Tom Fennell

List of Publications by Year
in descending order

70 papers	3,350 citations	172457 29 h-index	138484 58 g-index
72 all docs	72 docs citations	72 times ranked	2444 citing authors

#	Article	IF	Citations
1	Magnetic Coulomb Phase in the Spin Ice Ho ₂ Ti ₂ O ₇. Science, 2009, 326, 415-417.	12.6	485
2	Measurement of the charge and current of magnetic monopoles in spin ice. Nature, 2009, 461, 956-959.	27.8	306
3	Spin Correlations inHo2Ti2O7: A Dipolar Spin Ice System. Physical Review Letters, 2001, 87, 047205.	7.8	269
4	Er2Ti2O7:Evidence of quantum order by disorder in a frustrated antiferromagnet. Physical Review B, 2003, 68, .	3.2	208
5	Order in the Heisenberg pyrochlore: The magnetic structure ofGd2Ti2O7. Physical Review B, 2001, 64, .	3.2	129
6	Fractional antiferromagnetic skyrmion lattice induced by anisotropic couplings. Nature, 2020, 586, 37-41.	27.8	117
7	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Dy</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>Ti</mml:mi><mml:mn mathvariant="normal">O</mml:mi><mml:mn>7</mml:mn></mml:msub></mml:math>Spin Ice: A Test Case for Emergent Clusters in a Frustrated Magnet. Physical Review Letters, 2008, 101, 037204.	7.8	104
8	Power-Law Spin Correlations in the Pyrochlore Antiferromagnet<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Tb</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>Ti</mml:mi><mml:mn mathvariant="normal">O</mml:mi><mml:mn>7</mml:mn></mml:msub></mml:math>. Physical Review Letters, 2012, 109, 017201.	7.8	96
9	Pinch points and Kasteleyn transitions in kagome ice. Nature Physics, 2007, 3, 566-572.	16.7	91
10	Spiral spin-liquid and the emergence of a vortex-like state in MnSc2S4. Nature Physics, 2017, 13, 157-161.	16.7	88
11	Magnetoelastic Excitations in the Pyrochlore Spin Liquid<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Tb</mml:mi></mml:mrow><mml:mrow><mml:mn mathvariant="bold">O</mml:mi></mml:mrow><mml:mrow><mml:mn>7</mml:mn></mml:mrow></mml:msub></mml:mrow></mml: Physical Review Letters, 2014, 112, 017202.	7.8	85
12	Dynamical crossover in ÂhotÂ spin ice. Journal of Physics Condensed Matter, 2003, 15, L9-L15.	1.8	83
13	Candidate Quantum Spin Liquid in the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow><mml:mi>Ce</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></mml:mrow> Stannate<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mrow><mml:msub><mml:mrow><mml:mi>Ce</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn> Physical Review Letters, 2015, 115, 097202.	7.8	77
14	Evidence for two distinct spin relaxation mechanisms in ÂhotÂ spin ice Ho2Ti2O7. Journal of Physics Condensed Matter, 2004, 16, S635-S642.	1.8	71
15	Neutron scattering studies of the spin icesHo2Ti2O7andDy2Ti2O7in applied magnetic field. Physical Review B, 2005, 72, .	3.2	67
16	Neutron scattering investigation of the spin ice state inDy2Ti2O7. Physical Review B, 2004, 70, .	3.2	63
17	Experimental signatures of emergent quantum electrodynamics in Pr2Hf2O7. Nature Physics, 2018, 14, 711-715.	16.7	62
18	A quantum liquid of magnetic octupoles on the pyrochlore lattice. Nature Physics, 2020, 16, 546-552.	16.7	54

#	Article	IF	Citations
19	Candidate quantum spin ice in the pyrochlore<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Pr</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>O</mml:mi><mml:mn>7</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2016, 94, .	3.2	52
20	Crystal-field parameters of the rare-earth pyrochloresR2Ti2O7(R=Tb, Dy, and Ho). Physical Review B, 2016, 94, .	3.2	50
21	Topological-Sector Fluctuations and Curie-Law Crossover in Spin Ice. Physical Review X, 2013, 3, .	8.9	42
22	Coulomb spin liquid in anion-disordered pyrochlore Tb2Hf2O7. Nature Communications, 2017, 8, 892.	12.8	40
23	Magnetodielectric detection of magnetic quadrupole order in Ba(TiO)Cu4(PO4)4 with Cu4O12 square cupolas. Nature Communications, 2016, 7, 13039.	12.8	37
24	Universal fluctuations of the Danube water level: A link with turbulence, criticality and company growth. Europhysics Letters, 2002, 57, 310-314.	2.0	36
25	Magnetic Excitations and Electronic Interactions in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Sr</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow> A Spin-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>1</mml:mn><mml:mo>/</mml:mo><m. Physical Review Letters.	7.8	36
26	Coexistence of long- and short-range magnetic order in the frustrated magnet SrYb<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>O<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>4</mml:mn></mml:msub></mml:math>. Physical Review B, 2012, 86, .	3.2	34
27	Field-induced partial order in the spin ice dysprosium titanate. Applied Physics A: Materials Science and Processing, 2002, 74, s889-s891.	2.3	31
28	Magnetic Anisotropy Switch: Easy Axis to Easy Plane Conversion and Vice Versa. Advanced Functional Materials, 2018, 28, 1801846.	14.9	31
29	First-principles calculation and experimental investigation of lattice dynamics in the rare-earth pyrochlores<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>R</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>O</mml:mi><mml:mn>7</mml:mn></mml:msub></mml:mrow></mml:math><mml:math		

