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	Tunable critical correlations in kagome ice. Physical Review B, 2022, 105, .	3.2	4
2	Experimental Observation of Magnetic Monopoles in Spin Ice. Springer Series in Solid-state Sciences, 2021, , 189-238.	0.3	0
3	Dispersion of neutron spin resonance mode in Ba_{0.67}K_{0.33}Fe₂As₂ *. Chinese Physics B, 2021, 30, 127402.	1.4	4
4	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:r mathvariant="normal">O</mml:mi><mml:mn>7</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2021, 104, .	3.2	3
5	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: mathvariant="normal">O</mml:mi><mml:mn>7</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2020, 102, .	3.2	5
6	Fractional antiferromagnetic skyrmion lattice induced by anisotropic couplings. Nature, 2020, 586, 37-41.	27.8	117
7	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></ Physical Review B, 2020, 102, .	3.2	6
8	A quantum liquid of magnetic octupoles on the pyrochlore lattice. Nature Physics, 2020, 16, 546-552.	16.7	54
9	Magnetoelastic excitation spectrum 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:r mathvariant="normal">O</mml:mi><mml:mn>7</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2019, 99, .	3.2	8
10	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: : Zero and applied magnetic field study. Physical Review B, 2019, 100, .	3.2	5
11	Magnetic order and single-ion anisotropy in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Tb</mml:mi><mml:mn>3</mml:mn></mml:r mathvariant="normal">O</mml:mi><mml:mn>12</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2019, 100, .	3.2	15
12	Multiple Coulomb phase in the fluoride pyrochlore CsNiCrF6. Nature Physics, 2019, 15, 60-66.	16.7	13
13	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: Physical Review B, 2018, 97, .	3.2	8
14	Manifolds of magnetic ordered states and excitations in the almost Heisenberg pyrochlore antiferromagnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">MgCr</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:math>. Physical Review B, 2018, 97, .	3.2	14
15	Experimental signatures of emergent quantum electrodynamics in Pr2Hf2O7. Nature Physics, 2018, 14, 711-715.	16.7	62
16	Dipolar Spin Ice States with a Fast Monopole Hopping Rate in <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></mml:r		

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19	Odd and Even Modes of Neutron Spin Resonance in the Bilayer Iron-Based Superconductor CaKFe4As4. Physical Review Letters, 2018, 120, 267003.	7.8	28
20	Pauling Entropy, Metastability, and Equilibrium in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Dy</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub><mml:mrow><mml:mi mathvariant="normal">O</mml:mi></mml:mrow><mml:mrow><mml:mn>7</mml:mn></mml:mrow></mml:mrow></mml:msub></mml:mrow></m. Physical Review Letters, 2018, 121, 067202.	7.8	27
21	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
22	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: <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: Physical Review B, 2017, 95, .	3.2	15
23	Coulomb spin liquid in anion-disordered pyrochlore Tb2Hf2O7. Nature Communications, 2017, 8, 892.	12.8	40
24	Probing photoinduced spin states in spin-crossover molecules with neutron scattering. Physical Review B, 2017, 95, .	3.2	8
25	Spiral spin-liquid and the emergence of a vortex-like state in MnSc2S4. Nature Physics, 2017, 13, 157-161.	16.7	88
26	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: 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, 2017, 118, 087203.	7.8	36
27	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: mathvariant="normal">O</mml:mi><mml:mn>7</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2016, 94, .	3.2	52
28	Magnetodielectric detection of magnetic quadrupole order in Ba(TiO)Cu4(PO4)4 with Cu4O12 square cupolas. Nature Communications, 2016, 7, 13039.	12.8	37
29	Crystal-field parameters of the rare-earth pyrochloresR2Ti2O7(R=Tb, Dy, and Ho). Physical Review B, 2016, 94, .	3.2	50
30	Instabilities of spin-liquid states in a quantum kagome antiferromagnet. Physical Review B, 2016, 93, .	3.2	25
31	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: mathvariant="normal">O</mml:mi><mml:mn>7</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2016, 93, .	3.2	22
32	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: mathvariant="normal">O</mml:mi><mml:mn>7</mml:mn></mml:msub></mml:mrow></mml:math><mml:math		

