

# Peter C W Holdsworth

## List of Publications by Year in descending order

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94  
papers

3,919  
citations

126708

33  
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118652

62  
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96  
all docs

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. Physical Review Letters, 1992, 68, 855-858.	2.9	390
2	Signature of magnetic monopole and Dirac string dynamics in spin ice. Nature Physics, 2009, 5, 258-261.	6.5	275
3	Universal Fluctuations in Correlated Systems. Physical Review Letters, 2000, 84, 3744-3747.	2.9	225
4	Er <sub>2</sub> Ti <sub>2</sub> O <sub>7</sub> : Evidence of quantum order by disorder in a frustrated antiferromagnet. Physical Review B, 2003, 68, .	1.1	208
5	Magnetization and universal sub-critical behaviour in two-dimensional XY magnets. Journal of Physics Condensed Matter, 1993, 5, L53-L59.	0.7	197
6	Liquid-Gas Critical Behavior in a Frustrated Pyrochlore Ferromagnet. Physical Review Letters, 1998, 81, 4496-4499.	2.9	148
7	Universal window for two-dimensional critical exponents. Journal of Physics Condensed Matter, 2008, 20, 275233.	0.7	127
8	Creation and measurement of long-lived magnetic monopole currents in spin ice. Nature Physics, 2011, 7, 252-258.	6.5	126
9	Magnetic fluctuations in the classical XY model: The origin of an exponential tail in a complex system. Physical Review E, 2001, 63, 041106.	0.8	118
10	Melting artificial spin ice. New Journal of Physics, 2012, 14, 035009.	1.2	115
11	Quantum Order by Disorder and Accidental Soft Mode in $\text{Er}_2\text{Ti}_2\text{O}_7$ . Physical Review Letters, 2012, 109, 077204.	2.9	114
12	Magnetization: A characteristic of the Kosterlitz-Thouless-Berezinskii transition. Physical Review B, 1994, 49, 8811-8814.	1.1	113
13	Nonequilibrium critical dynamics of the two-dimensional XY model. Journal of Physics A, 2001, 34, 1805-1824.	1.6	107
14	Magnetic-Moment Fragmentation and Monopole Crystallization. Physical Review X, 2014, 4, .	2.8	97
15	Magnetic monopole dynamics in spin ice. Journal of Physics Condensed Matter, 2011, 23, 164222.	0.7	87
16	Three-Dimensional Kasteleyn Transition: Spin Ice in a [100] Field. Physical Review Letters, 2008, 100, 067207.	2.9	80
17	Kagomé antiferromagnet with defects: Satisfaction, frustration, and spin folding in a random spin system. Physical Review Letters, 1993, 70, 3812-3815.	2.9	77
18	Power fluctuations in a closed turbulent shear flow. Physical Review E, 1999, 60, R2452-R2455.	0.8	73

#	ARTICLE	IF	CITATIONS
19	Quantum kagomÃ© antiferromagnet in a magnetic field: Low-lying nonmagnetic excitations versus valence-bond crystal order. Physical Review B, 2005, 71, .	1.1	63
20	Onsagerâ€™s Wien effect on a lattice. Nature Materials, 2013, 12, 1033-1037.	13.3	56
21	Universality in two-dimensional magnetic systems. Journal of Applied Physics, 1993, 73, 6096-6098.	1.1	52
22	From classical to quantum KagomÃ© antiferromagnet in a magnetic field. Physical Review B, 2002, 65, .	1.1	43
23	Magnetic fluctuations in a finite two-dimensional model. Journal of Physics A, 1997, 30, 8363-8378.	1.6	42
24	Topological-Sector Fluctuations and Curie-Law Crossover in Spin Ice. Physical Review X, 2013, 3, .	2.8	42
25	Statistics of extremal intensities for Gaussian interfaces. Physical Review E, 2003, 68, 056116.	0.8	41
26	Soft modes in the easy plane pyrochlore antiferromagnet. Journal of Physics Condensed Matter, 2004, 16, S665-S671.	0.7	40
27	NÃ©el order, ring exchange, and charge fluctuations in the half-filled Hubbard model. Physical Review B, 2005, 72, .	1.1	40
28	Low-energy theory of the $t$ - $J$ model at half-filling: Interaction strengths in cuprate superconductors and an effective spin-only description of $t$ - $J$ model. Physical Review B, 2009, 79, .	1.1	40
29	Spin Ice under Pressure: Symmetry Enhancement and Infinite Order Multicriticality. Physical Review Letters, 2010, 105, 087201.	2.9	39
30	Violation of ensemble equivalence in the antiferromagnetic mean-field XY model. European Physical Journal B, 2000, 16, 659-667.	0.6	37
31	Universal fluctuations of the Danube water level: A link with turbulence, criticality and company growth. Europhysics Letters, 2002, 57, 310-314.	0.7	36
32	Surfing on a critical line: Rejuvenation without chaos, memory without a hierarchical phase space. Europhysics Letters, 2002, 58, 35-41.	0.7	36
33	Intermittency and Non-Gaussian Fluctuations of the Global Energy Transfer in Fully Developed Turbulence. Physical Review Letters, 2003, 90, 104501.	2.9	33
34	Criterion for universality-class-independent critical fluctuations: Example of the two-dimensional Ising model. Physical Review E, 2004, 70, 046112.	0.8	33
35	Nature of finite-temperature transition in anisotropic pyrochlore $O(2)$ model. Physical Review B, 2014, 89, .	1.1	32
36	Universal magnetic fluctuations with a field-induced length scale. Physical Review E, 2001, 64, 036111.	0.8	28

