Reinhard Lipowsky

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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

#	Paper	IF	Citations
314	Multispherical shapes of vesicles highlight the curvature elasticity of biomembranes.. *Advances in Colloid and Interface Science*, **2022**, 301, 102613	14.3	3
313	Integrin IIb 3 Activation and Clustering in Minimal Synthetic Cells. *Advanced NanoBiomed Research*, **2022**, 2, 2100094	0	0
312	Remodeling of Membrane Shape and Topology by Curvature Elasticity and Membrane Tension. *Advanced Biology*, **2021**, e2101020		4
311	Super-Resolution Imaging of Highly Curved Membrane Structures in Giant Vesicles Encapsulating Molecular Condensates. *Advanced Materials*, **2021**, e2106633	24	4
310	Budding and Fission of Nanovesicles Induced by Membrane Adsorption of Small Solutes. *ACS Nano*, **2021**, 15, 7237-7248	16.7	5
309	Active shape oscillations of giant vesicles with cyclic closure and opening of membrane necks. *Soft Matter*, **2021**, 17, 319-330	3.6	9
308	En route to dynamic life processes by SNARE-mediated fusion of polymer and hybrid membranes. *Nature Communications*, **2021**, 12, 4972	17.4	10
307	Structural variability and concerted motions of the T cell receptor - CD3 complex. *ELife*, **2021**, 10,	8.9	2
306	Superelasticity of Plasma- and Synthetic Membranes Resulting from Coupling of Membrane Asymmetry, Curvature, and Lipid Sorting. *Advanced Science*, **2021**, 8, e2102109	13.6	2
305	Coarse-Grained Molecular Model for the Glycosylphosphatidylinositol Anchor with and without Protein. *Journal of Chemical Theory and Computation*, **2020**, 16, 3889-3903	6.4	0
304	Controlled division of cell-sized vesicles by low densities of membrane-bound proteins. *Nature Communications*, **2020**, 11, 905	17.4	68
303	Mechanical Tension of Biomembranes Can Be Measured by Super Resolution (STED) Microscopy of Force-Induced Nanotubes. *Nano Letters*, **2020**, 20, 3185-3191	11.5	7
302	Simple sugars shape giant vesicles into multispheres with many membrane necks. *Soft Matter*, **2020**, 16, 1246-1258	3.6	21
301	Collective Force Generation by Molecular Motors Is Determined by Strain-Induced Unbinding. *Nano Letters*, **2020**, 20, 669-676	11.5	6
300	Unfolding mechanism and free energy landscape of single, stable, alpha helices at low pull speeds. *Soft Matter*, **2020**, 16, 9917-9928	3.6	4
299	Programming multi-protein assembly by gene-brush patterns and two-dimensional compartment geometry. *Nature Nanotechnology*, **2020**, 15, 783-791	28.7	6
298	Spherical Nanovesicles Transform into a Multitude of Nonspherical Shapes. *Nano Letters*, **2019**, 19, 7703-7711	11.5	10

