Helen C Walker

List of Publications by Year
in descending order

101 papers	2,928 citations	147801 31 h-index	182427 51 g-index
102 all docs	102 docs citations	102 times ranked	3734 citing authors

#	Article	IF	Citations
1	Evidence for a spinon Fermi surface in a triangular-lattice quantum-spin-liquid candidate. Nature, 2016, 540, 559-562.	27.8	259
2	Magnetic ground state of FeSe. Nature Communications, 2016, 7, 12182.	12.8	158
3	Magnetic structure and magnon dynamics of the quasi-two-dimensional antiferromagnet<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>FePS</mml:mi><mml:mn>3</mml:mn></mml:msub></m Physical Review B, 2016, 94, .	3.2	127
4	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>NaYbS</mml:mi><mml:mn>2</mml:mn></mml:msub></m : A planar spin- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mfrac><mml:mn>1</mml:mn><mml:mn>2</mml:mn></mml:mfrac></mml ... Physical Review B, 2018, 98, .	3.2	119
5	Robustness of Basal-Plane Antiferromagnetic Order and the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>J</mml:mi><mml:mi>eff</mml:mi></mml:msub><mml:mo mathvariant="bold">=</mml:mo><mml:mn>1</mml:mn><mml:mo>/</mml:mo><mml:mn>2</mml:mn></mml:math>State in Single-Layer Iridate Spin-Orbit Mott Insulators. Physical Review Letters, 2013, 110, 117207.	7.8	107
6	Gapless spin-liquid state in the structurally disorder-free triangular antiferromagnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>NaYbO</mml:mi><mml:mn>2</mml:mn></mml:msub></ Physical Review B, 2019, 100, .	3.2	101
7	Role of intrinsic disorder in the structural phase transition of magnetoelectric EuTiO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>. Physical Review B, 2012, 85, .	3.2	96
8	Locking of iridium magnetic moments to the correlated rotation of oxygen octahedra in Sr₂IrO₄revealed by x-ray resonant scattering. Journal of Physics Condensed Matter, 2013, 25, 422202.	1.8	86
9	Femtoscale Magnetically Induced Lattice Distortions in Multiferroic TbMnO ₃. Science, 2011, 333, 1273-1276.	12.6	85
10	Spin-liquid-like state in a spin-1/2 square-lattice antiferromagnet perovskite induced by d10â€“d0 cation mixing. Nature Communications, 2018, 9, 1085.	12.8	81
11	Hopping Time Scales and the Phonon-Liquid Electron-Crystal Picture in Thermoelectric Copper Selenide. Physical Review Letters, 2017, 118, 145901.	7.8	77
12	Low thermal conductivity in a modular inorganic material with bonding anisotropy and mismatch. Science, 2021, 373, 1017-1022.	12.6	76
13	Antiferromagnetic order and domains in Sr<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>Ir<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:	3.2	71
14	Nature of the Magnetic Order and Origin of Induced Ferroelectricity in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>TbMnO</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math>. Physical Review Letters, 2009, 103, 207602.	7.8	57
15	Fractionalized excitations in the partially magnetized spin liquid candidate YbMgGaO4. Nature Communications, 2018, 9, 4138.	12.8	49
16	EuTiO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>magnetic structure studied by neutron powder diffraction and resonant x-ray scattering. Physical Review B, 2012, 86, .	3.2	46
17	Magnetic excitations in non-collinear antiferromagnetic Weyl semimetal Mn3Sn. Npj Quantum Materials, 2018, 3, .	5.2	45
18	The effect of particle size, morphology and support on the formation of palladium hydride in commercial catalysts. Chemical Science, 2019, 10, 480-489.	7.4	43

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19	Circularly Polarized X Rays as a Probe of Noncollinear Magnetic Order in Multiferroic<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>TbMnO</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math>. Physical Review Letters, 2009, 102, 237205.	7.8	42
20	Determination of the Antiferroquadrupolar Order Parameters inUPd3. Physical Review Letters, 2006, 97, 137203.	7.8	41
21	On the magnetic structure of Sr₃Ir₂O₇: an x-ray resonant scattering study. Journal of Physics Condensed Matter, 2012, 24, 312202.	1.8	41
22	Crystal field states of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mrow><mml:mi>Tb</mml:mi></mml:mrow><mml:mrow><mm the pyrochlore spin liquid<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:m mathvariant="normal">O</mml:mi><mml:mn>7</mml:mn></mml:msub></mml:mrow></. Physical Review	3.2	41
23	B, 2015, 91,". Importance of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>X</mml:mi><mml:mi>Y</mml:mi></mml:mrow></mml:m in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Sr</mml:mi><mml:mn>2</mml:mn></mml:mr by magnetic critical scattering experiments. Physical Review B, 2015, 92, .	3.2	41
24	Coulomb spin liquid in anion-disordered pyrochlore Tb2Hf2O7. Nature Communications, 2017, 8, 892.	12.8	40
25	Order-by-disorder from bond-dependent exchange and intensity signature of nodal quasiparticles in a honeycomb cobaltate. Nature Communications, 2021, 12, 3936.	12.8	38
26	Tuning the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>S</mml:mi><mml:mo>=</mml:mo><mml:mn>1</mml:mn></mml:mr square-lattice antiferromagnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">S</mml:mi><mml:msub><mml:mi		

