Arthur Alan Middleton

List of Publications by Year in Descending Order

42 papers	2,494 citations	25 h-index	42 g-index
42 ext. papers	2,631 ext. citations	4.6 avg, IF	4.97 L-index

#	Paper	IF	Citations
42	Configuration memory in patchwork dynamics for low-dimensional spin glasses. *Physical Review B*, **2017**, 96,	3.3	2
41	Minimal spanning trees at the percolation threshold: a numerical calculation. *Physical Review E*, **2013**, 88, 032129	2.4	4
40	Numerically exact correlations and sampling in the two-dimensional Ising spin glass. *Physical Review E*, **2013**, 87, 043303	2.4	6
39	Extracting thermodynamic behavior of spin glasses from the overlap function. *Physical Review B*, **2013**, 87,	3.3	15
38	Zero- and low-temperature behavior of the two-dimensional $\Box$J Ising spin glass. *Physical Review Letters*, **2011**, 107, 047203	7.4	41
37	Exact algorithm for sampling the two-dimensional Ising spin glass. *Physical Review E*, **2009**, 80, 046708	2.4	20
36	Statistics of static avalanches in a random pinning landscape. *Physical Review E*, **2009**, 79, 050101	2.4	45
35	Persistence and memory in patchwork dynamics for glassy models. *Physical Review B*, **2008**, 77,	3.3	10
34	Irrational mode locking in quasiperiodic systems. *Physical Review Letters*, **2007**, 98, 148001	7.4	4
33	Measuring functional renormalization group fixed-point functions for pinned manifolds. *Physical Review Letters*, **2007**, 98, 155701	7.4	40
32	Possible description of domain walls in two-dimensional spin glasses by stochastic Loewner evolutions. *Physical Review B*, **2007**, 76,	3.3	53
31	Matching Kasteleyn cities for spin glass ground states. *Physical Review B*, **2007**, 76,	3.3	27
30	Counting States and Counting Operations **2005**, 71-100		
29	Percolation of unsatisfiability in finite dimensions. *Physical Review E*, **2004**, 70, 035103	2.4	2
28	Mean-field theory of collective transport with phase slips. *Physical Review B*, **2004**, 70,	3.3	12
27	Improved extremal optimization for the Ising spin glass. *Physical Review E*, **2004**, 69, 055701	2.4	28
26	Driven depinning of strongly disordered media and anisotropic mean-field limits. *Physical Review Letters*, **2003**, 91, 107002	7.4	19

25	Critical slowing down in polynomial time algorithms. *Physical Review Letters*, **2002**, 88, 017202	7.4	27
24	Three-dimensional random-field Ising magnet: Interfaces, scaling, and the nature of states. *Physical Review B*, **2002**, 65,	3.3	143
23	Color mixing via polarization. *Physics Teacher*, **2001**, 39, 123-124	0.4	3
22	Energetics and geometry of excitations in random systems. *Physical Review B*, **2001**, 63,	3.3	39
21	Disorder-induced topological defects in a d=2 elastic medium at zero temperature. *Physical Review B*, **2000**, 61, 14787-14790	3.3	18
20	Viscoelastic depinning of driven systems: mean-field plastic scallops. *Physical Review Letters*, **2000**, 85, 1104-7	7.4	49
19	Numerical Investigation of the Thermodynamic Limit for Ground States in Models with Quenched Disorder. *Physical Review Letters*, **1999**, 83, 1672-1675	7.4	39
18	Computational complexity of determining the barriers to interface motion in random systems. *Physical Review E*, **1999**, 59, 2571-2577	2.4	15
17	Simulation of the zero-temperature behavior of a three-dimensional elastic medium. *Physical Review B*, **1999**, 60, 10062-10069	3.3	15
16	Ground-State Roughness of the Disordered Substrate and Flux Lines in d=2. *Physical Review Letters*, **1996**, 77, 3204-3207	7.4	52
15	Numerical results for the ground-state interface in a random medium. *Physical Review E*, **1995**, 52, R3337-R3340	2.4	95
14	Self-Organized Criticality in Nonconserved Systems. *Physical Review Letters*, **1995**, 74, 742-745	7.4	108
13	Avalanches and the renormalization group for pinned charge-density waves. *Physical Review B*, **1994**, 49, 244-256	3.3	71
12	Critical behavior of charge-density waves below threshold: Numerical and scaling analysis. *Physical Review B*, **1993**, 47, 3530-3552	3.3	85
11	Collective transport in arrays of small metallic dots. *Physical Review Letters*, **1993**, 71, 3198-3201	7.4	340
10	Elastic string in a random potential. *Physical Review Letters*, **1993**, 70, 662-665	7.4	67
9	Scaling near mode locking in a charge density wave conductor. *Physical Review Letters*, **1993**, 70, 3784-3787	7.4	46
8	Asymptotic uniqueness of the sliding state for charge-density waves. *Physical Review Letters*, **1992**, 68, 670-673	7.4	202

7   Complete mode locking in models of charge-density waves. *Physical Review Letters*, **1992**, 68, 1586-1589   7.4   51

6   Thermal rounding of the charge-density-wave depinning transition. *Physical Review B*, **1992**, 45, 9465-9468   3.9   53

5   Dynamics of directed polymers with cutting interactions. *Physical Review A*, **1992**, 45, 7288-7291   2.6

4   Self-organization and a dynamical transition in traffic-flow models. *Physical Review A*, **1992**, 46, R6124-R6127   2.6   596

3   Middleton, Fisher, and Littlewood reply. *Physical Review Letters*, **1991**, 67, 3873   7.4   1

2   Critical behavior of pinned charge-density waves below the threshold for sliding. *Physical Review Letters*, **1991**, 66, 92-95   7.4   62

1   Discrete scatterers and autocorrelations of multiply scattered light. *Physical Review B*, **1991**, 43, 5934-5938   3.9   29