Roman KoteckÃ½

List of Publications by Year
in descending order

62	2,196	304701	223791
papers	citations	22 h-index	46 g-index

63	63	63	723
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A rigorous theory of finite-size scaling at first-order phase transitions. Journal of Statistical Physics, 1990, 61, 79-119.	1.2	260
2	Cluster expansion for abstract polymer models. Communications in Mathematical Physics, 1986, 103, 491-498.	2.2	234
3	Finite-size effects at asymmetric first-order phase transitions. Physical Review Letters, 1992, 68, 1734-1737.	7.8	134
4	Finite-size scaling for Potts models. Journal of Statistical Physics, 1991, 62, 529-551.	1.2	126
5	First-order phase transitions in large entropy lattice models. Communications in Mathematical Physics, 1982, 83, 493-515.	2.2	125
6	Antiferromagnetic Potts models. Physical Review Letters, 1989, 63, 109-112.	7.8	116
7	Three-state antiferromagnetic Potts models: A Monte Carlo study. Physical Review B, 1990, 42, 2465-2474.	3.2	108
8	On the formation/dissolution of equilibrium droplets. Europhysics Letters, 2002, 60, 21-27.	2.0	86
9	Does the Roughness of the Substrate Enhance Wetting?. Physical Review Letters, 1995, 74, 2292-2294.	7.8	78
10	The analysis of the Widom-Rowlinson model by stochastic geometric methods. Communications in Mathematical Physics, 1995, 172, 551-569.	2.2	73
11	General Theory of Lee-Yang Zeros in Models with First-Order Phase Transitions. Physical Review Letters, 2000, 84, 4794-4797.	7.8	61
12	Critical Region for Droplet Formation in the Two-Dimensional Ising Model. Communications in Mathematical Physics, 2003, 242, 137-183.	2.2	50
13	Droplet dynamics for asymmetric Ising model. Journal of Statistical Physics, 1993, 70, 1121-1148.	1.2	49
14	Low temperature phase diagrams for quantum perturbations of classical spin systems. Communications in Mathematical Physics, 1996, 181, 409-446.	2.2	45
15	Surface-induced finite-size effects for first-order phase transitions. Journal of Statistical Physics, 1995, 79, 43-115.	1.2	37
16	Phase coexistence of gradient Gibbs states. Probability Theory and Related Fields, 2007, 139, 1-39.	1.8	37
17	Shapes of growing dropletsâ€"A model of escape from a metastable phase. Journal of Statistical Physics, 1994, 75, 409-506.	1.2	33
18	Rigid interfaces for lattice models at low temperatures. Journal of Statistical Physics, 1988, 50, 755-812.	1.2	31

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19	Coarse-graining approach to first-order phase transitions. Journal of Statistical Physics, 1987, 47, 701-724.	1.2	28
20	Pathological behavior of renormalization-group maps at high fields and above the transition temeprature. Journal of Statistical Physics, 1995, 79, 969-992.	1.2	26
21	Partition Function Zeros at First-Order Phase Transitions: A General Analysis. Communications in Mathematical Physics, 2004, 251, 79-131.	2.2	24
22	Gibbs states of graphical representations of the Potts model with external fields. Journal of Mathematical Physics, 2000, 41, 1170-1210.	1.1	23
23	Long-range order for antiferromagnetic Potts models. Physical Review B, 1985, 31, 3088-3092.	3.2	22
24	Theq-state Potts model in the standard Pirogov-Sinai theory: Surface tensions and Wilson loops. Journal of Statistical Physics, 1990, 58, 199-248.	1.2	22
25	Phase Transition in the Three-State Potts Antiferromagnet on the Diced Lattice. Physical Review Letters, 2008, 101, 030601.	7.8	22
26	Aggregation and intermediate phases in dilute spin systems. Communications in Mathematical Physics, 1995, 171, 203-232.	2.2	21
27	Partition Function Zeros at First-Order Phase Transitions: Pirogovâ€“Sinai Theory. Journal of Statistical Physics, 2004, 116, 97-155.	1.2	20
28	Conformally covariant field equations I. first-order equations with non-vanishing mass. European Physical Journal D, 1975, 25, 123-149.	0.4	19
29	Effective Interactions Due to Quantum Fluctuations. Communications in Mathematical Physics, 1999, 206, 289-335.	2.2	19
30	The staggered charge-order phase of the extended Hubbard model in the atomic limit. Journal of Physics A, 1996, 29, 733-747.	1.6	18
31	Surface Tension and the Ornsteinâ€“Zernike Behaviour for the 2D Blumeâ€“Capel Model. Journal of Statistical Physics, 2002, 106, 431-476.	1.2	15
32	A Proof of the Gibbsâ€“Thomson Formula in the Droplet Formation Regime. Journal of Statistical Physics, 2004, 116, 175-203.	1.2	14
33	Two-dimensional Potts antiferromagnets with a phase transition at arbitrarily largeq. Physical Review E, 2013, 87, 012136.	2.1	14
34	Equilibrium shapes of crystals attached to walls. Journal of Statistical Physics, 1994, 76, 419-445.	1.2	13
35	Staggered Phases in Diluted Systems with Continuous Spins. Communications in Mathematical Physics, 1997, 189, 631-640.	2.2	13
36	Finite-Size Effects for the Potts Model with Weak Boundary Conditions. Journal of Statistical Physics, 2002, 109, 67-131.	1.2	12

