

# Peter C W Holdsworth

## List of Publications by Year in descending order

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96  
docs citations

96  
times ranked

2668  
citing authors

#	ARTICLE	IF	CITATIONS
1	Hidden order in a frustrated system: Properties of the Heisenberg Kagomé antiferromagnet. <i>Physical Review Letters</i> , 1992, 68, 855-858.	7.8	390
2	Signature of magnetic monopole and Dirac string dynamics in spin ice. <i>Nature Physics</i> , 2009, 5, 258-261.	16.7	275
3	Universal Fluctuations in Correlated Systems. <i>Physical Review Letters</i> , 2000, 84, 3744-3747.	7.8	225
4	Er <sub>2</sub> Ti <sub>2</sub> O <sub>7</sub> :Evidence of quantum order by disorder in a frustrated antiferromagnet. <i>Physical Review B</i> , 2003, 68, .	3.2	208
5	Magnetization and universal sub-critical behaviour in two-dimensional XY magnets. <i>Journal of Physics Condensed Matter</i> , 1993, 5, L53-L59.	1.8	197
6	Liquid-Gas Critical Behavior in a Frustrated Pyrochlore Ferromagnet. <i>Physical Review Letters</i> , 1998, 81, 4496-4499.	7.8	148
7	Universal window for two-dimensional critical exponents. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 275233.	1.8	127
8	Creation and measurement of long-lived magnetic monopole currents in spin ice. <i>Nature Physics</i> , 2011, 7, 252-258.	16.7	126
9	Magnetic fluctuations in the classicalXYmodel: The origin of an exponential tail in a complex system. <i>Physical Review E</i> , 2001, 63, 041106.	2.1	118
10	Melting artificial spin ice. <i>New Journal of Physics</i> , 2012, 14, 035009.	2.9	115
11	Quantum Order by Disorder and Accidental Soft Mode in $\text{Er}_2\text{Ti}_2\text{O}_7$ . <i>Physical Review Letters</i> , 2012, 109, 077204.	7.8	114
12	Magnetization: A characteristic of the Kosterlitz-Thouless-Berezinskii transition. <i>Physical Review B</i> , 1994, 49, 8811-8814.	3.2	113
13	Nonequilibrium critical dynamics of the two-dimensionalXYmodel. <i>Journal of Physics A</i> , 2001, 34, 1805-1824.	1.6	107
14	Magnetic-Moment Fragmentation and Monopole Crystallization. <i>Physical Review X</i> , 2014, 4, .	8.9	97
15	Magnetic monopole dynamics in spin ice. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 164222.	1.8	87
16	Three-Dimensional Kasteleyn Transition: Spin Ice in a [100] Field. <i>Physical Review Letters</i> , 2008, 100, 067207.	7.8	80
17	Kagomé antiferromagnet with defects: Satisfaction, frustration, and spin folding in a random spin system. <i>Physical Review Letters</i> , 1993, 70, 3812-3815.	7.8	77
18	Power fluctuations in a closed turbulent shear flow. <i>Physical Review E</i> , 1999, 60, R2452-R2455.	2.1	73

