Ralf Blossey

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4705000/publications.pdf

Version: 2024-02-01

113 papers	4,896 citations	196777 29 h-index	104191 69 g-index
125 all docs	125 docs citations	125 times ranked	6432 citing authors

#	Article	IF	Citations
1	Brownian particles driven by spatially periodic noise. European Physical Journal E, 2022, 45, 18.	0.7	3
2	Modeling the Cell Cycle of Caulobacter crescentus. , 2022, , 163-183.		0
3	Field theory of structured liquid dielectrics. Physical Review Research, 2022, 4, .	1.3	6
4	Continuum theories of structured dielectrics. Europhysics Letters, 2022, 139, 27002.	0.7	2
5	Active noise-driven particles under space-dependent friction in one dimension. Physical Review E, 2021, 103, 052602.	0.8	6
6	Dipolar Poisson models in a dual view. Journal of Chemical Physics, 2021, 155, 024112.	1.2	5
7	Methylationâ€dependent transcriptional regulation of crescentin gene (creS) by GcrA in Caulobacter crescentus. Molecular Microbiology, 2020, 114, 127-139.	1.2	16
8	Pioneer transcription factors in chromatin remodeling: The kinetic proofreading view. Physical Review E, 2020, 101, 040401.	0.8	11
9	Charge symmetry broken complex coacervation. Physical Review Research, 2020, 2, .	1.3	8
10	Charge regulation radically modifies electrostatics in membrane stacks. Physical Review E, 2019, 100, 050601.	0.8	14
11	Histone mark recognition controls nucleosome translocation via a kinetic proofreading mechanism: Confronting theory and high-throughput experiments. Physical Review E, 2019, 99, 060401.	0.8	3
12	Chromatin remodelers as active Brownian dimers. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 085601.	0.7	6
13	Comment on â€˜Nonlocal statistical field theory of dipolar particles in electrolyte solutionsâ€™. Journal of Physics Condensed Matter, 2019, 31, 078001.	0.7	0
14	The Latest Twists in Chromatin Remodeling. Biophysical Journal, 2018, 114, 2255-2261.	0.2	10
15	A Novel Integrated Way for Deciphering the Glycan Code for the FimH Lectin. Molecules, 2018, 23, 2794.	1.7	13
16	A fluctuation-corrected functional of convex Poissonâ€“Boltzmann theory. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 385001.	0.7	3
17	The Inclusion of Water Molecules in Residue Interaction Networks Identifies Additional Central Residues. Frontiers in Molecular Biosciences, 2018, 5, 88.	1.6	9
18	Mechanical evolution of DNA double-strand breaks in the nucleosome. PLoS Computational Biology, 2018, 14, e1006224.	1.5	10

#	Article	IF	Citations
19	Nucleation of twisted and tubular states in chiral ribbons. Physical Review E, 2017, 96, 032405.	0.8	1
20	Structural interactions in ionic liquids linked to higher-order Poisson-Boltzmann equations. Physical Review E, 2017, 95, 060602.	0.8	36
21	Molecular docking as a popular tool in drug design, an in silico travel. Advances and Applications in Bioinformatics and Chemistry, 2016, Volume 9, 1-11.	1.6	182
22	On the ability of molecular dynamics simulation and continuum electrostatics to treat interfacial water molecules in protein-protein complexes. Scientific Reports, 2016, 6, 38259.	1.6	11
23	Core-oscillator model ofCaulobacter crescentus. Physical Review E, 2016, 93, 062413.	0.8	1
24	Correlation-induced DNA adsorption on like-charged membranes. Physical Review E, 2016, 94, 042502.	0.8	15
25	Beyond Poissonâ€“Boltzmann: fluctuations and fluid structure in a self-consistent theory. Journal of Physics Condensed Matter, 2016, 28, 343001.	0.7	14
26	Regulatory motifs on ISWI chromatin remodelers: molecular mechanisms and kinetic proofreading. Journal of Physics Condensed Matter, 2015, 27, 064108.	0.7	3
27	Kinetic proofreading of chromatin remodeling: from gene activation to gene repression and back. AIMS Biophysics, 2015, 2, 398-411.	0.3	3
28	Dipolar correlations in structured solvents under nanoconfinement. Journal of Chemical Physics, 2014, 140, 234903.	1.2	33
29	Influence of Slip on the Rayleigh-Plateau Rim Instability in Dewetting Viscous Films. Physical Review Letters, 2014, 113, 014501.	2.9	34
30	DNA i-motif provides steel-like tough ends to chromosomes. Materials Research Society Symposia Proceedings, 2014, 1621, 135-141.	0.1	0
31	Kinetic control of nucleosome displacement by ISWI/ACF chromatin remodelers. Epigenetics and Chromatin, 2013, 6, .	1.8	0
32	Structure and Mechanical Characterization of DNA i-Motif Nanowires by Molecular Dynamics Simulation. Biophysical Journal, 2013, 105, 2820-2831.	0.2	15
33	Self-regulatory gene: An exact solution for the gene gate model. Physical Review E, 2013, 87, 042705.	0.8	23
34	Fokker-Planck description of single nucleosome repositioning by dimeric chromatin remodelers. Physical Review E, 2013, 88, 012728.	0.8	3
35	Epigenetic marks: from code to mechanisms. Frontiers in Life Science: Frontiers of Interdisciplinary Research in the Life Sciences, 2013, 7, 1-1.	1.1	1
36	Ultrasensitive MAPK/Erk activation in absence of protein synthesis in Xenopus oocytes. MAP Kinase, 2013, 2, .	0.3	1