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37	Neutron scattering studies of spin ices and spin liquids. Ã‰cole ThÃ©matique De La SociÃ©tÃ© FranÃ§aise De La Neutronique, 2014, 13, 04001.	0.2	7
38	Ice rule correlations in stuffed spin ice. New Journal of Physics, 2013, 15, 013022.	2.9	8
39	Neutron scattering and Î¼SR investigations of the low temperature state of LuCuGaO₄. Journal of Physics Condensed Matter, 2013, 25, 356002.	1.8	6
40	Topological-Sector Fluctuations and Curie-Law Crossover in Spin Ice. Physical Review X, 2013, 3, .	8.9	42
41	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	7.8	96
42	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
43	Spangolite: ans= 1/2 maple leaf lattice antiferromagnet?. Journal of Physics Condensed Matter, 2011, 23, 164201.	1.8	16
44	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> a frustrated lattice geometry. Physical Review B, 2010, 81, .	3.2	22
45	Spin dynamics in the hyperkagome compound<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Gd</mml:mtext></mml:mrow><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2010, 82, .	3.2	23
46	Electric field control of multiferroic domains in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Ni</mml:mtext></mml:mrow><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> by x-ray polarization-enhanced topography. Physical Review B, 2010, 82, .	3.2	24
47	Neutron scattering and crystal field studies of the rare earth double perovskite Ba₂ErSbO₆. Journal of Physics Condensed Matter, 2010, 22, 116007.	1.8	9
48	Consequence of Excess Configurational Entropy on Fragility: The Case of a Polymer-Oligomer Blend. Physical Review Letters, 2009, 103, 185702.	7.8	25
49	Measurement of the charge and current of magnetic monopoles in spin ice. Nature, 2009, 461, 956-959.	27.8	306
50	Magnetic Coulomb Phase in the Spin Ice Ho ₂ Ti ₂ O ₇. Science, 2009, 326, 415-417.	12.6	485
51	Low temperature magnetic structure of the quasi 1-dimensional magnet Ni₂SiO₄. Journal of Physics: Conference Series, 2009, 145, 012037.	0.4	2
52	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
53	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
54	Static Magnetic Order in<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>Sn</mml:mi><mml:mn mathvariant="normal">O</mml:mi><mml:mn>7</mml:mn></mml:msub></mml:math>Revealed by Muon Spin Relaxation with Exterior Muon Implantation. Physical Review Letters, 2008, 101, 237201.	7.8	14

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55	<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
56	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
57	Pinch points and Kasteleyn transitions in kagome ice. Nature Physics, 2007, 3, 566-572.	16.7	91
58	Spin Ice: a Laboratory for Low Temperature Physics. AIP Conference Proceedings, 2006, , .	0.4	0
59	Neutron scattering studies of the spin icesHo2Ti2O7andDy2Ti2O7in applied magnetic field. Physical Review B, 2005, 72, .	3.2	67
60	Evidence for two distinct spin relaxation mechanisms in ÂhotÂ spin ice Ho2Ti2O7. Journal of Physics Condensed Matter, 2004, 16, S635-S642.	1.8	71
61	Thermodynamic properties of magnetically diluted dipolar spin ice. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E989-E991.	2.3	7
62	Neutron scattering investigation of the spin ice state inDy2Ti2O7. Physical Review B, 2004, 70, .	3.2	63
63	Er2Ti2O7:Evidence of quantum order by disorder in a frustrated antiferromagnet. Physical Review B, 2003, 68, .	3.2	208
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65	Universal fluctuations of the Danube water level: A link with turbulence, criticality and company growth. Europhysics Letters, 2002, 57, 310-314.	2.0	36
66	Field-induced partial order in the spin ice dysprosium titanate. Applied Physics A: Materials Science and Processing, 2002, 74, s889-s891.	2.3	31
67	Spin Correlations inHo2Ti2O7: A Dipolar Spin Ice System. Physical Review Letters, 2001, 87, 047205.	7.8	269
68	Structural and magnetic characterization of Ho3SbO7 and Dy3SbO7. Canadian Journal of Physics, 2001, 79, 1415-1419.	1.1	27
69	Order in the Heisenberg pyrochlore: The magnetic structure ofGd2Ti2O7. Physical Review B, 2001, 64, .	3.2	129
70	Structural and magnetic characterization of Ho₃SbO₇ and Dy₃SbO₇. Canadian Journal of Physics, 2001, 79, 1415-1419.	1.1	0