Levente RÃ³zsa

List of Publications by Year
in descending order

33	1,151	471509 17	395702 33
papers	citations	h-index	g-index

34	34	34	1387
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Toward tailoring Majorana bound states in artificially constructed magnetic atom chains on elemental superconductors. Science Advances, 2018, 4, eaar5251.	10.3	233
2	Thermal skyrmion diffusion used in a reshuffler device. Nature Nanotechnology, 2019, 14, 658-661.	31.5	221
3	Skyrmions with Attractive Interactions in an Ultrathin Magnetic Film. Physical Review Letters, 2016, 117, 157205.	7.8	80
4	Complex magnetic phase diagram and skyrmion lifetime in an ultrathin film from atomistic simulations. Physical Review B, 2016, 93, .	3.2	65
5	Formation and stability of metastable skyrmionic spin structures with various topologies in an ultrathin film. Physical Review B, 2017, 95, .	3.2	61
6	Spin-orbit coupling induced splitting of Yu-Shiba-Rusinov states in antiferromagnetic dimers. Nature Communications, 2021, 12, 2040.	12.8	48
7	Precursors of Majorana modes and their length-dependent energy oscillations probed at both ends of atomic Shiba chains. Nature Nanotechnology, 2022, 17, 384-389.	31.5	44
8	Inducing skyrmions in ultrathin Fe films by hydrogen exposure. Nature Communications, 2018, 9, 1571.	12.8	40
9	Controlled creation and stability of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>k</mml:mi><mml:mi>Ï€</mml:mi></mml:mrow></mml skyrmions on a discrete lattice. Physical Review B, 2018, 97, .	3.2	34
10	Temperature scaling of the Dzyaloshinsky-Moriya interaction in the spin wave spectrum. Physical Review B, 2017, 96, .	3.2	33
11	Magnetism and in-gap states of 3d transition metal atoms on superconducting Re. Npj Quantum Materials, 2019, 4, .	5.2	29
12	Skyrmion Dynamics at Finite Temperatures: Beyond Thieleâ€™s Equation. Physical Review Letters, 2021, 127, 047203.	7.8	26
13	Stochastic dynamics and pattern formation of geometrically confined skyrmions. Communications Physics, 2019, 2, .	5.3	24
14	Temperature scaling of two-ion anisotropy in pure and mixed anisotropy systems. Physical Review B, 2020, 102, .	3.2	24
15	Nutation in antiferromagnetic resonance. Physical Review B, 2021, 103, .	3.2	22
16	Magnetic phase diagram of an Fe monolayer on W(110) and Ta(110) surfaces based onab initiocalculations. Physical Review B, 2015, 91, .	3.2	21
17	Long-range focusing of magnetic bound states in superconducting lanthanum. Nature Communications, 2020, 11, 4573.	12.8	19
18	Localized spin waves in isolated <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>k</mml:mi><mml:mi>Ï€</mml:mi></mml:mrow></mml:m skyrmions. Physical Review B, 2018, 98, .	3.2	17

#	ARTICLE	IF	CITATIONS
19	Langevin spin dynamics based onab initiocalculations: numerical schemes and applications. Journal of Physics Condensed Matter, 2014, 26, 216003.	1.8	12
20	Anisotropic non-split zero-energy vortex bound states in a conventional superconductor. Applied Physics Reviews, 2021, 8, .	11.3	12
21	Coexistence of antiferromagnetism and superconductivity in Mn/Nb(110). Physical Review B, 2022, 105, .	3.2	12
22	Reduced thermal stability of antiferromagnetic nanostructures. Physical Review B, 2019, 100, .	3.2	11
23	Effective damping enhancement in noncollinear spin structures. Physical Review B, 2018, 98, .	3.2	10
24	Relativistic and thermal effects on the magnon spectrum of a ferromagnetic monolayer. Journal of Physics Condensed Matter, 2013, 25, 506002.	1.8	9
25	Temperature-Induced Increase of Spin Spiral Periods. Physical Review Letters, 2017, 119, 037202.	7.8	9
26	Spin-polarized scanning tunneling microscopy characteristics of skyrmionic spin structures exhibiting various topologies. Physical Review B, 2017, 96, .	3.2	9
27	Electronic and Magnetic Properties of Building Blocks of Mn and Fe Atomic Chains on Nb(110). Nanomaterials, 2021, 11, 1933.	4.1	7
28	Spin waves in skyrmionic structures with various topological charges. Journal of Physics Condensed Matter, 2020, 33, 054001.	1.8	6
29	Spin reorientation transition in an ultrathin Fe film on W(110) induced by Dzyaloshinsky-Moriya interactions. Physical Review B, 2020, 102, .	3.2	5
30	Skyrmions as quasiparticles: Free energy and entropy. Physical Review B, 2021, 103, .	3.2	4
31	Theory of high-resolution tunneling spin transport on a magnetic skyrmion. Physical Review B, 2018, 97, .	3.2	2
32	Non-Collinear Magnetic Configurations at Finite Temperature in Thin Films. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	1
33	High-resolution tunneling spin transport characteristics of topologically distinct magnetic skyrmionic textures from theoretical calculations. Journal of Magnetism and Magnetic Materials, 2021, 519, 167440.	2.3	1