# Reinhard Lipowsky

#### List of Publications by Citations

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19,799 130 314 74 h-index g-index citations papers 21,890 7.2 330 5.7 L-index avg, IF ext. papers ext. citations

#	Paper	IF	Citations
314	Liquid morphologies on structured surfaces: from microchannels to microchips. <i>Science</i> , <b>1999</b> , 283, 46-9	33.3	871
313	The conformation of membranes. <i>Nature</i> , <b>1991</b> , 349, 475-81	50.4	814
312	Shape transformations of vesicles: Phase diagram for spontaneous- curvature and bilayer-coupling models. <i>Physical Review A</i> , <b>1991</b> , 44, 1182-1202	2.6	699
311	Computer simulations of bilayer membranes: Self-assembly and interfacial tension. <i>Journal of Chemical Physics</i> , <b>1998</b> , 108, 7397-7409	3.9	449
310	Mobility and Elasticity of Self-Assembled Membranes. <i>Physical Review Letters</i> , <b>1999</b> , 82, 221-224	7.4	421
309	Adhesion of vesicles. <i>Physical Review A</i> , <b>1990</b> , 42, 4768-4771	2.6	420
308	Tug-of-war as a cooperative mechanism for bidirectional cargo transport by molecular motors.  Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 4609-14	11.5	397
307	Tension-induced fusion of bilayer membranes and vesicles. <i>Nature Materials</i> , <b>2005</b> , 4, 225-8	27	336
306	Critical Surface Phenomena at First-Order Bulk Transitions. <i>Physical Review Letters</i> , <b>1982</b> , 49, 1575-1578	87.4	330
305	Equilibrium structure and lateral stress distribution of amphiphilic bilayers from dissipative particle dynamics simulations. <i>Journal of Chemical Physics</i> , <b>2002</b> , 117, 5048-5061	3.9	306
304	Wetting morphologies at microstructured surfaces. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 1848-52	11.5	305
303	Unbinding transitions of interacting membranes. <i>Physical Review Letters</i> , <b>1986</b> , 56, 2541-2544	7.4	300
302	Cooperative cargo transport by several molecular motors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 17284-9	11.5	297
301	Domain-induced budding of vesicles. <i>Physical Review Letters</i> , <b>1993</b> , 70, 2964-2967	7.4	277
300	Fluid Vesicles in Shear Flow. <i>Physical Review Letters</i> , <b>1996</b> , 77, 3685-3688	7.4	274
299	Contact Angles on Heterogeneous Surfaces: A New Look at Cassie's and Wenzel's Laws. <i>Langmuir</i> , <b>1998</b> , 14, 6772-6780	4	267
298	Shape transformations of vesicles with intramembrane domains. <i>Physical Review E</i> , <b>1996</b> , 53, 2670-2683	3 2.4	236

# (2007-2010)

297	Effect of cholesterol on the rigidity of saturated and unsaturated membranes: fluctuation and electrodeformation analysis of giant vesicles. <i>Soft Matter</i> , <b>2010</b> , 6, 1472	3.6	232
296	A practical guide to giant vesicles. Probing the membrane nanoregime via optical microscopy. <i>Journal of Physics Condensed Matter</i> , <b>2006</b> , 18, S1151-76	1.8	229
295	Morphological Transitions of Wetting Layers on Structured Surfaces. <i>Physical Review Letters</i> , <b>1998</b> , 80, 1920-1923	7.4	224
294	Random walks of cytoskeletal motors in open and closed compartments. <i>Physical Review Letters</i> , <b>2001</b> , 87, 108101	7.4	213
293	Sequential bottom-up assembly of mechanically stabilized synthetic cells by microfluidics. <i>Nature Materials</i> , <b>2018</b> , 17, 89-96	27	211
292	Budding of membranes induced by intramembrane domains. <i>Journal De Physique II</i> , <b>1992</b> , 2, 1825-1840		201
291	Time scales of membrane fusion revealed by direct imaging of vesicle fusion with high temporal resolution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2006</b> , 103, 15841-6	11.5	195
290	Scaling regimes and functional renormalization for wetting transitions. <i>Physical Review B</i> , <b>1987</b> , 36, 212	6 <del>5</del> 23141	181
289	Spontaneous tubulation of membranes and vesicles reveals membrane tension generated by spontaneous curvature. <i>Faraday Discussions</i> , <b>2013</b> , 161, 305-31; discussion 419-59	3.6	179
288	Budding dynamics of multicomponent membranes. <i>Physical Review Letters</i> , <b>2001</b> , 86, 3911-4	7.4	171
287	Giant vesicles in electric fields. Soft Matter, 2007, 3, 817-827	3.6	169
286	Traffic of Molecular Motors Through Tube-Like Compartments. <i>Journal of Statistical Physics</i> , <b>2003</b> , 113, 233-268	1.5	167
285	Wetting morphologies on substrates with striped surface domains. <i>Journal of Applied Physics</i> , <b>2002</b> , 92, 4296-4306	2.5	161
284	Dissipative particle dynamics simulations of polymersomes. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 17708-14	3.4	160
283	Domain-induced budding of fluid membranes. <i>Biophysical Journal</i> , <b>1993</b> , 64, 1133-8	2.9	156
282	MaxSynBio: Avenues Towards Creating Cells from the Bottom Up. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 13382-13392	16.4	155
281	Transport of beads by several kinesin motors. <i>Biophysical Journal</i> , <b>2008</b> , 94, 532-41	2.9	153
<b>2</b> 80	Pathway of membrane fusion with two tension-dependent energy barriers. <i>Physical Review Letters</i> , <b>2007</b> , 98, 218101	7.4	147

