Carlos Rascon

List of Publications by Year
in descending order

56 papers	1,432 citations	331670 21 h-index	330143 37 g-index
57 all docs	57 docs citations	57 times ranked	507 citing authors

#	Article	IF	Citations
1	Correlation-function structure in square-gradient models of the liquid-gas interface: Exact results and reliable approximations. Physical Review E, 2019, 100, 022803.	2.1	2
2	Microscopic determination of correlations in the fluid interfacial region in the presence of liquid-gas asymmetry. Physical Review E, 2019, 100, 052801.	2.1	2
3	The Goldstone mode and resonances in the fluid interfacial region. Nature Physics, 2019, 15, 287-292.	16.7	14
4	First-order wedge wetting revisited. Soft Matter, 2018, 14, 2835-2845.	2.7	5
5	Wetting of a plane with a narrow solvophobic stripe. Molecular Physics, 2018, 116, 1990-1997.	1.7	9
6	Classical density functional study of wetting transitions on nanopatterned surfaces. Journal of Physics Condensed Matter, 2017, 29, 094001.	1.8	12
7	The local structure factor near an interface; beyond extended capillary-wave models. Journal of Physics Condensed Matter, 2016, 28, 244013.	1.8	21
8	Geometry-induced capillary emptying. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 12633-12636.	7.1	20
9	Liquid-gas asymmetry and the wave-vector-dependent surface tension. Physical Review E, 2015, 91, 030401.	2.1	9
10	Capillary Contact Angle in a Completely Wet Groove. Physical Review Letters, 2014, 113, 146101.	7.8	19
11	Pair correlation functions and the wavevector-dependent surface tension in a simple density functional treatment of the liquidâ€"vapour interface. Journal of Physics Condensed Matter, 2014, 26, 355008.	1.8	24
12	Intrinsic Fluid Interfaces and Nonlocality. Physical Review Letters, 2013, 111, 096104.	7.8	22
13	The order of condensation in capillary grooves. Journal of Physics Condensed Matter, 2013, 25, 192101.	1.8	19
14	Capillary Emptying and Short-Range Wetting. Physical Review Letters, 2012, 108, 246101.	7.8	22
15	Scaling properties of fluid adsorption near the base of a cylinder. Physical Review E, 2012, 85, 031606.	2.1	5
16	The self-interaction of a fluid interface, the wavevector dependent surface tension and wedge filling. Journal of Physics Condensed Matter, 2011, 23, 015004.	1.8	13
17	Fluid Adsorption at the Base of a Cylinder. Physical Review Letters, 2011, 107, 206104.	7.8	8
18	Scaling of correlation functions near capillary condensation. Molecular Physics, 2011, 109, 1015-1027.	1.7	1

#	ARTICLE	IF	CITATIONS
19	An interpretation of covariance relations for wetting and wedge filling transitions. Journal of Chemical Physics, 2010, 132, 204704.	3.0	11
20	Local scale invariance for wetting and confined interfaces. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 125002.	2.1	1
21	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
22	The Trouble with Critical Wetting. Journal of Low Temperature Physics, 2009, 157, 149-173.	1.4	20
23	The critical wetting saga: how to draw the correct conclusion. Journal of Physics Condensed Matter, 2008, 20, 494234.	1.8	7
24	The influence of non-locality on fluctuation effects for 3D short-ranged wetting. Journal of Physics Condensed Matter, 2008, 20, 505102.	1.8	11
25	3D Short-Range Wetting and Nonlocality. Physical Review Letters, 2008, 100, 136105.	7.8	41
26	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
27	Condensation in a Capped Capillary is a Continuous Critical Phenomenon. Physical Review Letters, 2007, 98, 226101.	7.8	67
28	Comment on "Liquids on Topologically Nanopatterned Surfaces" Physical Review Letters, 2007, 98, 199801.	7.8	8
29	Derivation of a non-local interfacial Hamiltonian for short-ranged wetting: I. Double-parabola approximation. Journal of Physics Condensed Matter, 2006, 18, 6433-6451.	1.8	52
30	Signatures of non locality for short-ranged wetting at curved substrates. Journal of Chemical Physics, 2006, 124, 151101.	3.0	14
31	Extended wedge covariance for wetting and filling transitions. Journal of Chemical Physics, 2005, 123, 234105.	3.0	5
32	Covariance for Cone and Wedge Complete Filling. Physical Review Letters, 2005, 94, 096103.	7.8	38
33	Landau expansion for the critical point of a polydisperse system. Journal of Chemical Physics, 2003, 118, 4312-4320.	3.0	11
34	Interfacial fluctuation effects at 3D wedge-wetting. Fluid Phase Equilibria, 2001, 185, 139-146.	2.5	2
35	Adsorption isotherms and surface geometry. Fluid Phase Equilibria, 2001, 185, 147-155.	2.5	3
36	Wedge filling, cone filling and the strong-fluctuation regime. Journal of Physics Condensed Matter, 2001, 13, 4591-4613.	1.8	57