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37	Spin wave excitations in the tetragonal double perovskite<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi mathvariant="normal">Sr</mml:mi></mml:mrow><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>CuWO</mml:mi><mml:mn Physical Review B, 2016, 94, .	3.2	24
38	Spin Waves in Detwinned <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>BaFe</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow> Physical Review Letters, 2018, 121, 067002.	7.8	23
39	Exchange Interactions Mediated by Nonmagnetic Cations in Double Perovskites. Physical Review Letters, 2020, 124, 077202.	7.8	23
40	Observation of two spin gap energies in the filled skutterudite compoundCeOs4Sb12. Physical Review B, 2007, 75, .	3.2	21
41	Spin resonance in the superconducting state of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="bold">Li</mml:mi><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^’</mml:mo><mml:mi>x</mml:mi></mml:mrow></ mathvariant="bold">Fe</mml:mi><mml:mi>x</mml:mi></mml:msub><mml:msub><mml:mi mathvariant="bold">ODFe</mml:mi><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^’</mml:mo><mml:mi>y</mml:mi></mml:mrow> mathvariant="bold">Se</mml:mi></mml:mrow></m. Physical Review B, 2016, 94, .	3.2	21
42	REXS contribution to electronic ordering investigation in solids. European Physical Journal: Special Topics, 2012, 208, 89-98.	2.6	19
43	Magnetic excitations in the bulk multiferroic two-dimensional triangular lattice antiferromagnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mrow><mml:mo>(</mml:mo><mml:mi>Lu</mml:mi><mml:mm Physical Review B, 2018, 98, .	3.2	18
44	Magnon-polaron excitations in the noncollinear antiferromagnet Mn3Ge. Physical Review B, 2019, 99, .	3.2	18
45	Ordering of localized electronic states in multiferroic TbMnO₃: a soft x-ray resonant scattering study. Journal of Physics Condensed Matter, 2008, 20, 422205.	1.8	17
46	Ho and Fe magnetic ordering in multiferroic HoFe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>(BO<mml:math) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 387 Td (xmlns:mml="http://w	3.2	17
47	xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml: Long-range magnetic order in the ${ilde S}=1/2$ triangular lattice antiferromagnet KCeS$_2$. SciPost Physics, 2020, 9, .	4.9	16
48	Bulk properties and electronic structure of PuFeAsO. Physical Review B, 2012, 86, .	3.2	15
49	Diamagnetic d-Orbitals Drive Magnetic Structure Selection in the Double Perovskite Ba₂MnTeO₆. Chemistry of Materials, 2020, 32, 7070-7079.	6.7	15
50	X-ray resonant scattering determination of the antiferroquadrupolar ordering in UPd₃at low temperatures. Journal of Physics Condensed Matter, 2008, 20, 395221.	1.8	14
51	Evidence for biquadratic exchange in the quasi-two-dimensional antiferromagnet FePS3. Journal of Applied Physics, 2020, 127, .	2.5	14
52	Understanding the quadrupolar structures of. Journal of Magnetism and Magnetic Materials, 2007, 310, 718-722.	2.3	13
53	Crystal properties of hematite<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î±</mml:mi></mml:math>-Fe<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 /> Anharmonic Magnon Excitations in Noncollinear and Charge-Ordered <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow><mml:mi>RbFe</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow> mathvariant="normal">F</mml:mi></mml:mrow><mml:mrow><mml:mn>6</mml:mn></mml:mrow></mml: Physical Review Letters, 2018, 121, 087201.	3.2	13
54	Powder diffraction using <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow><mml:mi>RbFe</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow><mml:m mathvariant="normal">F</mml:mi></mml:mrow><mml:mrow><mml:mn>6</mml:mn></mml:mrow></mml:	7.8	13

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55	Magnetic structure of DyMn<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>5</mml:mn></mml:msub></mml:math>determined by resonant x-ray scattering. Physical	3.2	12
56	Anomalous Metamagnetism in the Low Carrier Density Kondo Lattice <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>YbRh</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></ Physical Review X, 2018, 8, .	8.9	12
57	Large easy-axis anisotropy in the one-dimensional magnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>BaMo</mml:mi><mml:msub><mml:mrow><mml:mo>(	3.2	12
58	Magnetic and electrical properties of dhcp<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">Np</mml:mi><mml:msub><mml:mi mathvariant="normal">Pd</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"		

