

# Carlos Rascon

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9574496/publications.pdf>

Version: 2024-02-01

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	Geometry-dominated fluid adsorption on sculpted solid substrates. <i>Nature</i> , 2000, 407, 986-989.	27.8	175
2	Critical Effects at 3D Wedge Wetting. <i>Physical Review Letters</i> , 2000, 85, 345-348.	7.8	112
3	Universality for 2D Wedge Wetting. <i>Physical Review Letters</i> , 1999, 83, 5535-5538.	7.8	91
4	Condensation in a Capped Capillary is a Continuous Critical Phenomenon. <i>Physical Review Letters</i> , 2007, 98, 226101.	7.8	67
5	Wedge filling, cone filling and the strong-fluctuation regime. <i>Journal of Physics Condensed Matter</i> , 2001, 13, 4591-4613.	1.8	57
6	Perturbation Theory for Classical Solids. <i>Physical Review Letters</i> , 1996, 77, 2249-2252.	7.8	53
7	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
8	Theoretical approach to the correlations of a classical crystal. <i>Physical Review E</i> , 1996, 54, 1261-1264.	2.1	49
9	Phase transitions in systems with extremely short-ranged attractions: A density-functional theory. <i>Physical Review B</i> , 1995, 51, 14899-14906.	3.2	48
10	Phase diagrams of systems of particles interacting via repulsive potentials. <i>Journal of Chemical Physics</i> , 1997, 106, 6689-6697.	3.0	45
11	Wetting at nonplanar substrates: Unbending and unbinding. <i>Physical Review E</i> , 1999, 59, 5697-5700.	2.1	43
12	3D Short-Range Wetting and Nonlocality. <i>Physical Review Letters</i> , 2008, 100, 136105.	7.8	41
13	Covariance for Cone and Wedge Complete Filling. <i>Physical Review Letters</i> , 2005, 94, 096103.	7.8	38
14	Geometry dependent critical exponents at complete wetting. <i>Journal of Chemical Physics</i> , 2000, 112, 5175-5180.	3.0	34
15	Derivation of a non-local interfacial Hamiltonian for short-ranged wetting: II. General diagrammatic structure. <i>Journal of Physics Condensed Matter</i> , 2007, 19, 416105.	1.8	31
16	Two-dimensional filling in ordered and disordered systems. <i>Journal of Physics Condensed Matter</i> , 2000, 12, 7671-7685.	1.8	27
17	Surface phase diagrams for wetting on heterogenous substrates. <i>Journal of Chemical Physics</i> , 2001, 115, 5258-5271.	3.0	27
18	Pair correlation functions and the wavevector-dependent surface tension in a simple density functional treatment of the liquid-vapour interface. <i>Journal of Physics Condensed Matter</i> , 2014, 26, 355008.	1.8	24

#	ARTICLE	IF	CITATIONS
19	Solid-to-solid isostructural transition in the hard sphere/attractive Yukawa system. Journal of Chemical Physics, 1995, 103, 9795-9799.	3.0	23
20	Capillary Emptying and Short-Range Wetting. Physical Review Letters, 2012, 108, 246101.	7.8	22
21	Intrinsic Fluid Interfaces and Nonlocality. Physical Review Letters, 2013, 111, 096104.	7.8	22
22	The local structure factor near an interface; beyond extended capillary-wave models. Journal of Physics Condensed Matter, 2016, 28, 244013.	1.8	21
23	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
24	The Trouble with Critical Wetting. Journal of Low Temperature Physics, 2009, 157, 149-173.	1.4	20
25	Geometry-induced capillary emptying. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 12633-12636.	7.1	20
26	Equation of state of the hard-sphere crystal. Physical Review E, 1996, 53, 5698-5703.	2.1	19
27	The order of condensation in capillary grooves. Journal of Physics Condensed Matter, 2013, 25, 192101.	1.8	19
28	Capillary Contact Angle in a Completely Wet Groove. Physical Review Letters, 2014, 113, 146101.	7.8	19
29	Wetting on non-planar and heterogeneous substrates. Journal of Physics Condensed Matter, 2000, 12, A369-A374.	1.8	16
30	Droplet shapes on structured substrates and conformal invariance. Journal of Physics Condensed Matter, 2001, 13, 383-402.	1.8	15
31	Thermodynamic consistency of the hard-sphere solid distribution function. Journal of Chemical Physics, 1996, 105, 10527-10534.	3.0	14
32	Signatures of non locality for short-ranged wetting at curved substrates. Journal of Chemical Physics, 2006, 124, 151101.	3.0	14
33	The Goldstone mode and resonances in the fluid interfacial region. Nature Physics, 2019, 15, 287-292.	16.7	14
34	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
35	Classical density functional study of wetting transitions on nanopatterned surfaces. Journal of Physics Condensed Matter, 2017, 29, 094001.	1.8	12
36	Landau expansion for the critical point of a polydisperse system. Journal of Chemical Physics, 2003, 118, 4312-4320.	3.0	11

#	ARTICLE	IF	CITATIONS
37	The influence of non-locality on fluctuation effects for 3D short-ranged wetting. Journal of Physics Condensed Matter, 2008, 20, 505102.	1.8	11
38	An interpretation of covariance relations for wetting and wedge filling transitions. Journal of Chemical Physics, 2010, 132, 204704.	3.0	11
39	Liquid-gas asymmetry and the wave-vector-dependent surface tension. Physical Review E, 2015, 91, 030401.	2.1	9
40	Wetting of a plane with a narrow solvophobic stripe. Molecular Physics, 2018, 116, 1990-1997.	1.7	9
41	Interfacial Structural Changes and Singularities in Nonplanar Geometries. Physical Review Letters, 1998, 81, 1267-1270.	7.8	8
42	Comment on "Liquids on Topologically Nanopatterned Surfaces": Physical Review Letters, 2007, 98, 199801.	7.8	8
43	Fluid Adsorption at the Base of a Cylinder. Physical Review Letters, 2011, 107, 206104.	7.8	8
44	The critical wetting saga: how to draw the correct conclusion. Journal of Physics Condensed Matter, 2008, 20, 494234.	1.8	7
45	Extended wedge covariance for wetting and filling transitions. Journal of Chemical Physics, 2005, 123, 234105.	3.0	5
46	Scaling properties of fluid adsorption near the base of a cylinder. Physical Review E, 2012, 85, 031606.	2.1	5
47	First-order wedge wetting revisited. Soft Matter, 2018, 14, 2835-2845.	2.7	5
48	Comment on 'Density-functional theory of solid-to-solid isostructural transitions'. Journal of Physics Condensed Matter, 1995, 7, 8211-8213.	1.8	3
49	Adsorption isotherms and surface geometry. Fluid Phase Equilibria, 2001, 185, 147-155.	2.5	3
50	Interfacial fluctuation effects at 3D wedge-wetting. Fluid Phase Equilibria, 2001, 185, 139-146.	2.5	2
51	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
52	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
53	New exact relations for the many-cavity distribution function of non-uniform hard-sphere systems. Molecular Physics, 1995, 84, 373-380.	1.7	1
54	Local Functional Models of Critical Correlations in Thin Films. Physical Review Letters, 2000, 85, 4108-4111.	7.8	1

#	ARTICLE	IF	CITATIONS
55	Local scale invariance for wetting and confined interfaces. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 125002.	2.1	1
56	Scaling of correlation functions near capillary condensation. Molecular Physics, 2011, 109, 1015-1027.	1.7	1