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37	Droplet shapes on structured substrates and conformal invariance. Journal of Physics Condensed Matter, 2001, 13, 383-402.	1.8	15
38	Surface phase diagrams for wetting on heterogenous substrates. Journal of Chemical Physics, 2001, 115, 5258-5271.	3.0	27
39	Geometry-dominated fluid adsorption on sculpted solid substrates. Nature, 2000, 407, 986-989.	27.8	175
40	Two-dimensional filling in ordered and disordered systems. Journal of Physics Condensed Matter, 2000, 12, 7671-7685.	1.8	27
41	Wetting on non-planar and heterogeneous substrates. Journal of Physics Condensed Matter, 2000, 12, A369-A374.	1.8	16
42	Critical Effects at 3D Wedge Wetting. Physical Review Letters, 2000, 85, 345-348.	7.8	112
43	Local Functional Models of Critical Correlations in Thin Films. Physical Review Letters, 2000, 85, 4108-4111.	7.8	1
44	Geometry dependent critical exponents at complete wetting. Journal of Chemical Physics, 2000, 112, 5175-5180.	3.0	34
45	Universality for 2D Wedge Wetting. Physical Review Letters, 1999, 83, 5535-5538.	7.8	91
46	Wetting at nonplanar substrates: Unbending and unbinding. Physical Review E, 1999, 59, 5697-5700.	2.1	43
47	Interfacial Structural Changes and Singularities in Nonplanar Geometries. Physical Review Letters, 1998, 81, 1267-1270.	7.8	8
48	Phase diagrams of systems of particles interacting via repulsive potentials. Journal of Chemical Physics, 1997, 106, 6689-6697.	3.0	45
49	Equation of state of the hard-sphere crystal. Physical Review E, 1996, 53, 5698-5703.	2.1	19
50	Perturbation Theory for Classical Solids. Physical Review Letters, 1996, 77, 2249-2252.	7.8	53
51	Thermodynamic consistency of the hard€sphere solid distribution function. Journal of Chemical Physics, 1996, 105, 10527-10534.	3.0	14
52	Theoretical approach to the correlations of a classical crystal. Physical Review E, 1996, 54, 1261-1264.	2.1	49
53	Phase transitions in systems with extremely short-ranged attractions: A density-functional theory. Physical Review B, 1995, 51, 14899-14906.	3.2	48
54	Solid€to€solid isostructural transition in the hard sphere/attractive Yukawa system. Journal of Chemical Physics, 1995, 103, 9795-9799.	3.0	23

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55	New exact relations for the many-cavity distribution function of non-uniform hard-sphere systems. Molecular Physics, 1995, 84, 373-380.	1.7	1
56	Comment on 'Density-functional theory of solid-to-solid isostructural transitions'. Journal of Physics Condensed Matter, 1995, 7, 8211-8213.	1.8	3