GeTe <sub>2</sub> van der Waals heterostructure. Nature Communications, 2020, 11, 3860.	12.8	208
2	Current-induced magnetic skyrmions oscillator. New Journal of Physics, 2015, 17, 023061.	2.9	149
3	Spin-momentum locking and spin-orbit torques in magnetic nano-heterojunctions composed of Weyl semimetal WTe <sub>2</sub> . Nature Communications, 2018, 9, 3990.	12.8	105
4	Direct writing of room temperature and zero field skyrmion lattices by a scanning local magnetic field. Applied Physics Letters, 2018, 112, .	3.3	68
5	Determination of chirality and density control of Néel-type skyrmions with in-plane magnetic field. Communications Physics, 2018, 1, .	5.3	48
6	Current-induced Helicity Reversal of a Single Skyrmionic Bubble Chain in a Nanostructured Frustrated Magnet. Advanced Materials, 2020, 32, e1904815.	21.0	47
7	Manipulating the Topology of Nanoscale Skyrmion Bubbles by Spatially Geometric Confinement. ACS Nano, 2019, 13, 922-929.	14.6	43
8	Chiral Helimagnetism and One-dimensional Magnetic Solitons in a Cr-intercalated Transition Metal Dichalcogenide. Advanced Materials, 2021, 33, e2101131.	21.0	40
9	Creation of a thermally assisted skyrmion lattice in Pt/Co/Ta multilayer films. Applied Physics Letters, 2018, 113, .	3.3	38
10	Electron Beam Lithography of Magnetic Skyrmions. Advanced Materials, 2020, 32, e2003003.	21.0	30
11	Nanoscale characterisation and magnetic properties of Co <sub>81</sub> /Cu <sub>19</sub> /Cu multilayer nanowires. Journal of Materials Chemistry C, 2015, 3, 85-93.	5.5	22
12	Writing skyrmions with a magnetic dipole. Journal of Applied Physics, 2018, 124, .	2.5	20
13	Direct imaging of an inhomogeneous electric current distribution using the trajectory of magnetic half-skyrmions. Science Advances, 2020, 6, eaay1876.	10.3	20
14	Berry Phase Engineering in SrRuO <sub>3</sub> /SrIrO <sub>3</sub> /SrTiO <sub>3</sub> Superlattices Induced by Band Structure Reconstruction. ACS Nano, 2021, 15, 5086-5095.	14.6	19
15	Static property and current-driven precession of 2π-vortex in nano-disk with Dzyaloshinskii-Moriya interaction. AIP Advances, 2015, 5, .	1.3	17
16	Effect of Dzyaloshinskii-Moriya interaction on the magnetic vortex oscillator driven by spin-polarized current. Journal of Applied Physics, 2015, 117, .	2.5	16
17	Deformation of Néel-type skyrmions revealed by Lorentz transmission electron microscopy. Applied Physics Letters, 2020, 116, 142402.	3.3	13
18	Giant magnetoelectric effect in perpendicularly magnetized Pt/Co/Ta ultrathin films on a ferroelectric substrate. Materials Horizons, 2020, 7, 2328-2335.	12.2	12

#	ARTICLE	IF	CITATIONS
19	Thermal creation of skyrmions in ferromagnetic films with perpendicular anisotropy and Dzyaloshinskii-Moriya interaction. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 493, 165724.	2.3	10
20	Superposition of Emergent Monopole and Antimonopole in CoTb Thin Films. <i>Physical Review Letters</i> , 2021, 127, 217201.	7.8	10
21	Formation and magnetic-field stability of magnetic dipole skyrmions and bubbles in a ferrimagnet. <i>Applied Physics Letters</i> , 2020, 116, .	3.3	9
22	Propagating and reflecting of spin wave in permalloy nanostrip with 360° domain wall. <i>Journal of Applied Physics</i> , 2014, 115, 013908.	2.5	8
23	Thermally induced generation and annihilation of magnetic chiral skyrmion bubbles and achiral bubbles in MnNiGa magnets. <i>Applied Physics Letters</i> , 2020, 116, .	3.3	8
24	Precise Tuning of Skyrmion Density in a Controllable Manner by Ion Irradiation. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 34011-34019.	8.0	8
25	Current-induced collective motion of 180° and 360° domain walls in double nanowires system. <i>Journal of Magnetism and Magnetic Materials</i> , 2013, 347, 124-130.	2.3	6
26	Tunable Static and High-Frequency Magnetic Properties of FeCo Films by an Applied Magnetic Field. <i>Science of Advanced Materials</i> , 2016, 8, 1061-1065.	0.7	6
27	Current-induced domain wall motion in nanostrip-nanobars system. <i>Japanese Journal of Applied Physics</i> , 2014, 53, 073001.	1.5	5
28	Dynamic response for Dzyaloshinskii-Moriya interaction on bubble-like magnetic solitons driven by spin-polarized current. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 195004.	2.8	4
29	Current-induced 360° domain wall motion with Dzyaloshinskii-Moriya interaction. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 175005.	2.8	3
30	Competition between Chiral Energy and Chiral Damping in the Asymmetric Expansion of Magnetic Bubbles. <i>ACS Applied Electronic Materials</i> , 2021, 3, 4734-4742.	4.3	3
31	Tuning giant magnetoimpedance response of Fe <sub>75.5</sub> Si <sub>13.5</sub> B <sub>7</sub> Nb <sub>3</sub> Cu <sub>1</sub> amorphous ribbon by laser ablation. <i>Journal of Magnetism and Magnetic Materials</i> , 2012, 324, 3189-3192.	2.3	2
32	Characterizing the spin orbit torque field-like term in in-plane magnetic system using transverse field. <i>Journal of Applied Physics</i> , 2016, 120, 083908.	2.5	2
33	Interfacial scattering effect on anisotropic magnetoresistance and anomalous Hall effect in Ta/Fe multilayers. <i>AIP Advances</i> , 2018, 8, 055813.	1.3	2
34	Phase locking of vortex cores in two coupled magnetic nanopillars. <i>AIP Advances</i> , 2014, 4, .	1.3	1
35	Effect of perpendicular magnetic field on bubble-like magnetic solitons driven by spin-polarized current with Dzyaloshinskii-Moriya interaction. <i>Journal of Applied Physics</i> , 2016, 120, 183901.	2.5	1
36	Magnetotransport Mechanism of Individual Nanostructures via Direct Magnetoresistance Measurement in situ SEM. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 39798-39806.	8.0	1

#	ARTICLE	IF	CITATIONS
37	Vortex Dynamics in Magnetic Nanodisks With a Ring of Magnetic Defects. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	0