Richard L C Vink

List of Publications by Year
in descending order

60 papers	1,909 citations	257450 24 h-index	265206 42 g-index
62 all docs	62 docs citations	62 times ranked	1650 citing authors

#	Article	IF	Citations
1	Friction on incommensurate substrates: Role of anharmonicity and defects. Physical Review E, 2021, 104, 014802.	2.1	0
2	Noncontact friction: Role of phonon damping and its nonuniversality. Physical Review B, 2021, 104, .	3.2	7
3	Spatially resolved atomic-scale friction: Theory and simulation. Physical Review B, 2020, 101, .	3.2	3
4	Connection between sliding friction and phonon lifetimes: Thermostat-induced thermolubricity effects in molecular dynamics simulations. Physical Review B, 2019, 100, .	3.2	12
5	Insights into Hydrogen Gas Environment-Promoted Nanostructural Changes in Stressed and Relaxed Palladium by Environmental Transmission Electron Microscopy and Variable-Energy Positron Annihilation Spectroscopy. Journal of Physical Chemistry Letters, 2018, 9, 5246-5253.	4.6	8
6	Membrane sorting via the extracellular matrix. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 527-531.	2.6	4
7	Crossover from a Kosterlitz-Thouless phase transition to a discontinuous phase transition in two-dimensional liquid crystals. Physical Review E, 2014, 90, 062132.	2.1	8
8	Raft Formation in Lipid Bilayers Coupled to Curvature. Biophysical Journal, 2014, 107, 1591-1600.	0.5	36
9	A finite-temperature Monte Carlo algorithm for network forming materials. Journal of Chemical Physics, 2014, 140, 104509.	3.0	6
10	A lipid bound actin meshwork organizes liquid phase separation in model membranes. ELife, 2014, 3, e01671.	6.0	161
11	Fluids in porous media: The case of neutral walls. Physical Review E, 2013, 88, 042131.	2.1	7
12	Monolayer curvature stabilizes nanoscale raft domains in mixed lipid bilayers. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 4476-4481.	7.1	99
13	Application of classical nucleation theory to the formation of adhesion domains. Soft Matter, 2013, 9, 11197.	2.7	2
14	Cross-linked biopolymer bundles: Cross-link reversibility leads to cooperative binding/unbinding phenomena. Journal of Chemical Physics, 2012, 136, 035102.	3.0	9
15	Phase separation in fluids exposed to spatially periodic external fields. Physical Review E, 2012, 85, 031505.	2.1	5
16	Main transition in the Pink membrane model: Finite-size scaling and the influence of surface roughness. Physical Review E, 2012, 85, 061912.	2.1	4
17	Random pinning limits the size of membrane adhesion domains. Physical Review E, 2012, 86, 031923.	2.1	19
18	Membrane lateral structure: the influence of immobilized particles on domain size. Physical Chemistry Chemical Physics, 2012, 14, 14500.	2.8	27

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19	Fluid phase separation inside a static periodic field: An effectively two-dimensional critical phenomenon. Journal of Chemical Physics, 2011, 134, 204907.	3.0	8
20	Phase Behavior of Polymerâ€Containing Systems: Recent Advances Through Computer Simulation. Macromolecular Theory and Simulations, 2011, 20, 600-613.	1.4	9
21	Fluids with quenched disorder: scaling of the free energy barrier near critical points. Journal of Physics Condensed Matter, 2011, 23, 234117.	1.8	8
22	Domain formation in membranes with quenched protein obstacles: Lateral heterogeneity and the connection to universality classes. Journal of Chemical Physics, 2011, 134, 055106.	3.0	36
23	The Widomâ€"Rowlinson mixture on a sphere: elimination of exponential slowing down at first-order phase transitions. Journal of Physics Condensed Matter, 2010, 22, 104123.	1.8	9
24	Finite-size scaling in Ising-like systems with quenched random fields: Evidence of hyperscaling violation. Physical Review E, 2010, 82, 051134.	2.1	36
25	Nematics with Quenched Disorder: Violation of Self-Averaging. Physical Review Letters, 2010, 105, 147801.	7.8	5
26	Isotropic-to-nematic transition in confined liquid crystals: An essentially nonuniversal phenomenon. Physical Review E, 2010, 81, 021705.	2.1	15
27	Finite-size effects at first-order isotropic-to-nematic transitions. Physical Review B, 2009, 80, .	3.2	11
28	Restricted orientation â€œliquid crystalâ€• in two dimensions: Isotropic-nematic transition or liquid-gas one(?). Europhysics Letters, 2009, 85, 56003.	2.0	34
29	Critical behavior of soft matter fluids in bulk and in random porous media: from Ising to random-field Ising universality. Soft Matter, 2009, 5, 4388.	2.7	17
30	Confinement effects on phase behavior of soft matter systems. Soft Matter, 2008, 4, 1555.	2.7	118
31	Colloidâ€"polymer mixtures in random porous media: finite size scaling and connected versus disconnected susceptibilities. Journal of Physics Condensed Matter, 2008, 20, 404222.	1.8	17
32	Colloidâ€"polymer mixtures in the presence of quenched disorder: a theoretical and computer simulation study. Journal of Physics Condensed Matter, 2008, 20, 115101.	1.8	11
33	Description of the Fluctuating Colloid-Polymer Interface. Physical Review Letters, 2008, 101, 086101.	7.8	36
34	From capillary condensation to interface localization transitions in colloid-polymer mixtures confined in thin-film geometry. Physical Review E, 2008, 78, 041604.	2.1	19
35	Colloid-polymer mixtures between asymmetric walls: Evidence for an interface localization transition. Europhysics Letters, 2007, 77, 60002.	2.0	25
36	Structure and phase equilibria of the Widomâ€"Rowlinson model. Journal of Physics Condensed Matter, 2007, 19, 036101.	1.8	11

