

Andrew Parry

List of Publications by Year in descending order

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papers

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218677

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92
times ranked

567
citing authors

#	ARTICLE	IF	CITATIONS
1	Influence of wetting on phase equilibria: A novel mechanism for critical-point shifts in films. <i>Physical Review Letters</i> , 1990, 64, 439-442.	7.8	197
2	Geometry-dominated fluid adsorption on sculpted solid substrates. <i>Nature</i> , 2000, 407, 986-989.	27.8	175
3	Critical Effects at 3D Wedge Wetting. <i>Physical Review Letters</i> , 2000, 85, 345-348.	7.8	112
4	Universality for 2D Wedge Wetting. <i>Physical Review Letters</i> , 1999, 83, 5535-5538.	7.8	91
5	Condensation in a Capped Capillary is a Continuous Critical Phenomenon. <i>Physical Review Letters</i> , 2007, 98, 226101.	7.8	67
6	Morphological phase transitions of thin fluid films on chemically structured substrates. <i>Europhysics Letters</i> , 1999, 47, 474-480.	2.0	66
7	Liquids at interfaces: what can a theorist contribute?. <i>Journal of Physics Condensed Matter</i> , 1990, 2, SA15-SA32.	1.8	58
8	Wedge filling, cone filling and the strong-fluctuation regime. <i>Journal of Physics Condensed Matter</i> , 2001, 13, 4591-4613.	1.8	57
9	Nonlocality and Short-Range Wetting Phenomena. <i>Physical Review Letters</i> , 2004, 93, 086104.	7.8	57
10	Derivation of a non-local interfacial Hamiltonian for short-ranged wetting: I. Double-parabola approximation. <i>Journal of Physics Condensed Matter</i> , 2006, 18, 6433-6451.	1.8	52
11	Length scales for wetting transitions: Beyond the continuum Landau approximation for the interfacial binding potential. <i>Physical Review A</i> , 1992, 45, 3823-3830.	2.5	51
12	Surface Order Parameter Interface Hamiltonian: Renormalization of the Capillary Parameter at Complete Wetting. <i>Physical Review Letters</i> , 1995, 74, 3403-3406.	7.8	45
13	Wetting at nonplanar substrates: Unbending and unbinding. <i>Physical Review E</i> , 1999, 59, 5697-5700.	2.1	43
14	Wedge covariance for two-dimensional filling and wetting. <i>Journal of Physics Condensed Matter</i> , 2002, 14, 1169-1198.	1.8	41
15	3D Short-Range Wetting and Nonlocality. <i>Physical Review Letters</i> , 2008, 100, 136105.	7.8	41
16	Critical amplitude ratios for critical wetting in three dimensions: Observation of nonclassical behavior in the Ising model. <i>Physical Review B</i> , 1991, 43, 11535-11538.	3.2	40
17	Covariance for Cone and Wedge Complete Filling. <i>Physical Review Letters</i> , 2005, 94, 096103.	7.8	38
18	Fluctuation theory for the wavevector expansion of the excess grand potential of a liquid-vapour interface and the theory of interfacial fluctuations. <i>Journal of Physics Condensed Matter</i> , 1994, 6, 7199-7206.	1.8	35

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19	Geometry dependent critical exponents at complete wetting. Journal of Chemical Physics, 2000, 112, 5175-5180.	3.0	34
20	Universal Phase Boundary Shifts for Corner Wetting and Filling. Physical Review Letters, 2001, 87, 196103.	7.8	33
21	Universal fluctuation-induced corrections to the Kelvin equation for capillary condensation. Journal of Physics A, 1992, 25, 275-284.	1.6	31
22	Drumhead model of 2D wetting, filling and wedge covariance. Europhysics Letters, 2002, 60, 106-112.	2.0	31
23	Derivation of a non-local interfacial Hamiltonian for short-ranged wetting: II. General diagrammatic structure. Journal of Physics Condensed Matter, 2007, 19, 416105.	1.8	31
24	Crossover effects in the wetting of adsorbed films in linear wedges. Physical Review E, 2003, 68, 021606.	2.1	30
25	Two-dimensional filling in ordered and disordered systems. Journal of Physics Condensed Matter, 2000, 12, 7671-7685.	1.8	27
26	Surface phase diagrams for wetting on heterogenous substrates. Journal of Chemical Physics, 2001, 115, 5258-5271.	3.0	27
27	Fluid adsorption at a non-planar wall: roughness-induced first-order wetting. Journal of Physics Condensed Matter, 1996, 8, L659-L666.	1.8	25
28	Pair correlation functions and the wavevector-dependent surface tension in a simple density functional treatment of the liquid-vapour interface. Journal of Physics Condensed Matter, 2014, 26, 355008.	1.8	24
29	Fluid Adsorption near an Apex: Covariance between Complete and Critical Wetting. Physical Review Letters, 2003, 90, 046101.	7.8	23
30	Parry and Evans reply. Physical Review Letters, 1991, 66, 2175-2175.	7.8	22
31	Long-ranged surface perturbations for confined fluids. Physical Review Letters, 1991, 67, 2978-2981.	7.8	22
32	Three-dimensional wedge filling in ordered and disordered systems. Journal of Physics Condensed Matter, 2004, 16, 2515-2542.	1.8	22
33	Capillary Emptying and Short-Range Wetting. Physical Review Letters, 2012, 108, 246101.	7.8	22
34	The local structure factor near an interface; beyond extended capillary-wave models. Journal of Physics Condensed Matter, 2016, 28, 244013.	1.8	21
35	Derivation of a non-local interfacial model for 3D wetting in an external field. Journal of Physics Condensed Matter, 2009, 21, 465105.	1.8	20
36	The Trouble with Critical Wetting. Journal of Low Temperature Physics, 2009, 157, 149-173.	1.4	20