#	Article	IF	Citations
37	Stochastic description of single nucleosome repositioning by ACF remodelers. Physical Review E, 2012, 85, 061920.	0.8	4
38	Kinetic Control of Nucleosome Displacement by ISWI/ACF Chromatin Remodelers. Physical Review Letters, 2012, 109, 118103.	2.9	16
39	Thin Liquid Films. Theoretical and Mathematical Physics (United States), 2012, , .	0.0	48
40	A Dynamical Model of Oocyte Maturation Unveils Precisely Orchestrated Meiotic Decisions. PLoS Computational Biology, 2012, 8, e1002329.	1.5	5
41	Statistical Mechanics of Thin Films. Theoretical and Mathematical Physics (United States), 2012, , 9-47.	0.0	0
42	Hydrodynamics of Thin Viscous Films. Theoretical and Mathematical Physics (United States), 2012, , 59-87.	0.0	0
43	From Classical Liquids to Polymers. Theoretical and Mathematical Physics (United States), 2012, , 49-56.	0.0	0
44	Viscoelastic Thin Films. Theoretical and Mathematical Physics (United States), 2012, , 89-115.	0.0	0
45	Kinetic Proofreading in Chromatin Remodeling: The Case of ISWI/ACF. Biophysical Journal, 2011, 101, L30-L32.	0.2	17
46	Frontiers in Life Scienceis ON. Frontiers in Life Science: Frontiers of Interdisciplinary Research in the Life Sciences, 2011, 5, 1-1.	1.1	1
47	Chromatin remodelling: why, when & how?. FEBS Journal, 2011, 278, 3578-3578.	2.2	0
48	The dynamics of the nucleosome: thermal effects, external forces and ATP. FEBS Journal, 2011, 278, 3619-3632.	2.2	66
49	Slits, plates, and Poisson-Boltzmann theory in a local formulation of nonlocal electrostatics. Physical Review E, 2010, 82, 052501.	0.8	33
50	Electrowetting and droplet impalement experiments on superhydrophobic multiscale structures. Faraday Discussions, 2010, 146, 125.	1.6	33
51	Y-DNA melting: a short tale of three scales. Journal of Physics Condensed Matter, 2009, 21, 034115.	0.7	2
52	Can the hybrid meta GGA and DFTâ€Ð methods describe the stacking interactions in conjugated polymers?. Journal of Computational Chemistry, 2009, 30, 1179-1184.	1.5	15
53	Reversible Electrowetting on Superhydrophobic Double-Nanotextured Surfaces. Langmuir, 2009, 25, 6551-6558.	1.6	55
54	Kicked by Mos and tuned by MPFâ€"the initiation of the MAPK cascade inXenopusoocytes. HFSP Journal, 2009, 3, 428-440.	2.5	13