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73	Absence of superconductivity in fluorine-doped neptunium pnictide NpFeAsO. Journal of Physics Condensed Matter, 2015, 27, 325702.	1.8	7
74	Plaquette instability competing with bicollinear ground state in detwinned FeTe. Physical Review B, 2019, 100, .	3.2	7
75	Frustration model and spin excitations in the helimagnet FeP. Physical Review B, 2022, 105, .	3.2	7
76	Study of non-Fermi-liquid behaviour near the ferromagnetic quantum critical point in CePd0.15Rh0.85. Journal of Magnetism and Magnetic Materials, 2007, 310, 858-860.	2.3	6
77	5fdelocalization-induced suppression of quadrupolar order in U(Pd1âˆ'xPtx)3. Physical Review B, 2011, 84, .	3.2	6
78	Crystal-field states and defect levels in candidate quantum spin ice <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ce</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 Materials, 2022, 6, .	2.4	6
79	X-ray resonant scattering study of the magnetic phase diagram of multiferroic TbMnO 3. Physica B: Condensed Matter, 2009, 404, 3264-3266.	2.7	5
80	Long-range antiferromagnetic order of formally nonmagneticEu3+Van Vleck ions observed in multiferroicEu1âˆ'xYxMnO3. Physical Review B, 2015, 91, .	3.2	5
81	Coexistence of magnetic fluctuations and long-range order in the one-dimensional <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>J</mml:mi><mml:mn>1</mml:mn></mml:msub></mml:mrow></mml:math> zigzag chain materials <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>BaDy</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi></mml:msub></mml:mrow></mml:math>. Physical Review B, 2018, 98, .	3.2	5
82	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:mrow></mml:math> : Zero and applied magnetic field study. Physical Review B, 2019, 100, .	3.2	5
83	Weaker nematic phase connected to the first order antiferromagnetic phase transition in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>SrFe</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> compared to <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>BaFe</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> Physical Review B, 2019, 99, .	3.2	5
84	Field-tuned quantum effects in a triangular-lattice Ising magnet. Science Bulletin, 2022, 67, 38-44.	9.0	5
85	Neutron Scattering Studies of the Breathing Pyrochlore Antiferromagnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>LiGaCr</mml:mi></mml:mrow><mml:mrow><mml:mn>4</mml:mn></mml:mrow></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mrow><mml:mn>8</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>. From One- to Two-Magnon Excitations in the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>S</mml:mi><mml:mo>=</mml:mo><mml:mrow><mml:mn>3</mml:mn><mml:mo>/</mml:mo>	7.8	5
86	Magnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Î²</mml:mi><mml:mtext>â€™</mml:mtext><mml:msub><mml:mrow><mml:mi>CaCr</mml:mi> Physical Review Letters, 2021, 126, 017201.	7.8	5
87	Magnetic susceptibility of DHCP. Physica B: Condensed Matter, 2005, 359-361, 1156-1158.	2.7	4
88	EuFe2As2: Magnetic Structure and Local Charge Distribution Anisotropies as Seen by Resonant X-ray Scattering. Journal of Superconductivity and Novel Magnetism, 2011, 24, 705-709.	1.8	4
89	Lattice dynamics in the double-helix antiferromagnet FeP. Physical Review Research, 2020, 2, .	3.6	4
90	Randomness and frustration in a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>S</mml:mi><mml:mo>=</mml:mo><mml:mfrac> square-lattice Heisenberg antiferromagnet. Physical Review B, 2022, 105, .	3.2	4

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91	Inelastic neutron scattering and heat capacity studies of ferromagnetic PrInNi4. Physica B: Condensed Matter, 2006, 385-386, 41-43.	2.7	3
92	Heat capacity studies of the system. Physica B: Condensed Matter, 2006, 378-380, 981-982.	2.7	3
93	Photoelectron spectroscopy of NpPd3 and PuPd3. Journal of Physics Condensed Matter, 2008, 20, 275220.	1.8	3
94	Measuring radioactive powder samples on the high-resolution powder diffraction beamline at the European Synchrotron Radiation Facility. Journal of Applied Crystallography, 2013, 46, 567-569.	4.5	3
95	A new route to quantum criticality in (U,Np). Journal of Magnetism and Magnetic Materials, 2007, 310, 751-753.	2.3	2
96	237Np MÃ¶ssbauer effect study on NpFeAsO. Journal of Physics Condensed Matter, 2014, 26, 156002.	1.8	2
97	Magnetic, electrical, and thermodynamic properties of NpIr: Ambient and high-pressure measurements, and electronic structure calculations. Physical Review B, 2015, 91, .	3.2	2
98	Critical fluctuations in the spinâ€“orbit Mott insulator Sr₃Ir₂O₇. Journal of Physics Condensed Matter, 2019, 31, 185803.	1.8	2
99	Magnetic correlations in the triangular antiferromagnet FeGa2S4. Physical Review B, 2021, 104, .	3.2	2
100	Quadrupolar and Magnetic Ordering in (U,Np)Pd3. Journal of the Physical Society of Japan, 2006, 75, 20-23.	1.6	1
101	Synthesis and characterization of large single crystals of NpPd3 by flux method. Journal of Crystal Growth, 2011, 320, 52-54.	1.5	1