#	Article	IF	Citations
37	Magnetic properties of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Ba</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>a frustrated lattice geometry. Physical Review B, 2010, 81, .	3.2	22
38	Sample independence of magnetoelastic excitations in the rare-earth pyrochlore<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Tb</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>7</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2016, 93, .	3.2	22
39	Special temperatures in frustrated ferromagnets. Nature Communications, 2018, 9, 1999.	12.8	20
40	Spangolite: ans= 1/2 maple leaf lattice antiferromagnet?. Journal of Physics Condensed Matter, 2011, 23, 164201.	1.8	16
41	Wavevector and energy resolution of the polarized diffuse scattering spectrometer D7. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 857, 24-30.	1.6	16
42	Phonon-mediated spin-flipping mechanism in the spin ices <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Dy</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>7</mml:mn></mml:msub></mml:mrow></mml:math> and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ho</mml:mi><mml:mn>2</mml:mn></mml:msub>	3.2	15
43	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>CdEr</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn>		

#	Article	IF	Citations
55	Pair correlation function analysis of 5-(4-hexadecyloxyphenyl)-10,15,20-tri(4-pyridyl)porphyrin and 5-(4-methoxycarbonylphenyl)-10,15,20-tri(4-pyridyl)porphyrin. Journal of Molecular Structure, 2008, 875, 167-172.	3.6	6
56	Neutron scattering and Î¼SR investigations of the low temperature state of LuCuGaO₄. Journal of Physics Condensed Matter, 2013, 25, 356002.	1.8	6
57	Evolution of field-induced metastable phases in the Shastry-Sutherland lattice magnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>TmB</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:math>. Physical Review B, 2020, 102, .	3.2	6
58	Ferromagnetic fluctuations in YbNi₄P₂measured by inelastic neutron scattering. Journal of Physics: Conference Series, 2015, 592, 012083.	0.4	5
59	Multiphase competition in the quantum XY pyrochlore antiferromagnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>CdYb</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> : Zero and applied magnetic field study. Physical Review B, 2019, 100, .	3.2	5
60	Changes in elastic moduli as evidence for quadrupolar ordering in the rare-earth frustrated magnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Tb</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>7</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2020, 102, .	3.2	5
61	Molecular structure of 5,10,15,20-tetra(1-naphthyl)porphyrin and 5,10-di(4-hexadecyloxyphenyl)-15,20-di(4-pyridyl)porphyrin studied by high-energy X-ray diffraction. Chemical Physics Letters, 2007, 446, 36-42.	2.6	4
62	Dispersion of neutron spin resonance mode in Ba_{0.67}K_{0.33}Fe₂As₂ *. Chinese Physics B, 2021, 30, 127402.	1.4	4
63	Tunable critical correlations in kagome ice. Physical Review B, 2022, 105, .	3.2	4
64	Ab initio lattice dynamics calculation of vibrational density of states and Raman active modes of the olivine mineral Ni2SiO4. Journal of Physics Condensed Matter, 2008, 20, 285203.	1.8	3
65	24-spin clusters in the mineral boleite <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>KPb</mml:mi><mml:mn>26</mml:mn></mml:msub></mml:math>. Physical Review B, 2018, 97, .	3.2	3
66	Magnetic-field control of magnetoelastic coupling in the rare-earth pyrochlore <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Tb</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>7</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2021, 104, .	3.2	3
67	Low temperature magnetic structure of the quasi 1-dimensional magnet Ni₂SiO₄. Journal of Physics: Conference Series, 2009, 145, 012037.	0.4	2
68	Spin Ice: a Laboratory for Low Temperature Physics. AIP Conference Proceedings, 2006, , .	0.4	0
69	Experimental Observation of Magnetic Monopoles in Spin Ice. Springer Series in Solid-state Sciences, 2021, , 189-238.	0.3	0
70	Structural and magnetic characterization of Ho₃SbO₇ and Dy₃SbO₇. Canadian Journal of Physics, 2001, 79, 1415-1419.	1.1	0