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37	Finite range decomposition for families of gradient Gaussian measures. Journal of Functional Analysis, 2013, 264, 169-206.	1.4	12
38	Entropy-Driven Phase Transition in Low-Temperature Antiferromagnetic Potts Models. Communications in Mathematical Physics, 2014, 330, 1339-1394.	2.2	12
39	The random interchange process on the hypercube. Electronic Communications in Probability, 2016, 21, .	0.4	11
40	Mean field approximation is exact in the many-component limit of potts lattice gauge model. Communications in Mathematical Physics, 1981, 82, 391-397.	2.2	10
41	A microscopic justification of the Wulff construction. Journal of Statistical Physics, 1993, 72, 1-14.	1.2	10
42	Finite-Size Scaling for the 2D Ising Model with Minus Boundary Conditions. Journal of Statistical Physics, 2001, 104, 905-943.	1.2	10
43	Forbidden Gap Argument for Phase Transitions Proved by Means of Chessboard Estimates. Communications in Mathematical Physics, 2006, 264, 631-656.	2.2	10
44	Phase Diagram of Horizontally Invariant Gibbs States for Lattice Models. Annales Henri Poincare, 2002, 3, 203-267.	1.7	8
45	Roughening transition for the Ising model on a BCC lattice. A case in the theory of ground states. Journal of Statistical Physics, 1987, 47, 773-799.	1.2	7
46	SOS approximants for Potts crystal shapes. Physica A: Statistical Mechanics and Its Applications, 1992, 189, 616-634.	2.6	7
47	Finite-size scaling for first-order phase transitions (rigorous results). Physica A: Statistical Mechanics and Its Applications, 1993, 194, 128-136.	2.6	7
48	Interfaces for Random Cluster Models. Journal of Statistical Physics, 2003, 111, 73-106.	1.2	7
49	Renormalization of nonperturbative functional integral for independent value models. Letters in Mathematical Physics, 1977, 2, 21-25.	1.1	6
50	Low Temperature Phase DiagramsÂ¶of Fermionic Lattice Systems. Communications in Mathematical Physics, 2000, 208, 575-604.	2.2	6
51	Nonlinear Elastic Free Energies and Gradient Young-Gibbs Measures. Communications in Mathematical Physics, 2014, 326, 887-917.	2.2	6
52	Title is missing!. Journal of Statistical Physics, 1999, 94, 299-320.	1.2	6
53	Coexistence of Partially Disordered/Ordered Phases in an Extended Potts Model. Journal of Statistical Physics, 2000, 99, 1169-1206.	1.2	5
54	Planar and lamellar antiferromagnetism in Hubbard models. Journal of Physics A, 2000, 33, 7857-7871.	1.6	5

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55	True nature of long-range order in a plaquette orbital model. Journal of Statistical Mechanics: Theory and Experiment, 2010, 2010, P11001.	2.3	5
56	Nonperturbative renormalizability for a class of gradient-free models. Physical Review D, 1978, 18, 2187-2192.	4.7	4
57	Comment on: â€œTheory of the evaporation/condensation transition of equilibrium droplets in finite volumesâ€• Physica A: Statistical Mechanics and Its Applications, 2003, 327, 583-588.	2.6	4
58	Model with roughening transition at low temperatures. Physical Review B, 1986, 34, 2049-2051.	3.2	2
59	A spin-1 lattice model of microemulsions at low temperatures. Journal of Physics A, 1993, 26, 5285-5293.	1.6	2
60	Intermediate phase for a classical continuum model. Physical Review B, 1996, 54, 9221-9224.	3.2	2
61	The use of projective limits in classical statistical mechanics and Euclidean quantum field theory. European Physical Journal D, 1980, 30, 23-32.	0.4	1
62	Staggered Long-Range Order for Diluted Quantum Spin Models. Journal of Statistical Physics, 2019, 175, 972-986.	1.2	0