BÃ¶rge GÃ¶bel

List of Publications by Year
in descending order

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29 papers	1,316 citations	394421 19 h-index	552781 26 g-index
31 all docs	31 docs citations	31 times ranked	1169 citing authors

#	Article	IF	Citations
1	Beyond skyrmions: Review and perspectives of alternative magnetic quasiparticles. Physics Reports, 2021, 895, 1-28.	25.6	307
2	Antiferromagnetic skyrmion crystals: Generation, topological Hall, and topological spin Hall effect. Physical Review B, 2017, 96, .	3.2	122
3	Magnetic bimerons as skyrmion analogues in in-plane magnets. Physical Review B, 2019, 99, .	3.2	118
4	Mapping spinâ€“charge conversion to the band structure in a topological oxide two-dimensional electron gas. Nature Materials, 2019, 18, 1187-1193.	27.5	103
5	Elliptical Bloch skyrmion chiral twins in an antiskyrmion system. Nature Communications, 2020, 11, 1115.	12.8	92
6	Electrical writing, deleting, reading, and moving of magnetic skyrmioniums in a racetrack device. Scientific Reports, 2019, 9, 12119.	3.3	70
7	Unconventional topological Hall effect in skyrmion crystals caused by the topology of the lattice. Physical Review B, 2017, 95, .	3.2	59
8	Overcoming the speed limit in skyrmion racetrack devices by suppressing the skyrmion Hall effect. Physical Review B, 2019, 99, .	3.2	46
9	Spin and orbital Edelstein effects in a two-dimensional electron gas: Theory and application to <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>SrTiO</mml:mi><mml:mn>3</mml:mn></mml:msub><m interfaces. Physical Review Research, 2021, 3, .	3.6	37
10	Topological Hall signatures of magnetic hopfions. Physical Review Research, 2020, 2, .	3.6	32
11	Magnon transport in noncollinear spin textures: Anisotropies and topological magnon Hall effects. Physical Review B, 2017, 95, .	3.2	30
12	Forming individual magnetic biskyrmions by merging two skyrmions in a centrosymmetric nanodisk. Scientific Reports, 2019, 9, 9521.	3.3	30
13	Skyrmion ratchet propagation: utilizing the skyrmion Hall effect in AC racetrack storage devices. Scientific Reports, 2021, 11, 3020.	3.3	30
14	Taking an electron-magnon duality shortcut from electron to magnon transport. Physical Review B, 2018, 97, .	3.2	26
15	Magnetoelectric effect and orbital magnetization in skyrmion crystals: Detection and characterization of skyrmions. Physical Review B, 2019, 99, .	3.2	26
16	The family of topological Hall effects for electrons in skyrmion crystals. European Physical Journal B, 2018, 91, 1.	1.5	25
17	Setting of the magnetic structure of chiral kagome antiferromagnets by a seeded spin-orbit torque. Science Advances, 2022, 8, .	10.3	25
18	Evolution and competition between chiral spin textures in nanostripes with D _{2d} symmetry. Science Advances, 2020, 6, .	10.3	24

#	Article	IF	Citations
19	Colossal topological Hall effect at the transition between isolated and lattice-phase interfacial skyrmions. Nature Communications, 2021, 12, 2758.	12.8	21
20	Topological Hall Signatures of Two Chiral Spin Textures Hosted in a Single Tetragonal Inverse Heusler Thin Film. ACS Nano, 2020, 14, 13463-13469.	14.6	19
21	Signatures of lattice geometry in quantum and topological Hall effect. New Journal of Physics, 2017, 19, 063042.	2.9	18
22	Observation of NÃ©el-type skyrmions in acentric self-intercalated Cr1+ÎTe2. Nature Communications, 2022, 13, .	12.8	18
23	Microscopic origin of the anomalous Hall effect in noncollinear kagome magnets. Physical Review Research, 2020, 2, .	3.6	17
24	Spin Hall effect in noncollinear kagome antiferromagnets. Physical Review B, 2021, 104, .	3.2	9
25	Observation of fractional spin textures in a Heusler material. Nature Communications, 2022, 13, 2348.	12.8	9
26	Quaternary-Digital Data Storage Based on Magnetic Bubbles in Anisotropic Materials. Physical Review Applied, 2021, 15, .	3.8	2
27	Compensated Quantum and Topological Hall Effects of Electrons in Polyatomic Stripe Lattices. Physica Status Solidi (B): Basic Research, 2020, 257, 1900518.	1.5	1
28	Mapping giant spin-charge conversion to the band structure in a topological oxide two-dimensional electron gas (Conference Presentation). , 2019, , .		0
29	Ferroelectric control of the spin to charge interconversion in oxide two-dimensional gas. , 2020, , .		0