279	Wrapping of nanoparticles by membranes. Advances in Colloid and Interface Science, 2014, 208, 214-24	14.3	146
278	The fusion of membranes and vesicles: pathway and energy barriers from dissipative particle dynamics. <i>Biophysical Journal</i> , <b>2009</b> , 96, 2658-75	2.9	139
277	Adhesion of Vesicles and Membranes. <i>Molecular Crystals and Liquid Crystals</i> , <b>1991</b> , 202, 17-25		138
276	Kinesin's network of chemomechanical motor cycles. <i>Physical Review Letters</i> , <b>2007</b> , 98, 258102	7.4	135
275	The 2018 biomembrane curvature and remodeling roadmap. <i>Journal Physics D: Applied Physics</i> , <b>2018</b> , 51,	3	133
274	Transient binding of dynein controls bidirectional long-range motility of early endosomes.  Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 3618-23	11.5	124
273	Vesicles in electric fields: Some novel aspects of membrane behavior. <i>Soft Matter</i> , <b>2009</b> , 5, 3201	3.6	124
272	Membrane nanotubes induced by aqueous phase separation and stabilized by spontaneous curvature. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 4731-6	11.5	120
271	Solvent-exposed tails as prestalk transition states for membrane fusion at low hydration. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 6710-8	16.4	118
270	Tubulation and aggregation of spherical nanoparticles adsorbed on vesicles. <i>Physical Review Letters</i> , <b>2012</b> , 109, 188102	7.4	115
269	Critical particle sizes for the engulfment of nanoparticles by membranes and vesicles with bilayer asymmetry. <i>ACS Nano</i> , <b>2015</b> , 9, 3704-20	16.7	113
268	The morphology of lipid membranes. <i>Current Opinion in Structural Biology</i> , <b>1995</b> , 5, 531-40	8.1	111
267	Individual actin filaments in a microfluidic flow reveal the mechanism of ATP hydrolysis and give insight into the properties of profilin. <i>PLoS Biology</i> , <b>2011</b> , 9, e1001161	9.7	105
266	Interactions of alkali metal chlorides with phosphatidylcholine vesicles. <i>Langmuir</i> , <b>2010</b> , 26, 18951-8	4	104
265	Domains in membranes and vesicles. <i>Journal of Physics Condensed Matter</i> , <b>2003</b> , 15, S31-S45	1.8	103
264	Pattern formation during T-cell adhesion. <i>Biophysical Journal</i> , <b>2004</b> , 87, 3665-78	2.9	99
263	Complete unbinding and quasi-long-range order in lamellar phases. <i>Physical Review B</i> , <b>1987</b> , 35, 7004-7	099	99
262	Spontaneous curvature of fluid vesicles induced by trans-bilayer sugar asymmetry. <i>European Biophysics Journal</i> , <b>1999</b> , 28, 174-178	1.9	95