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37	First-order phase transitions in two-dimensional off-lattice liquid crystals. Journal of Physics Condensed Matter, 2007, 19, 466109.	1.8	21
38	Liquid Crystals in Two Dimensions: First-Order Phase Transitions and Nonuniversal Critical Behavior. Physical Review Letters, 2007, 98, 217801.	7.8	50
39	Monte Carlo simulations of phase transitions of systems in nanoscopic confinement. Computer Physics Communications, 2007, 177, 140-145.	7.5	9
40	Critical behavior of the Widom-Rowlinson mixture: Coexistence diameter and order parameter. Journal of Chemical Physics, 2006, 124, 094502.	3.0	17
41	Coexistence diameter in two-dimensional colloid-polymer mixtures. Physical Review E, 2006, 74, 010102.	2.1	5
42	Phase diagram and structure of colloid-polymer mixtures confined between walls. Physical Review E, 2006, 74, 031601.	2.1	35
43	Critical behavior in colloid-polymer mixtures: Theory and simulation. Physical Review E, 2006, 73, 061407.	2.1	29
44	Critical Behavior of Colloid-Polymer Mixtures in Random Porous Media. Physical Review Letters, 2006, 97, 230603.	7.8	43
45	Critical behavior of a colloid-polymer mixture confined between walls. Physical Review E, 2006, 73, 056118.	2.1	43
46	Isotropic-nematic interfacial tension of hard and soft rods: Application of advanced grand canonical biased-sampling techniques. Journal of Chemical Physics, 2005, 123, 074901.	3.0	32
47	Bulk and interfacial properties in colloid-polymer mixtures. Physical Review E, 2005, 72, 030401.	2.1	24
48	Critical phenomena in colloid-polymer mixtures: Interfacial tension, order parameter, susceptibility, and coexistence diameter. Physical Review E, 2005, 71, 011401.	2.1	60
49	Simulation and theory of fluid demixing and interfacial tension of mixtures of colloids and nonideal polymers. Physical Review E, 2005, 71, 051406.	2.1	24
50	Capillary waves in a colloid-polymer interface. Journal of Chemical Physics, 2005, 122, 134905.	3.0	95
51	Interfacial tension of the isotropic-nematic interface in suspensions of soft spherocylinders. Physical Review E, 2005, 71, 051716.	2.1	40
52	Critical behaviour and interfacial fluctuations in a phase-separating model colloidâ€"polymer mixture: grand canonical Monte Carlo simulations. Journal of Physics Condensed Matter, 2004, 16, 3807-3820.	1.8	57
53	Grand canonical Monte Carlo simulation of a model colloidâ€"polymer mixture: Coexistence line, critical behavior, and interfacial tension. Journal of Chemical Physics, 2004, 121, 3253-3258.	3.0	103
54	Large well-relaxed models of vitreous silica, coordination numbers, and entropy. Physical Review B, 2003, 67, .	3.2	57

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55	Simulation of polysilane and polysilyne formation and structure. Journal of Chemical Physics, 2002, 116, 854-859.	3.0	4
56	Configurational Entropy of Network-Forming Materials. Physical Review Letters, 2002, 89, 076405.	7.8	23
57	Raman spectra and structure of amorphous Si. Physical Review B, 2001, 63, .	3.2	99
58	Fitting the Stillingerâ€"Weber potential to amorphous silicon. Journal of Non-Crystalline Solids, 2001, 282, 248-255.	3.1	158
59	Basic mechanisms of structural relaxation and diffusion in amorphous silicon. Materials Research Society Symposia Proceedings, 2001, 664, 2811.	0.1	1
60	Device-size atomistic models of amorphous silicon. Physical Review B, 2001, 64, .	3.2	30