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37	Capillary Contact Angle in a Completely Wet Groove. <i>Physical Review Letters</i> , 2014, 113, 146101.	7.8	19
38	Wetting transitions in fluids with short-ranged forces: correlation functions and criticality. <i>Journal of Physics Condensed Matter</i> , 1989, 1, 7207-7238.	1.8	18
39	Short-distance expansion for the local susceptibility and pair correlation function at continuous wetting transitions. <i>Journal of Physics A</i> , 1991, 24, 1335-1350.	1.6	16
40	Wetting on non-planar and heterogeneous substrates. <i>Journal of Physics Condensed Matter</i> , 2000, 12, A369-A374.	1.8	16
41	Scaling and local scale invariance for wetting transitions and confined interfaces. <i>Journal of Physics A</i> , 1992, 25, 257-273.	1.6	15
42	Scaling-violation anomaly at critical wetting. <i>Physical Review E</i> , 1996, 53, 6577-6580.	2.1	15
43	An exact solution for two-dimensional wetting with a corrugated wall. <i>Journal of Physics A</i> , 1997, 30, 4597-4605.	1.6	15
44	Droplet shapes on structured substrates and conformal invariance. <i>Journal of Physics Condensed Matter</i> , 2001, 13, 383-402.	1.8	15
45	Non-Ornstein-Zernike surface structure factor for complete wetting in three (and above) dimensions. <i>Journal of Physics A</i> , 1994, 27, 1877-1883.	1.6	14
46	Signatures of non locality for short-ranged wetting at curved substrates. <i>Journal of Chemical Physics</i> , 2006, 124, 151101.	3.0	14
47	Intrusion of fluids into nanogrooves. <i>European Physical Journal E</i> , 2008, 25, 103-115.	1.6	14
48	The Goldstone mode and resonances in the fluid interfacial region. <i>Nature Physics</i> , 2019, 15, 287-292.	16.7	14
49	Comment on simple scaling theory for three-dimensional critical wetting with short-ranged forces. <i>Physical Review B</i> , 1989, 39, 12336-12338.	3.2	13
50	Nonuniversal anisotropy dependence of critical-wetting exponents in a vector model. <i>Physical Review B</i> , 1990, 42, 798-802.	3.2	13
51	Two parameters for three-dimensional wetting transitions. <i>Europhysics Letters</i> , 1997, 37, 207-212.	2.0	13
52	Effective interfacial Hamiltonian theories of correlation functions at wetting transitions. <i>Journal of Physics A</i> , 1993, 26, L667-L672.	1.6	12
53	Coupled fluctuations near critical wetting. <i>Physical Review E</i> , 1995, 52, R5768-R5771.	2.1	12
54	Complete prewetting. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 275001.	1.8	12