### (2008-2013)

261	Binding constants of membrane-anchored receptors and ligands depend strongly on the nanoscale roughness of membranes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 15283-8	11.5	92
<b>2</b> 60	Elastic Properties of Polymer-Decorated Membranes. <i>Journal De Physique II</i> , <b>1996</b> , 6, 1465-1481		91
259	Surface critical phenomena at first-order phase transitions. <i>Ferroelectrics</i> , <b>1987</b> , 73, 69-81	0.6	91
258	Wetting on cylinders and spheres. <i>Physical Review B</i> , <b>1987</b> , 36, 8725-8735	3.3	91
257	Molecular motor traffic: From biological nanomachines to macroscopic transport. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2006</b> , 372, 34-51	3.3	88
256	Wetting and dewetting of structured and imprinted surfaces. <i>Colloids and Surfaces A:</i> Physicochemical and Engineering Aspects, <b>2000</b> , 161, 3-22	5.1	87
255	Cell rigidity and shape override CD47's "self"-signaling in phagocytosis by hyperactivating myosin-II. <i>Blood</i> , <b>2015</b> , 125, 542-52	2.2	86
254	Concentration dependence of the interfacial tension for aqueous two-phase polymer solutions of dextran and polyethylene glycol. <i>Langmuir</i> , <b>2012</b> , 28, 3831-9	4	84
253	Tension-induced vesicle fusion: pathways and pore dynamics. Soft Matter, 2008, 4, 1208-1214	3.6	84
252	Binding and unbinding of lipid membranes: A Monte Carlo study. <i>Physical Review Letters</i> , <b>1989</b> , 62, 1572	!- <del>/</del> 1.5475	84
251	Bidirectional transport by molecular motors: enhanced processivity and response to external forces. <i>Biophysical Journal</i> , <b>2010</b> , 98, 2610-8	2.9	83
250	Diffusion-limited growth of wetting layers. <i>Physical Review Letters</i> , <b>1986</b> , 57, 353-356	7.4	83
249	Adhesion of membranesviareceptorligand complexes: Domain formation, binding cooperativity, and active processes. <i>Soft Matter</i> , <b>2009</b> , 5, 3213	3.6	81
248	Improved dissipative particle dynamics simulations of lipid bilayers. <i>Journal of Chemical Physics</i> , <b>2007</b> , 126, 015101	3.9	81
247	Life is motion limultiscale motility of molecular motors. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2005</b> , 352, 53-112	3.3	81
246	Morphological wetting transitions at chemically structured surfaces. <i>Current Opinion in Colloid and Interface Science</i> , <b>2001</b> , 6, 40-48	7.6	80
245	Enhanced ordering of interacting filaments by molecular motors. <i>Physical Review Letters</i> , <b>2006</b> , 96, 258	1934	78
244	Morphological transitions of vesicles induced by alternating electric fields. <i>Biophysical Journal</i> , <b>2008</b> , 95, L19-21	2.9	77

243	Adhesion of Membranes via Anchored Stickers. <i>Physical Review Letters</i> , <b>1996</b> , 77, 1652-1655	7.4	77
242	Wetting in random systems. <i>Physical Review Letters</i> , <b>1986</b> , 56, 472-475	7.4	75
241	Phase diagram and tie-line determination for the ternary mixture DOPC/eSM/cholesterol. <i>Biophysical Journal</i> , <b>2013</b> , 104, 1456-64	2.9	74
240	Spontaneous curvature of bilayer membranes from molecular simulations: asymmetric lipid densities and asymmetric adsorption. <i>Journal of Chemical Physics</i> , <b>2015</b> , 142, 054101	3.9	72
239	Driven Ratchets with Disordered Tracks. <i>Physical Review Letters</i> , <b>1997</b> , 79, 2895-2898	7.4	70
238	Multicomponent order parameter for surface melting. <i>Physical Review Letters</i> , <b>1989</b> , 62, 913-916	7.4	70
237	Controlled division of cell-sized vesicles by low densities of membrane-bound proteins. <i>Nature Communications</i> , <b>2020</b> , 11, 905	17.4	68
236	Adhesion of membranes: a theoretical perspective. <i>Langmuir</i> , <b>1991</b> , 7, 1867-1873	4	68
235	Shape fluctuations of polymerized or solidlike membranes. <i>Physical Review Letters</i> , <b>1990</b> , 65, 2893-2896	57.4	66
234	Coupling of bending and stretching deformations in vesicle membranes. <i>Advances in Colloid and Interface Science</i> , <b>2014</b> , 208, 14-24	14.3	63
233	Adhesion-induced phase behavior of multicomponent membranes. <i>Physical Review E</i> , <b>2001</b> , 64, 011903	2.4	62
232	Dynamic pattern evolution on scale-free networks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 10052-7	11.5	60
231	Patterns of Flexible Nanotubes Formed by Liquid-Ordered and Liquid-Disordered Membranes. <i>ACS Nano</i> , <b>2016</b> , 10, 463-74	16.7	59
230	Unusual bifurcation of renormalization-group fixed points for interfacial transitions. <i>Physical Review Letters</i> , <b>1986</b> , 57, 2411-2414	7.4	59
229	Bacterial twitching motility is coordinated by a two-dimensional tug-of-war with directional memory. <i>Nature Communications</i> , <b>2014</b> , 5, 3759	17.4	58
228	Vesicles with multiple membrane domains. <i>Soft Matter</i> , <b>2011</b> , 7, 6092	3.6	58
227	Behavior of giant vesicles with anchored DNA molecules. <i>Biophysical Journal</i> , <b>2007</b> , 92, 4356-68	2.9	58
226	The computational route from bilayer membranes to vesicle fusion. <i>Journal of Physics Condensed Matter</i> , <b>2006</b> , 18, S1191-219	1.8	57