297	Interaction of SNARE Mimetic Peptides with Lipid bilayers: Effects of Secondary Structure, Bilayer Composition and Lipid Anchoring. *Scientific Reports*, **2019**, 9, 7708	4.9	7
296	Optimizing the dynamics of protein expression. *Scientific Reports*, **2019**, 9, 7511	4.9	9
295	Bilayer Membranes with Frequent Flip-Flops Have Tensionless Leaflets. *Nano Letters*, **2019**, 19, 5011-5016	11.5	32
294	Giant Vesicles Encapsulating Aqueous Two-Phase Systems: From Phase Diagrams to Membrane Shape Transformations. *Frontiers in Chemistry*, **2019**, 7, 213	5	9
293	Force-Dependent Unbinding Rate of Molecular Motors from Stationary Optical Trap Data. *Nano Letters*, **2019**, 19, 2598-2602	11.5	5
292	Force sharing and force generation by two teams of elastically coupled molecular motors. *Scientific Reports*, **2019**, 9, 454	4.9	6
291	Directed Growth of Biomimetic Microcompartments. *Advanced Biology*, **2019**, 3, e1800314	3.5	14
290	Understanding giant vesicles: A theoretical perspective **2019**, 73-168		4
289	Particle membrane interactions **2019**, 211-227		
288	Understanding and controlling the morphological complexity of biomembranes. *Advances in Biomembranes and Lipid Self-Assembly*, **2019**, 105-157	1	2
287	Molecular mechanics of coiled coils loaded in the shear geometry. *Chemical Science*, **2018**, 9, 4610-4621	9.4	38
286	Membrane Nanotubes Increase the Robustness of Giant Vesicles. *ACS Nano*, **2018**, 12, 4478-4485	16.7	43
285	Response of Membranes and Vesicles to Capillary Forces Arising from Aqueous Two-Phase Systems and Water-in-Water Droplets. *Journal of Physical Chemistry B*, **2018**, 122, 3572-3586	3.4	11
284	Sequential bottom-up assembly of mechanically stabilized synthetic cells by microfluidics. *Nature Materials*, **2018**, 17, 89-96	27	211
283	The 2018 biomembrane curvature and remodeling roadmap. *Journal Physics D: Applied Physics*, **2018**, 51,	3	133
282	The Conserved ESCRT-III Machinery Participates in the Phagocytosis of. *Frontiers in Cellular and Infection Microbiology*, **2018**, 8, 53	5.9	31
281	MaxSynBio: Avenues Towards Creating Cells from the Bottom Up. *Angewandte Chemie - International Edition*, **2018**, 57, 13382-13392	16.4	155
280	Lipids with bulky head groups generate large membrane curvatures by small compositional asymmetries. *Journal of Chemical Physics*, **2018**, 149, 084901	3.9	18

279	Decomposition of time-dependent fluorescence signals reveals codon-specific kinetics of protein synthesis. *Nucleic Acids Research*, **2018**, 46, e130	20.1	3
278	Charged giant unilamellar vesicles prepared by electroformation exhibit nanotubes and transbilayer lipid asymmetry. *Scientific Reports*, **2018**, 8, 11838	4.9	54
277	Area Increase and Budding in Giant Vesicles Triggered by Light: Behind the Scene. *Advanced Science* , **2018**, 5, 1800432	13.6	24
276	A molecular dynamics model for glycosylphosphatidyl-inositol anchors: "flop down" or "lollipop"?. *Physical Chemistry Chemical Physics*, **2018**, 20, 29314-29324	3.6	2
275	Trimeric coiled coils expand the range of strength, toughness and dynamics of coiled coil motifs under shear. *Physical Chemistry Chemical Physics*, **2018**, 20, 29105-29115	3.6	10
274	Asymmetric Ionic Conditions Generate Large Membrane Curvatures. *Nano Letters*, **2018**, 18, 7816-7821	11.5	28
273	Understanding Membranes and Vesicles: A Personal Recollection of the Last Two Decades **2018**, 3-44		3
272	Nanodroplets at Membranes Create Tight-Lipped Membrane Necks via Negative Line Tension. *ACS Nano*, **2018**, 12, 12424-12435	16.7	13
271	Domes and cones: Adhesion-induced fission of membranes by ESCRT proteins. *PLoS Computational Biology*, **2018**, 14, e1006422	5	15
270	Presynaptic Biogenesis Requires Axonal Transport of Lysosome-Related Vesicles. *Neuron*, **2018**, 99, 1216-1232.e7	13.9	54
269	MaxSynBio: Wege zur Synthese einer Zelle aus nicht lebenden Komponenten. *Angewandte Chemie*, **2018**, 130, 13566-13577	3.6	25
268	Membrane fluctuations and acidosis regulate cooperative binding of 'marker of self' protein CD47 with the macrophage checkpoint receptor SIRP *Journal of Cell Science*, **2018**, 132,	5.3	33
267	The glycolipid GM1 reshapes asymmetric biomembranes and giant vesicles by curvature generation. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 5756-5761	11.5	53
266	Uniform and Janus-like nanoparticles in contact with vesicles: energy landscapes and curvature-induced forces. *Soft Matter*, **2017**, 13, 2155-2173	3.6	23
265	Tug-of-war between two elastically coupled molecular motors: a case study on force generation and force balance. *Soft Matter*, **2017**, 13, 328-344	3.6	5
264	Giant Vesicles Exposed to Aqueous Two-Phase Systems: Membrane Wetting, Budding Processes, and Spontaneous Tubulation. *Advanced Materials Interfaces*, **2017**, 4, 1600451	4.6	21
263	Stabilization of membrane necks by adhesive particles, substrate surfaces, and constriction forces. *Soft Matter*, **2016**, 12, 8155-8166	3.6	14
262	Solution Asymmetry and Salt Expand Fluid-Fluid Coexistence Regions of Charged Membranes. *Biophysical Journal*, **2016**, 110, 2581-2584	2.9	25