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37	ac Wien Effect in Spin Ice, Manifest in Nonlinear, Nonequilibrium Susceptibility. Physical Review Letters, 2015, 115, 037201.	2.9	25
38	Emergent electrochemistry in spin ice: Debye-Hückel theory and beyond. Physical Review B, 2018, 98, .	1.1	25
39	Classical topological order in kagome ice. Journal of Physics Condensed Matter, 2011, 23, 164208.	0.7	24
40	Static and Dynamic Magnetic Properties of Rb <sub>2</sub> CrCl <sub>4</sub> : Ideal 2D-XY Behaviour in a Layered Magnet. Journal of the Physical Society of Japan, 1995, 64, 3066-3071.	0.7	23
41	Competition between exchange and anisotropy in a pyrochlore ferromagnet. Europhysics Letters, 2002, 57, 93-99.	0.7	23
42	Universal magnetic fluctuations in the two-dimensional XY model. Journal of Applied Physics, 1998, 83, 7234-7236.	1.1	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.	0.7	21
44	Monte Carlo study of induced bond orientational ordering in two-dimensional liquid-crystal models. Physical Review A, 1990, 41, 6786-6795.	1.0	19
45	Spin-wave analysis of the transverse-field Ising model on the checkerboard lattice. Physical Review B, 2012, 85, .	1.1	17
46	Fragmentation in Frustrated Magnets: A Review. Journal of Low Temperature Physics, 2020, 201, 710-737.	0.6	17
47	Can the universal jump be observed in two-dimensional XY magnets?. Journal of Applied Physics, 1994, 75, 5955-5957.	1.1	16
48	Bramwelle et al. Reply:. Physical Review Letters, 2002, 89, .	2.9	15
49	From quantum to thermal topological-sector fluctuations of strongly interacting Bosons in a ring lattice. New Journal of Physics, 2016, 18, 075003.	1.2	15
50	Spin ice Thin Film: Surface Ordering, Emergent Square ice, and Strain Effects. Physical Review Letters, 2017, 118, 207206.	2.9	15
51	Topological-sector fluctuations and ergodicity breaking at the Berezinskii-Kosterlitz-Thouless transition. Physical Review B, 2015, 91, .	1.1	14
52	Random bonds and random fields in two-dimensional orientational glasses. Journal of Physics Condensed Matter, 1991, 3, 6679-6694.	0.7	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	Bramwelle et al. Reply:. Physical Review Letters, 2001, 87, .	2.9	11