225	Cooperative wrapping of nanoparticles by membrane tubes. Soft Matter, 2014, 10, 3570-7	3.6	56
224	Distinct transport regimes for two elastically coupled molecular motors. <i>Physical Review Letters</i> , <b>2012</b> , 108, 208101	7.4	56
223	Transition from complete to partial wetting within membrane compartments. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 12252-3	16.4	56
222	Network Brownian Motion: A New Method to Measure Vertex-Vertex Proximity and to Identify Communities and Subcommunities. <i>Lecture Notes in Computer Science</i> , <b>2004</b> , 1062-1069	0.9	56
221	Binding cooperativity of membrane adhesion receptors. Soft Matter, 2009, 5, 3354	3.6	55
220	Charged giant unilamellar vesicles prepared by electroformation exhibit nanotubes and transbilayer lipid asymmetry. <i>Scientific Reports</i> , <b>2018</b> , 8, 11838	4.9	54
219	Presynaptic Biogenesis Requires Axonal Transport of Lysosome-Related Vesicles. <i>Neuron</i> , <b>2018</b> , 99, 121	l 6 <u>⊦</u> ∮.2j37	2. <b>9</b> 4
218	The glycolipid GM1 reshapes asymmetric biomembranes and giant vesicles by curvature generation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 5756-5761	11.5	53
217	Autophagosome closure requires membrane scission. <i>Autophagy</i> , <b>2015</b> , 11, 2134-2137	10.2	52
216	Self-organized density patterns of molecular motors in arrays of cytoskeletal filaments. <i>Biophysical Journal</i> , <b>2005</b> , 88, 3118-32	2.9	52
215	Stability of spherical vesicles in electric fields. <i>Langmuir</i> , <b>2010</b> , 26, 12390-407	4	51
214	Nanoparticle formation in giant vesicles: synthesis in biomimetic compartments. <i>Small</i> , <b>2009</b> , 5, 2033-7	11	51
213	Motility States of Molecular Motors Engaged in a Stochastic Tug-of-War. <i>Journal of Statistical Physics</i> , <b>2008</b> , 133, 1059-1081	1.5	51
212	The role of membrane curvature for the wrapping of nanoparticles. <i>Soft Matter</i> , <b>2016</b> , 12, 581-7	3.6	50
211	Domains and rafts in membranes - hidden dimensions of selforganization. <i>Journal of Biological Physics</i> , <b>2002</b> , 28, 195-210	1.6	50
210	Conformal degeneracy and conformal diffusion of vesicles. <i>Physical Review Letters</i> , <b>1993</b> , 71, 452-455	7.4	49
209	Interface roughening in two-dimensional quasicrystals. <i>Physical Review Letters</i> , <b>1987</b> , 59, 1679-1682	7.4	49
208	Flexible membranes with anchored polymers. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>1997</b> , 128, 255-264	5.1	48