#	ARTICLE	IF	CITATIONS
19	Quantum kagomé antiferromagnet in a magnetic field: Low-lying nonmagnetic excitations versus valence-bond crystal order. <i>Physical Review B</i> , 2005, 71, .	3.2	63
20	Onsager's Wien effect on a lattice. <i>Nature Materials</i> , 2013, 12, 1033-1037.	27.5	56
21	Universality in two-dimensional magnetic systems. <i>Journal of Applied Physics</i> , 1993, 73, 6096-6098.	2.5	52
22	From classical to quantum Kagomé antiferromagnet in a magnetic field. <i>Physical Review B</i> , 2002, 65, .	3.2	43
23	Magnetic fluctuations in a finite two-dimensional model. <i>Journal of Physics A</i> , 1997, 30, 8363-8378.	1.6	42
24	Topological-Sector Fluctuations and Curie-Law Crossover in Spin Ice. <i>Physical Review X</i> , 2013, 3, .	8.9	42
25	Statistics of extremal intensities for Gaussian interfaces. <i>Physical Review E</i> , 2003, 68, 056116.	2.1	41
26	Soft modes in the easy plane pyrochlore antiferromagnet. <i>Journal of Physics Condensed Matter</i> , 2004, 16, S665-S671.	1.8	40
27	Néel order, ring exchange, and charge fluctuations in the half-filled Hubbard model. <i>Physical Review B</i> , 2005, 72, .	3.2	40
28	Low-energy theory of the $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ display="block">\rangle \langle \text{mml:mrow} \langle \text{mml:mi} \rangle t \langle \text{mml:mi} \rangle \langle \text{mml:mo} \rangle \hat{\wedge} \langle \text{mml:mo} \rangle \langle \text{mml:msup} \langle \text{mml:mi} \rangle t \langle \text{mml:mi} \rangle \langle \text{mml:mo} \rangle \hat{\wedge}^2 \langle \text{mml:mo} \rangle \text{ mml:math}$ model at half-filling: Interaction strengths in cuprate superconductors and an effective spin-only description of $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ display="block">\rangle \langle \text{mml:mrow} \langle \text{mml:mi} \rangle O \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 7 \langle \text{mml:mi} \rangle \langle \text{mml:msup} \langle \text{mml:mi} \rangle 2 \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle \langle \text{mml:mo} \rangle \hat{\wedge}^3 \langle \text{mml:mo} \rangle \text{ mml:math}$ . <i>Physical Review B</i> , 2009, 79, .	3.2	40
29	Spin Ice under Pressure: Symmetry Enhancement and Infinite Order Multicriticality. <i>Physical Review Letters</i> , 2010, 105, 087201.	7.8	39
30	Violation of ensemble equivalence in the antiferromagnetic mean-field XY model. <i>European Physical Journal B</i> , 2000, 16, 659-667.	1.5	37
31	Universal fluctuations of the Danube water level: A link with turbulence, criticality and company growth. <i>Europhysics Letters</i> , 2002, 57, 310-314.	2.0	36
32	Surfing on a critical line: Rejuvenation without chaos, memory without a hierarchical phase space. <i>Europhysics Letters</i> , 2002, 58, 35-41.	2.0	36
33	Intermittency and Non-Gaussian Fluctuations of the Global Energy Transfer in Fully Developed Turbulence. <i>Physical Review Letters</i> , 2003, 90, 104501.	7.8	33
34	Criterion for universality-class-independent critical fluctuations: Example of the two-dimensional Ising model. <i>Physical Review E</i> , 2004, 70, 046112.	2.1	33
35	Nature of finite-temperature transition in anisotropic pyrochlore $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ display="block">\rangle \langle \text{mml:mrow} \langle \text{mml:msub} \langle \text{mml:mi} \rangle Er \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle \langle \text{mml:msup} \langle \text{mml:mi} \rangle 3 \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle \langle \text{mml:mo} \rangle \hat{\wedge}^3 \langle \text{mml:mo} \rangle \text{ mml:math}$ $\text{mathvariant="normal"}\rangle O \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 7 \langle \text{mml:mi} \rangle \langle \text{mml:msup} \langle \text{mml:mi} \rangle 2 \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle \langle \text{mml:mo} \rangle \hat{\wedge}^3 \langle \text{mml:mo} \rangle \text{ mml:math}$ . <i>Physical Review B</i> , 2014, 89, .	3.2	32
36	Universal magnetic fluctuations with a field-induced length scale. <i>Physical Review E</i> , 2001, 64, 036111.	2.1	28