#	Article	IF	Citations
55	Thin film rupture and polymer flow. Physical Chemistry Chemical Physics, 2008, 10, 5177.	1.3	14
56	Spinodal Dewetting of Thin Films with Large Interfacial Slip: Implications from the Dispersion Relation. Langmuir, 2008, 24, 12290-12294.	1.6	20
57	Metahybrid Density Functional Theory and Correlated ab Initio Studies on Microhydrated Adenineâ‹¯Thymine Base Pairs. Journal of Physical Chemistry B, 2008, 112, 9182-9186.	1.2	10
58	Compositionality, stochasticity, and cooperativity in dynamic models of gene regulation. HFSP Journal, 2008, 2, 17-28.	2.5	29
59	Kinetic proofreading of gene activation by chromatin remodeling. HFSP Journal, 2008, 2, 167-170.	2.5	33
60	Mean-field versus stochastic models for transcriptional regulation. Physical Review E, 2008, 78, 031909.	0.8	9
61	DNA melting. Journal of Physics Condensed Matter, 2008, 21, 030201.	0.7	0
62	Electrostatic potentials of proteins in water: a structured continuum approach. Bioinformatics, 2007, 23, e99-e103.	1.8	41
63	Stability domains of actin genes and genomic evolution. Physical Review E, 2007, 76, 051916.	0.8	4
64	Preparation of Superhydrophobic Silicon Oxide Nanowire Surfaces. Langmuir, 2007, 23, 1608-1611.	1.6	111
65	Performance of DFT/MPWB1K for stacking and H-bonding interactions. Chemical Physics Letters, 2007, 439, 35-39.	1.2	68
66	Slip vs. viscoelasticity in dewetting thin films. European Physical Journal E, 2006, 20, 267-271.	0.7	26
67	A thin-film model for corotational Jeffreys fluids under strong slip. European Physical Journal E, 2006, 20, 365-368.	0.7	18
68	Capillary filling of miniaturized sources for electrospray mass spectrometry. Journal of Physics Condensed Matter, 2006, 18, S677-S690.	0.7	6
69	A Compositional Approach to the Stochastic Dynamics of Gene Networks. Lecture Notes in Computer Science, 2006, , 99-122.	1.0	32
70	The physics of biodevices. Journal of Physics Condensed Matter, 2006, 18, .	0.7	0
71	A thin-film equation for viscoelastic liquids of Jeffreys type. European Physical Journal E, 2005, 17, 373-379.	0.7	43
72	Exons, Introns, and DNA Thermodynamics. Physical Review Letters, 2005, 94, 178101.	2.9	28

#	Article	IF	Citations
73	Deposition from a drop: morphologies of unspecifically bound DNA. Journal of Physics Condensed Matter, 2005, 17, S703-S716.	0.7	28
74	Novel Formulation of Nonlocal Electrostatics. Physical Review Letters, 2004, 93, 108104.	2.9	83
75	Microfluidic design rules for capillary slot-based electrospray sources. Applied Physics Letters, 2004, 85, 2140-2142.	1.5	26
76	Blobs, channels and â€œcigarsâ€• Morphologies of liquids at a step. European Physical Journal E, 2004, 14, 79-89.	0.7	39
77	Complex dewetting scenarios captured by thin-film models. Nature Materials, 2003, 2, 59-63.	13.3	352
78	Self-cleaning surfaces â€" virtual realities. Nature Materials, 2003, 2, 301-306.	13.3	2,089
79	Morphological Instability of a Confined Polymer Film in a Thermal Gradient. Macromolecules, 2003, 36, 1645-1655.	2.2	78
80	Reparametrizing the loop entropy weights: Effect on DNA melting curves. Physical Review E, 2003, 68, 061911.	0.8	79
81	Correlated dewetting patterns in thin polystyrene films. Journal of Physics Condensed Matter, 2003, 15, S421-S426.	0.7	21
82	Satellite hole formation during dewetting: experiment and simulation. Journal of Physics Condensed Matter, 2003, 15, 3355-3366.	0.7	43
83	Wetting droplet instability and quantum ring formation. Physical Review E, 2002, 65, 021603.	0.8	104
84	Temperature-gradientâ€"induced instability in polymer films. Europhysics Letters, 2002, 60, 255-261.	0.7	63
85	Contact Line Deposits on cDNA Microarrays:Â A â€œTwin-Spot Effectâ€• Langmuir, 2002, 18, 2952-2954.	1.6	107
86	Read patents, not just papers. Nature Materials, 2002, 1, 199-201.	13.3	8
87	Hysteresis at First-Order Wetting Transitions of 4He on Weak-Binding Substrates. Journal of Low Temperature Physics, 2002, 126, 355-360.	0.6	1
88	Polystyrene nanodroplets*. Journal of Physics Condensed Matter, 2001, 13, 4915-4923.	0.7	40
89	Effective forces between interfaces in type-I superconductors. Europhysics Letters, 2001, 54, 522-525.	0.7	6
90	Dimple-assisted dewetting: heterogeneous nucleation in undercooled wetting films. Annalen Der Physik, 2001, 10, 733-775.	0.9	4