207	Membrane curvature induced by polymers and colloids. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>1998</b> , 249, 536-543	3.3	47
206	Universal aspects of the chemomechanical coupling for molecular motors. <i>Physical Review Letters</i> , <b>2000</b> , 85, 4401-4	7.4	46
205	Remodeling of membrane compartments: some consequences of membrane fluidity. <i>Biological Chemistry</i> , <b>2014</b> , 395, 253-74	4.5	45
204	Chemomechanical Coupling of Molecular Motors: Thermodynamics, Network Representations, and Balance Conditions. <i>Journal of Statistical Physics</i> , <b>2007</b> , 130, 39-67	1.5	45
203	Melting at grain boundaries and surfaces. <i>Physical Review Letters</i> , <b>1986</b> , 57, 2876	7.4	45
202	Discontinuous unbinding transitions of filament bundles. <i>Physical Review Letters</i> , <b>2005</b> , 95, 038102	7.4	44
201	Renormalization of hydration forces by collective protrusion modes. <i>Biophysical Chemistry</i> , <b>1994</b> , 49, 27-37	3.5	44
<b>2</b> 00	Membrane morphology is actively transformed by covalent binding of the protein Atg8 to PE-lipids. <i>PLoS ONE</i> , <b>2014</b> , 9, e115357	3.7	44
199	Membrane Nanotubes Increase the Robustness of Giant Vesicles. ACS Nano, 2018, 12, 4478-4485	16.7	43
198	Stochastic simulations of cargo transport by processive molecular motors. <i>Journal of Chemical Physics</i> , <b>2009</b> , 131, 245107	3.9	43
197	Vortex behavior in high-Tc superconductors with disorder. <i>Physical Review Letters</i> , <b>1988</b> , 61, 2508	7.4	43
196	Liquid Bridges in Chemically Structured Slit Pores. <i>Langmuir</i> , <b>2001</b> , 17, 3390-3399	4	41
195	Unbinding of symmetric and asymmetric stacks of membranes. <i>Physical Review Letters</i> , <b>1993</b> , 71, 3596-3	3 <i>5</i> 949	41
194	Stretched-exponential relaxation of birefringence in a critical binary mixture. <i>Physical Review B</i> , <b>1988</b> , 38, 7223-7226	3.3	41
193	Unbinding transitions and phase separation of multicomponent membranes. <i>Physical Review E</i> , <b>2000</b> , 62, R45-8	2.4	40
192	Binding constants of membrane-anchored receptors and ligands: A general theory corroborated by Monte Carlo simulations. <i>Journal of Chemical Physics</i> , <b>2015</b> , 143, 243136	3.9	39
191	Intrinsic contact angle of aqueous phases at membranes and vesicles. <i>Physical Review Letters</i> , <b>2009</b> , 103, 238103	7.4	39
190	Active diffusion of motor particles. <i>Physical Review Letters</i> , <b>2005</b> , 95, 268102	7.4	39

# (2013-2012)

189	Curvature of double-membrane organelles generated by changes in membrane size and composition. <i>PLoS ONE</i> , <b>2012</b> , 7, e32753	3.7	39	
188	Molecular mechanics of coiled coils loaded in the shear geometry. <i>Chemical Science</i> , <b>2018</b> , 9, 4610-4621	9.4	38	
187	Importance of polar solvation and configurational entropy for design of antiretroviral drugs targeting HIV-1 protease. <i>Journal of Physical Chemistry B</i> , <b>2013</b> , 117, 5793-805	3.4	37	
186	Stable patterns of membrane domains at corrugated substrates. <i>Physical Review Letters</i> , <b>2008</b> , 100, 098	1,0,3	37	
185	Line tension effects for liquid droplets on circular surface domains. <i>Langmuir</i> , <b>2006</b> , 22, 11041-59	4	37	
184	Random walks of molecular motors arising from diffusional encounters with immobilized filaments. <i>Physical Review E</i> , <b>2004</b> , 69, 061911	2.4	37	
183	Droplets, bubbles, and vesicles at chemically structured surfaces. <i>Journal of Physics Condensed Matter</i> , <b>2005</b> , 17, S537-S558	1.8	37	
182	Effects of the chemomechanical stepping cycle on the traffic of molecular motors. <i>Physical Review E</i> , <b>2008</b> , 78, 041909	2.4	36	
181	Binding of Polymers to Calcite Crystals in Water: Characterization by Isothermal Titration Calorimetry. <i>Langmuir</i> , <b>2003</b> , 19, 6097-6103	4	36	
180	Stability of liquid channels or filaments in the presence of line tension. <i>Journal of Physics Condensed Matter</i> , <b>2005</b> , 17, 2349-2364	1.8	36	
179	Effect of ribosome shielding on mRNA stability. <i>Physical Biology</i> , <b>2013</b> , 10, 046008	3	34	
178	Deducing the kinetics of protein synthesis in vivo from the transition rates measured in vitro. <i>PLoS Computational Biology</i> , <b>2014</b> , 10, e1003909	5	34	
177	Lipid membranes in contact with aqueous phases of polymer solutions. Soft Matter, 2012, 8, 6409	3.6	34	
176	Asymptotic properties of degree-correlated scale-free networks. <i>Physical Review E</i> , <b>2010</b> , 81, 046103	2.4	33	
175	Equilibrium morphologies and effective spring constants of capillary bridges. <i>Langmuir</i> , <b>2010</b> , 26, 18734	ŀ- <u>4</u> 1	33	
174	Membrane fluctuations and acidosis regulate cooperative binding of 'marker of self' protein CD47 with the macrophage checkpoint receptor SIRP Journal of Cell Science, <b>2018</b> , 132,	5.3	33	
173	Bilayer Membranes with Frequent Flip-Flops Have Tensionless Leaflets. <i>Nano Letters</i> , <b>2019</b> , 19, 5011-50	1161.5	32	
172	Complex degradation processes lead to non-exponential decay patterns and age-dependent decay rates of messenger RNA. <i>PLoS ONE</i> , <b>2013</b> , 8, e55442	3.7	32	