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55	Classical density functional study of wetting transitions on nanopatterned surfaces. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 094001.	1.8	12
56	3D wedge filling and 2D random-bond wetting. <i>Europhysics Letters</i> , 2005, 72, 1004-1010.	2.0	11
57	Controlling the order of wedge filling transitions: the role of line tension. <i>New Journal of Physics</i> , 2007, 9, 167-167.	2.9	11
58	The influence of non-locality on fluctuation effects for 3D short-ranged wetting. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 505102.	1.8	11
59	An interpretation of covariance relations for wetting and wedge filling transitions. <i>Journal of Chemical Physics</i> , 2010, 132, 204704.	3.0	11
60	Tricritical wedge filling transitions with short-ranged forces. <i>Journal of Physics Condensed Matter</i> , 2005, 17, S3487-S3492.	1.8	10
61	The order of filling transitions in acute wedges. <i>Journal of Physics Condensed Matter</i> , 2012, 24, 182202.	1.8	10
62	Point tension in adsorption at a chemically inhomogeneous substrate in two dimensions. <i>Physical Review E</i> , 2006, 74, 031608.	2.1	9
63	Liquid-gas asymmetry and the wave-vector-dependent surface tension. <i>Physical Review E</i> , 2015, 91, 030401.	2.1	9
64	Wetting of a plane with a narrow solvophobic stripe. <i>Molecular Physics</i> , 2018, 116, 1990-1997.	1.7	9
65	Stiffness matrix formalism for wetting transitions I. Short-range forces. <i>Molecular Physics</i> , 1996, 87, 501-516.	1.7	9
66	Universal and non-universal short-distance expansions in the strong, weak and intermediate fluctuation regimes of critical wetting. <i>Journal of Physics A</i> , 1991, 24, L699-L704.	1.6	8
67	Interfacial Structural Changes and Singularities in Nonplanar Geometries. <i>Physical Review Letters</i> , 1998, 81, 1267-1270.	7.8	8
68	Interfacial structure at a two-dimensional wedge filling transition: Exact results and a renormalization group study. <i>Physical Review E</i> , 2004, 69, 061604.	2.1	8
69	Critical wetting in power-law wedge geometries. <i>Journal of Physics Condensed Matter</i> , 2002, 14, L679-L686.	1.8	7
70	The critical wetting saga: how to draw the correct conclusion. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 494234.	1.8	7
71	Nonlinear renormalization of the surface-order-parameter interface Hamiltonian. <i>Journal of Physics A</i> , 1996, 29, 1873-1879.	1.6	6
72	Absence of a stiffness instability for a model critical-wetting transition in three dimensions. <i>Journal of Physics A</i> , 1994, 27, L351-L356.	1.6	5

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73	Finite-size effects of correlation lengths in planar uniaxial ferromagnets. <i>Physical Review E</i> , 1995, 51, 5261-5273.	2.1	5
74	Extended wedge covariance for wetting and filling transitions. <i>Journal of Chemical Physics</i> , 2005, 123, 234105.	3.0	5
75	First-order wedge wetting revisited. <i>Soft Matter</i> , 2018, 14, 2835-2845.	2.7	5
76	Critical amplitudes for critical wetting with short-ranged forces: the approach to $d=3$ -. <i>Journal of Physics Condensed Matter</i> , 1990, 2, 7687-7698.	1.8	4
77	Finite-size-scaling derivation of the Widom critical-exponent relation for surface tension. <i>Physical Review A</i> , 1992, 46, 5282-5283.	2.5	4
78	A disorder point for filling transitions in 1+1 dimensions. <i>Journal of Physics A</i> , 2001, 34, L5-L10.	1.6	4
79	Renormalization group calculations for wetting transitions of infinite order and continuously varying order: Local interface Hamiltonian approach. <i>Physical Review E</i> , 2013, 88, 022122.	2.1	4
80	Universal amplitude-exponent relations for interfaces and conformal mappings. <i>Journal of Physics A</i> , 1992, 25, L1015-L1021.	1.6	3
81	Correlation functions on Cylinders. <i>Physical Review Letters</i> , 1994, 73, 1742-1745.	7.8	3
82	Correlation function algebra for inhomogeneous fluids. <i>Journal of Physics Condensed Matter</i> , 1997, 9, 2351-2373.	1.8	3
83	Tests of nonuniversality and finite-size scaling for two-dimensional wetting with long-ranged forces. <i>Physical Review E</i> , 2007, 75, 041110.	2.1	3
84	Title is missing!. <i>Journal of Physics A</i> , 1992, 25, L685-L691.	1.6	2
85	Susceptibility Critical Amplitude Ratios and Tests of the Stiffness Instability at Wetting Transitions. <i>Europhysics Letters</i> , 1994, 28, 251-256.	2.0	2
86	Correlation-function structure in square-gradient models of the liquid-gas interface: Exact results and reliable approximations. <i>Physical Review E</i> , 2019, 100, 022803.	2.1	2
87	Microscopic determination of correlations in the fluid interfacial region in the presence of liquid-gas asymmetry. <i>Physical Review E</i> , 2019, 100, 052801.	2.1	2
88	Renormalization group flow of the stiffness matrix - free-energy relation. <i>Journal of Physics Condensed Matter</i> , 1997, 9, 7003-7015.	1.8	1
89	Local Functional Models of Critical Correlations in Thin Films. <i>Physical Review Letters</i> , 2000, 85, 4108-4111.	7.8	1
90	Local scale invariance for wetting and confined interfaces. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2010, 43, 125002.	2.1	1

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91	Scaling of confined membranes and interfaces. <i>Journal of Physics A</i> , 1994, 27, 5089-5100.	1.6	0
92	Phase transitions, interfacial fluctuations and hidden symmetries for fluids near structured walls. <i>Pramana - Journal of Physics</i> , 2005, 64, 709-725.	1.8	0