

# Hans-Benjamin Braun

## List of Publications by Year in descending order

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44  
papers

1,979  
citations

331670

21  
h-index

276875

41  
g-index

45  
all docs

45  
docs citations

45  
times ranked

1985  
citing authors

#	ARTICLE	IF	CITATIONS
1	Skyrmion lines, monopoles, and emergent electromagnetism in nanowires. , 2020, , 381-401.		3
2	Tunable terahertz oscillation arising from Bloch-point dynamics in chiral magnets. Physical Review Research, 2020, 2, .	3.6	13
3	Solitons in Real Space: Domain Walls, Vortices, Hedgehogs, and Skyrmions. Springer Series in Solid-state Sciences, 2018, , 1-40.	0.3	1
4	Monopole-Induced Emergent Electric Fields in Ferromagnetic Nanowires. Physical Review Letters, 2018, 121, 097202.	7.8	32
5	Chopping skyrmions from magnetic chiral domains with uniaxial stress in magnetic nanowire. Applied Physics Letters, 2017, 111, .	3.3	30
6	Skyrmion-Based Dynamic Magnonic Crystal. Nano Letters, 2015, 15, 4029-4036.	9.1	109
7	Quenching the fire in spin ice. Nature Physics, 2014, 10, 88-89.	16.7	1
8	Controlling vortex chirality in hexagonal building blocks of artificial spin ice. New Journal of Physics, 2013, 15, 125033.	2.9	16
9	Chiral magnetization configurations in magnetic nanostructures in the presence of Dzyaloshinskii-Moriya interactions. Journal of Applied Physics, 2012, 111, 07C706.	2.5	3
10	Topological effects in nanomagnetism: from superparamagnetism to chiral quantum solitons. Advances in Physics, 2012, 61, 1-116.	14.4	331
11	Real-space observation of emergent magnetic monopoles and associated Dirac strings in artificial Kagome spin ice. Nature Physics, 2011, 7, 68-74.	16.7	348
12	Breather states in magnetic domain wall racetrack memory samples. Journal of Magnetism and Magnetic Materials, 2010, 322, 1381-1384.	2.3	5
13	Dipolar energy states in clusters of perpendicular magnetic nanoislands. Journal of Applied Physics, 2009, 105, .	2.5	35
14	Magnetization response in bulk nanostructured magnets. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 449-451, 407-413.	5.6	4
15	Chiral quantum excitations in the anisotropic antiferromagnet CsCoBr <sub>3</sub> . Journal of Magnetism and Magnetic Materials, 2007, 310, 1194-1196.	2.3	1
16	Scaling behavior of thermally assisted magnetization reversal in nanomagnets. Journal of Applied Physics, 2006, 99, 08F908.	2.5	9
17	Magnetic Domain Formation in Itinerant Metamagnets. Physical Review Letters, 2006, 96, 196406.	7.8	21
18	Magnetization reversal in FM/AF/FM trilayers: dependence of AF thickness. Journal of Magnetism and Magnetic Materials, 2005, 286, 484-487.	2.3	3

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19	Magnetic depth profiling of FM/AF/FM trilayers by PNR. <i>Physica B: Condensed Matter</i> , 2005, 356, 46-50.	2.7	12
20	Emergence of soliton chirality in a quantum antiferromagnet. <i>Nature Physics</i> , 2005, 1, 159-163.	16.7	48
21	Magnetism of nanostructured ferromagnets-experiments and theoretical model. <i>Scripta Materialia</i> , 2001, 44, 1425-1429.	5.2	2
22	LÄffler, Braun, and Wagner Reply:. <i>Physical Review Letters</i> , 2001, 87, .	7.8	5
23	STOCHASTIC MAGNETIZATION DYNAMICS IN MAGNETIC NANOSTRUCTURES: FROM NÄ%EL-BROWN TO SOLITON-ANTISOLITON CREATION. , 2000, , .		8
24	Magnetic Correlations in Nanostructured Ferromagnets. <i>Physical Review Letters</i> , 2000, 85, 1990-1993.	7.8	171
25	From micromagnetics to quantum spin chains: Quantization of breathers. <i>Journal of Applied Physics</i> , 1999, 85, 5648-5650.	2.5	2
26	Magnetic correlations in nanostructured metals and an extended random-anisotropy model. <i>Journal of Applied Physics</i> , 1999, 85, 5187-5189.	2.5	28
27	Nucleation in ferromagnetic nanowiresâ€™magnetostatics and topology. <i>Journal of Applied Physics</i> , 1999, 85, 6172-6174.	2.5	56
28	Macroscopic quantum tunneling of ferromagnetic domain walls. <i>Physical Review B</i> , 1997, 56, 8129-8137.	3.2	36
29	CHIRALITY CORRELATION OF SPIN SOLITONS: BLOCH WALLS, SPIN-Ä½ SOLITONS AND HOLES IN A 2D ANTIFERROMAGNETIC BACKGROUND. <i>International Journal of Modern Physics B</i> , 1996, 10, 219-234.	2.0	14
30	Chiral quantum spin solitons. <i>Journal of Applied Physics</i> , 1996, 79, 6107.	2.5	8
31	Berryâ€™s phase and quantum dynamics of ferromagnetic solitons. <i>Physical Review B</i> , 1996, 53, 3237-3255.	3.2	99
32	Dissipation and Quantum Propagation of Bloch Walls. <i>Europhysics Letters</i> , 1995, 31, 555-560.	2.0	13
33	Spin Parity Effects and Macroscopic Quantum Coherence of Bloch Walls. , 1995, , 319-345.		3
34	Bloch states of a Bloch wall. <i>Journal of Applied Physics</i> , 1994, 76, 6177-6179.	2.5	16
35	Kramersâ€™s rate theory, broken symmetries, and magnetization reversal (invited). <i>Journal of Applied Physics</i> , 1994, 76, 6310-6315.	2.5	60
36	Statistical mechanics of nonuniform magnetization reversal. <i>Physical Review B</i> , 1994, 50, 16501-16521.	3.2	50

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37	Nonuniform switching of single domain particles at finite temperatures. <i>Journal of Applied Physics</i> , 1994, 75, 4609-4616.	2.5	41
38	Fluctuations and instabilities of ferromagnetic domain-wall pairs in an external magnetic field. <i>Physical Review B</i> , 1994, 50, 16485-16500.	3.2	98
39	Thermally Activated Magnetization Reversal in Elongated Ferromagnetic Particles. <i>Physical Review Letters</i> , 1993, 71, 3557-3560.	7.8	134
40	Dynamical confinement of twisted soliton pairs in biaxial ferromagnets. <i>Physical Review Letters</i> , 1993, 70, 3335-3338.	7.8	23
41	Nucleation rates for magnetization reversal in biaxial ferromagnets. <i>IEEE Transactions on Magnetics</i> , 1991, 27, 4787-4789.	2.1	3
42	General solution of the Landau-Lifshitz-Gilbert equations linearized around a Bloch wall. <i>Physical Review B</i> , 1991, 43, 5908-5914.	3.2	6
43	Nucleation of magnetization reversal via creation of pairs of Bloch walls. <i>Physical Review Letters</i> , 1990, 65, 787-789.	7.8	31
44	Transition rates of a non-Markovian Brownian particle in a double well potential. <i>Journal of Chemical Physics</i> , 1988, 88, 7537-7549.	3.0	47