171	Importance of polar solvation for cross-reactivity of antibody and its variants with steroids. <i>Journal of Physical Chemistry B</i> , <b>2011</b> , 115, 7661-9	3.4	32
170	Cooperative behavior of molecular motors: Cargo transport and traffic phenomena. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2010</b> , 42, 649-661	3	32
169	Membrane flow patterns in multicomponent giant vesicles induced by alternating electric fields Electronic supplementary information (ESI) available: Vesicle preparation procedure, numerical calculations and confocal microscopy movies of domain motion. See DOI: 10.1039/b811876kClick here for additional data file.Click here for additional data file.	3.6	32
168	additional data file Click here for additional data file Click here for additional data file Soft Matter, Novel method for measuring the adhesion energy of vesicles. Langmuir, 2007, 23, 5423-9	4	32
167	From bunches of membranes to bundles of strings. <i>European Physical Journal B</i> , <b>1995</b> , 97, 193-203	1.2	32
166	Renormalized Interactions of Interfaces, Membranes and Polymers. <i>Physica Scripta</i> , <b>1989</b> , T29, 259-264	2.6	32
165	The Conserved ESCRT-III Machinery Participates in the Phagocytosis of. <i>Frontiers in Cellular and Infection Microbiology</i> , <b>2018</b> , 8, 53	5.9	31
164	Protein Synthesis in E. coli: Dependence of Codon-Specific Elongation on tRNA Concentration and Codon Usage. <i>PLoS ONE</i> , <b>2015</b> , 10, e0134994	3.7	31
163	Intermittent depolymerization of actin filaments is caused by photo-induced dimerization of actin protomers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 10769-74	11.5	31
162	Adhesive Nanoparticles as Local Probes of Membrane Curvature. <i>Nano Letters</i> , <b>2015</b> , 15, 7168-73	11.5	30
161	Chemomechanical coupling and motor cycles of myosin V. <i>Biophysical Journal</i> , <b>2011</b> , 100, 1747-55	2.9	30
160	Wetting-induced budding of vesicles in contact with several aqueous phases. <i>Journal of Physical Chemistry B</i> , <b>2012</b> , 116, 1819-23	3.4	29
159	Mechanical compressibility of the glycosylphosphatidylinositol (GPI) anchor backbone governed by independent glycosidic linkages. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 18964-72	16.4	29
158	Stretching of buckled filaments by thermal fluctuations. <i>Physical Review E</i> , <b>2007</b> , 76, 061914	2.4	29
157	Actin polymerization and depolymerization coupled to cooperative hydrolysis. <i>Physical Review Letters</i> , <b>2009</b> , 103, 048102	7.4	28
156	Polymorphism of vesicles with multi-domain patterns. <i>Soft Matter</i> , <b>2009</b> , 5, 3303	3.6	28
155	Asymmetric simple exclusion processes with diffusive bottlenecks. <i>Physical Review E</i> , <b>2004</b> , 70, 066104	2.4	28
154	Parabolic renormalization-group flow for interfaces and membranes. <i>Physical Review Letters</i> , <b>1989</b> , 62, 704-707	7.4	28

153	Equilibrium crystal shapes of ideal and random quasicrystals. <i>Physical Review Letters</i> , <b>1988</b> , 60, 2394-23	9 <b>7</b> .4	28
152	Asymmetric Ionic Conditions Generate Large Membrane Curvatures. <i>Nano Letters</i> , <b>2018</b> , 18, 7816-7821	11.5	28
151	Molecular motor traffic in a half-open tube. <i>Journal of Physics Condensed Matter</i> , <b>2005</b> , 17, S3839-50	1.8	27
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