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55	The Kasteleyn transition in three dimensions: Spin ice in a [100] field. Journal of Physics: Conference Series, 2009, 145, 012024.	0.3	11
56	Critical Casimir forces from the equation of state of quantum critical systems. Physical Review B, 2016, 94, .	1.1	11
57	Origin of the approximate universality of distributions in equilibrium correlated systems. Europhysics Letters, 2006, 76, 1008-1014.	0.7	10
58	Direct calculation of the critical Casimir force in a binary fluid. Physical Review E, 2016, 94, 040102.	0.8	10
59	Anisotropic dispersive forces and orientational order. Physica Scripta, 1989, 39, 613-619.	1.2	9
60	Site dilution in the half-filled one-band Hubbard model: Ring exchange, charge fluctuations, and application to $\text{La}_2\text{Cu}_x(\text{Mg/Zn})_{1-x}\text{O}_4$ . Physical Review B, 2009, 79, .	1.1	9
61	Correlated random walks on two-sublattice systems. I. Theory. Physical Review B, 1986, 34, 3221-3232.	1.1	8
62	Monte Carlo Study of Bond and Molecular Orientational Ordering in Two-Dimensional Nematic Liquid-Crystal Systems. Europhysics Letters, 1989, 9, 539-544.	0.7	8
63	Real space renormalization group analysis of the random field Ising model. Journal of Physics A, 1996, 29, L539-L545.	1.6	8
64	Correlated random walks on two-sublattice systems. II. Monte Carlo simulations. Physical Review B, 1986, 34, 3233-3237.	1.1	6
65	Comment on "Chain Formation in Low Density Dipolar Hard Spheres: A Monte Carlo Study". Physical Review Letters, 1995, 74, 202-202.	2.9	6
66	Ground state and low-lying excitations of the spin-XXZ model on the kagomé lattice at magnetization. Physica B: Condensed Matter, 2005, 359-361, 1391-1393.	1.3	6
67	SPIN ICE. , 2005, , 367-456.		6
68	Critical Casimir forces in a magnetic system: An experimental protocol. Physical Review B, 2014, 90, .	1.1	6
69	Induced nearest-neighbor bond-orientational ordering and director fluctuations in two-dimensional liquid-crystal models. Physical Review A, 1990, 41, 3377-3380.	1.0	5
70	Induced Nearest-Neighbor Bond Orientational Ordering and Structural Transformation in a Two-Dimensional Liquid Crystal Model. Molecular Crystals and Liquid Crystals, 1991, 204, 177-188.	0.7	5
71	The fluctuating surface Hamiltonian for the classical Kagome antiferromagnet. Journal of Physics Condensed Matter, 1995, 7, 3295-3299.	0.7	5
72	Magnetization in Ultrathin Films: Critical Exponent $\hat{\nu}^2$ for the 2D XY Model with 4-Fold Crystal Fields. Modern Physics Letters B, 1997, 11, 139-148.	1.0	5

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73	Hopping conductivity for localised electronic states. Journal of Physics C: Solid State Physics, 1987, 20, 2219-2229.	1.5	4
74	Spin Structure in Magnetic Multilayers with Rough Interfaces. Physical Review Letters, 1996, 76, 2583-2586.	2.9	4
75	Critical behaviour of the random field Ising model. Journal of Physics A, 1998, 31, 85-105.	1.6	4
76	Phase order in superfluid helium films. Europhysics Letters, 2015, 112, 56003.	0.7	4
77	Field-induced ordering in dipolar spin ice. Physical Review B, 2016, 93, .	1.1	4
78	Vortex corrections to universal scaling of magnetic fluctuations in 2D XY model. Physica A: Statistical Mechanics and Its Applications, 2002, 315, 643-649.	1.2	3
79	Correlated random walk on a bcc lattice with next-nearest-neighbor hops: Self-consistent decoupling approximation. Physical Review B, 1986, 34, 8533-8537.	1.1	2
80	A current-current correlation function approach to hopping conductivity. Journal of Physics Condensed Matter, 1989, 1, 557-568.	0.7	2
81	Flaws curb the flow. Nature Physics, 2013, 9, 8-9.	6.5	2
82	Dissipation-induced non-Gaussian energy fluctuations. Europhysics Letters, 2013, 102, 50004.	0.7	2
83	Finite-size scaling of the magnetization probability density for the critical Ising model in slab geometry. Journal of Physics Condensed Matter, 2016, 28, 166007.	0.7	2
84	Hopping thermo-electric power for localised electronic states. Journal of Physics C: Solid State Physics, 1987, 20, 2231-2241.	1.5	1
85	The critical line of the 2-dimensional easy plane ferromagnet. Journal of Magnetism and Magnetic Materials, 1992, 117, 8-10.	1.0	1
86	CRITICAL FLUCTUATIONS IN 2D XY MAGNETS. Fractals, 2003, 11, 73-80.	1.8	1
87	An electric-field representation of the harmonic XY model. Journal of Physics Condensed Matter, 2017, 29, 085402.	0.7	1
88	The effect of driving on model C interfaces. Journal of Statistical Mechanics: Theory and Experiment, 2020, 2020, 033206.	0.9	1
89	Violation of the fluctuation-dissipation theorem and effective temperatures in spin ice. Physical Review B, 2022, 105, .	1.1	1
90	Hopping conductivity for localized electronic states Liouville space formalism. Physica B: Condensed Matter, 1992, 176, 319-326.	1.3	0

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91	Temperature dependence of XY-like order parameters in thin free-standing smectic liquid-crystal films. Physical Review E, 1993, 48, 625-627.	0.8	0
92	Extreme statistics of intensity fluctuations in nonequilibrium steady states. , 2004, , .		0
93	Extreme statistics and volume fluctuations in a confined one-dimensional gas. Journal of Statistical Mechanics: Theory and Experiment, 2008, 2008, P07019.	0.9	0
94	Electric field fluctuations in the two-dimensional Coulomb fluid. New Journal of Physics, 2021, 23, 093039.	1.2	0