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37	ac Wien Effect in Spin Ice, Manifest in Nonlinear, Nonequilibrium Susceptibility. Physical Review Letters, 2015, 115, 037201.		7.8	25
38	Emergent electrochemistry in spin ice: Debye-Hückel theory and beyond. Physical Review B, 2018, 98, .		3.2	25
39	Classical topological order in kagome ice. Journal of Physics Condensed Matter, 2011, 23, 164208.		1.8	24
40	Static and Dynamic Magnetic Properties of Rb <sub>2</sub> CrCl <sub>4</sub> : Ideal 2D-XYBehaviour in a Layered Magnet. Journal of the Physical Society of Japan, 1995, 64, 3066-3071.		1.6	23
41	Competition between exchange and anisotropy in a pyrochlore ferromagnet. Europhysics Letters, 2002, 57, 93-99.		2.0	23
42	Universal magnetic fluctuations in the two-dimensional XY model. Journal of Applied Physics, 1998, 83, 7234-7236.		2.5	22
43	Crystal shape-dependent magnetic susceptibility and Curie law crossover in the spin ices Dy <sub>2</sub> Ti <sub>2</sub> O <sub>7</sub> and Ho <sub>2</sub> Ti <sub>2</sub> O <sub>7</sub> . Journal of Physics Condensed Matter, 2013, 25, 386002.		1.8	21
44	Monte Carlo study of induced bond orientational ordering in two-dimensional liquid-crystal models. Physical Review A, 1990, 41, 6786-6795.		2.5	19
45	Spin-wave analysis of the transverse-field Ising model on the checkerboard lattice. Physical Review B, 2012, 85, .		3.2	17
46	Fragmentation in Frustrated Magnets: A Review. Journal of Low Temperature Physics, 2020, 201, 710-737.		1.4	17
47	Can the universal jump be observed in two-dimensional XYmagnets?. Journal of Applied Physics, 1994, 75, 5955-5957.		2.5	16
48	Bramwell et al.Reply:. Physical Review Letters, 2002, 89, .		7.8	15
49	From quantum to thermal topological-sector fluctuations of strongly interacting Bosons in a ring lattice. New Journal of Physics, 2016, 18, 075003.		2.9	15
50	Spin ice Thin Film: Surface Ordering, Emergent Square ice, and Strain Effects. Physical Review Letters, 2017, 118, 207206.		7.8	15
51	Topological-sector fluctuations and ergodicity breaking at the Berezinskii-Kosterlitz-Thouless transition. Physical Review B, 2015, 91, .		3.2	14
52	Random bonds and random fields in two-dimensional orientational glasses. Journal of Physics Condensed Matter, 1991, 3, 6679-6694.		1.8	13
53	Relevance of soft modes for order parameter fluctuations in the two-dimensional XY model. Journal of Physics A, 2002, 35, 1231-1244.		1.6	12
54	Bramwell et al.Reply:. Physical Review Letters, 2001, 87, .		7.8	11

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55	The Kasteleyn transition in three dimensions: Spin ice in a [100] field. <i>Journal of Physics: Conference Series</i> , 2009, 145, 012024.	0.4	11
56	Critical Casimir forces from the equation of state of quantum critical systems. <i>Physical Review B</i> , 2016, 94, .	3.2	11
57	Origin of the approximate universality of distributions in equilibrium correlated systems. <i>Europhysics Letters</i> , 2006, 76, 1008-1014.	2.0	10
58	Direct calculation of the critical Casimir force in a binary fluid. <i>Physical Review E</i> , 2016, 94, 040102.	2.1	10
59	Anisotropic dispersive forces and orientational order. <i>Physica Scripta</i> , 1989, 39, 613-619.	2.5	9
60	Site dilution in the half-filled one-band Hubbard model: Ring exchange, charge fluctuations, and application to $\text{La}_2\text{Cu}_1\text{x}(\text{Mg/Zn})_x\text{O}_4$ . <i>Physical Review B</i> , 2009, 79, .	3.2	9
61	Frustrated order by disorder: The pyrochlore anti-ferromagnet with bond disorder. <i>Canadian Journal of Physics</i> , 2001, 79, 1365-1371.	1.1	9
62	Correlated random walks on two-sublattice systems. I. Theory. <i>Physical Review B</i> , 1986, 34, 3221-3232.	3.2	8
63	Monte Carlo Study of Bond and Molecular Orientational Ordering in Two-Dimensional Nematic Liquid-Crystal Systems. <i>Europhysics Letters</i> , 1989, 9, 539-544.	2.0	8
64	Real space renormalization group analysis of the random field Ising model. <i>Journal of Physics A</i> , 1996, 29, L539-L545.	1.6	8
65	Correlated random walks on two-sublattice systems. II. Monte Carlo simulations. <i>Physical Review B</i> , 1986, 34, 3233-3237.	3.2	6
66	Comment on "Chain Formation in Low Density Dipolar Hard Spheres: A Monte Carlo Study". <i>Physical Review Letters</i> , 1995, 74, 202-202.	7.8	6
67	Ground state and low-lying excitations of the spin- XXZ model on the kagomé lattice at magnetization. <i>Physica B: Condensed Matter</i> , 2005, 359-361, 1391-1393.	2.7	6
68	SPIN ICE. , 2005, , 367-456.		6
69	Critical Casimir forces in a magnetic system: An experimental protocol. <i>Physical Review B</i> , 2014, 90, .	3.2	6
70	Induced nearest-neighbor bond-orientational ordering and director fluctuations in two-dimensional liquid-crystal models. <i>Physical Review A</i> , 1990, 41, 3377-3380.	2.5	5
71	Induced Nearest-Neighbor Bond Orientational Ordering and Structural Transformation in a Two-Dimensional Liquid Crystal Model. <i>Molecular Crystals and Liquid Crystals</i> , 1991, 204, 177-188.	0.7	5
72	The fluctuating surface Hamiltonian for the classical Kagome antiferromagnet. <i>Journal of Physics Condensed Matter</i> , 1995, 7, 3295-3299.	1.8	5