#	Article	IF	Citations
91	Effect of Substrate Roughness on Wetting and Absorption. Physical Review Letters, 2001, 87, 279601.	2.9	5
92	Capillary-wave effects at critical wetting in type-I superconductors. Physical Review E, 2000, 61, R6049-R6051.	0.8	2
93	Heterogeneous Hole Nucleation in Electron-ChargedH4eWetting Films. Physical Review Letters, 2000, 85, 4743-4746.	2.9	4
94	Dynamics of Wetting Layer Formation. Physical Review Letters, 2000, 84, 4661-4664.	2.9	39
95	First-Order Wetting Transitions under Gravity. Journal of Colloid and Interface Science, 1999, 209, 442-444.	5.0	4
96	Ring Formation in Evaporating Porphyrin Derivative Solutions. Langmuir, 1999, 15, 3582-3588.	1.6	76
97	Dimple instability in a metastable superfluid film. Journal of Low Temperature Physics, 1998, 113, 799-804.	0.6	2
98	Discussion of a model for the prewetting transition of liquid helium on a disordered substrate. Journal of Low Temperature Physics, 1998, 110, 665-670.	0.6	12
99	Random-field Ising model for the hysteresis of the prewetting transition on a disordered substrate. Physica A: Statistical Mechanics and Its Applications, 1998, 248, 247-272.	1.2	29
100	Dimple-assisted dewetting in rotating superfluid films. Physical Review B, 1998, 57, R14048-R14051.	1.1	5
101	Critical holes in undercooled wetting layers. Journal of Physics A, 1997, 30, 2937-2946.	1.6	8
102	Decay of metastable states in wetting and dewetting transitions. Physica A: Statistical Mechanics and Its Applications, 1996, 224, 93-100.	1.2	8
103	Interface-potential approach to surface states in type-I superconductors. Physical Review B, 1996, 53, 8599-8603.	1.1	20
104	Diverging length scales at first-order wetting transitions. Physical Review E, 1995, 52, 1223-1226.	0.8	17
105	NUCLEATION AT FIRST-ORDER WETTING TRANSITIONS. International Journal of Modern Physics B, 1995, 09, 3489-3525.	1.0	40
106	Critical nuclei for wetting and dewetting. Journal of Physics A, 1994, 27, 1405-1406.	1.6	18
107	Lifetime of undercooled wetting layers. Physical Review E, 1994, 50, R1759-R1761.	0.8	22
108	Critical droplets on a wall near a first-order wetting transition. Physical Review E, 1993, 48, 1131-1135.	0.8	36

#	Article	IF	Citations
109	Critical droplets near coexistence of wet and nonwet surface states. European Physical Journal B, 1992, 86, 273-275.	0.6	18
110	Critical Droplets in First-Order Wetting Transitions. Europhysics Letters, 1991, 14, 125-129.	0.7	25
111	Percolation thresholds near lower critical points. Physical Review A, 1991, 44, 1134-1138.	1.0	4
112	Self-Organized InGaAs Quantum Rings -- Fabrication and Spectroscopy. Advances in Solid State Physics, 0, , 125-138.	0.8	11
113	Chromatin. , 0, , .		5