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73	Magnetization in Ultrathin Films: Critical Exponent $\beta^2$ for the 2D XY Model with 4-Fold Crystal Fields. <i>Modern Physics Letters B</i> , 1997, 11, 139-148.	1.9	5
74	Hopping conductivity for localised electronic states. <i>Journal of Physics C: Solid State Physics</i> , 1987, 20, 2219-2229.	1.5	4
75	Spin Structure in Magnetic Multilayers with Rough Interfaces. <i>Physical Review Letters</i> , 1996, 76, 2583-2586.	7.8	4
76	Critical behaviour of the random field Ising model. <i>Journal of Physics A</i> , 1998, 31, 85-105.	1.6	4
77	Phase order in superfluid helium films. <i>Europhysics Letters</i> , 2015, 112, 56003.	2.0	4
78	Field-induced ordering in dipolar spin ice. <i>Physical Review B</i> , 2016, 93, .	3.2	4
79	Vortex corrections to universal scaling of magnetic fluctuations in 2D XY model. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2002, 315, 643-649.	2.6	3
80	Correlated random walk on a bcc lattice with next-nearest-neighbor hops: Self-consistent decoupling approximation. <i>Physical Review B</i> , 1986, 34, 8533-8537.	3.2	2
81	A current-current correlation function approach to hopping conductivity. <i>Journal of Physics Condensed Matter</i> , 1989, 1, 557-568.	1.8	2
82	Flaws curb the flow. <i>Nature Physics</i> , 2013, 9, 8-9.	16.7	2
83	Dissipation-induced non-Gaussian energy fluctuations. <i>Europhysics Letters</i> , 2013, 102, 50004.	2.0	2
84	Finite-size scaling of the magnetization probability density for the critical Ising model in slab geometry. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 166007.	1.8	2
85	Hopping thermo-electric power for localised electronic states. <i>Journal of Physics C: Solid State Physics</i> , 1987, 20, 2231-2241.	1.5	1
86	The critical line of the 2-dimensional easy plane ferromagnet. <i>Journal of Magnetism and Magnetic Materials</i> , 1992, 117, 8-10.	2.3	1
87	CRITICAL FLUCTUATIONS IN 2D XY MAGNETS. <i>Fractals</i> , 2003, 11, 73-80.	3.7	1
88	An electric-field representation of the harmonic XY model. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 085402.	1.8	1
89	The effect of driving on model C interfaces. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2020, 2020, 033206.	2.3	1
90	Violation of the fluctuation-dissipation theorem and effective temperatures in spin ice. <i>Physical Review B</i> , 2022, 105, .	3.2	1

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91	Hopping conductivity for localized electronic states Liouville space formalism. <i>Physica B: Condensed Matter</i> , 1992, 176, 319-326.	2.7	0
92	Temperature dependence of XY-like order parameters in thin free-standing smectic liquid-crystal films. <i>Physical Review E</i> , 1993, 48, 625-627.	2.1	0
93	Extreme statistics of intensity fluctuations in nonequilibrium steady states. , 2004, , .		0
94	Extreme statistics and volume fluctuations in a confined one-dimensional gas. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2008, 2008, P07019.	2.3	0
95	Electric field fluctuations in the two-dimensional Coulomb fluid. <i>New Journal of Physics</i> , 2021, 23, 093039.	2.9	0