261	Binding equilibrium and kinetics of membrane-anchored receptors and ligands in cell adhesion: Insights from computational model systems and theory. *Cell Adhesion and Migration*, **2016**, 10, 576-589	3.2	20
260	Solvent-shared pairs of densely charged ions induce intense but short-range supra-additive slowdown of water rotation. *Physical Chemistry Chemical Physics*, **2016**, 18, 1918-30	3.6	18
259	Patterns of Flexible Nanotubes Formed by Liquid-Ordered and Liquid-Disordered Membranes. *ACS Nano*, **2016**, 10, 463-74	16.7	59
258	The role of membrane curvature for the wrapping of nanoparticles. *Soft Matter*, **2016**, 12, 581-7	3.6	50
257	Membrane curvature generated by asymmetric depletion layers of ions, small molecules, and nanoparticles. *Journal of Chemical Physics*, **2016**, 145, 074117	3.9	17
256	Photosensitive Peptidomimetic for Light-Controlled, Reversible DNA Compaction. *Biomacromolecules*, **2016**, 17, 1959-68	6.9	13
255	Molar mass fractionation in aqueous two-phase polymer solutions of dextran and poly(ethylene glycol). *Journal of Chromatography A*, **2016**, 1452, 107-15	4.5	16
254	Modulating Vesicle Adhesion by Electric Fields. *Biophysical Journal*, **2016**, 111, 1454-1464	2.9	24
253	External forces influence the elastic coupling effects during cargo transport by molecular motors. *Physical Review E*, **2015**, 91, 022701	2.4	20
252	Viscoelasticity of Poly(ethylene glycol) Solutions on Supported Lipid Bilayers via Quartz Crystal Microbalance with Dissipation. *Macromolecules*, **2015**, 48, 1824-1831	5.5	20
251	Critical particle sizes for the engulfment of nanoparticles by membranes and vesicles with bilayer asymmetry. *ACS Nano*, **2015**, 9, 3704-20	16.7	113
250	Adhesive Nanoparticles as Local Probes of Membrane Curvature. *Nano Letters*, **2015**, 15, 7168-73	11.5	30
249	Spontaneous curvature of bilayer membranes from molecular simulations: asymmetric lipid densities and asymmetric adsorption. *Journal of Chemical Physics*, **2015**, 142, 054101	3.9	72
248	Autophagosome closure requires membrane scission. *Autophagy*, **2015**, 11, 2134-2137	10.2	52
247	Binding kinetics of membrane-anchored receptors and ligands: Molecular dynamics simulations and theory. *Journal of Chemical Physics*, **2015**, 143, 243137	3.9	19
246	Association-dissociation process with aging subunits: Recursive solution. *Physical Review E*, **2015**, 92, 052137	2.4	1
245	Cell rigidity and shape override CD47's "self"-signaling in phagocytosis by hyperactivating myosin-II. *Blood*, **2015**, 125, 542-52	2.2	86
244	Binding constants of membrane-anchored receptors and ligands: A general theory corroborated by Monte Carlo simulations. *Journal of Chemical Physics*, **2015**, 143, 243136	3.9	39

243	Protein Synthesis in E. coli: Dependence of Codon-Specific Elongation on tRNA Concentration and Codon Usage. *PLoS ONE*, **2015**, 10, e0134994	3.7	31
242	Molecular Motors: Cooperative Phenomena of Multiple Molecular Motors **2015**, 27-61		10
241	Wrapping of nanoparticles by membranes. *Advances in Colloid and Interface Science*, **2014**, 208, 214-24	14.3	146
240	Allosteric control of kinesin's motor domain by tubulin: a molecular dynamics study. *Physical Chemistry Chemical Physics*, **2014**, 16, 6189-98	3.6	10
239	Effect of cytochrome c on the phase behavior of charged multicomponent lipid membranes. *Biochimica Et Biophysica Acta - Biomembranes*, **2014**, 1838, 2036-45	3.8	22
238	Conformational diversity of O-antigen polysaccharides of the Gram-negative bacterium Shigella flexneri serotype Y. *Journal of Physical Chemistry B*, **2014**, 118, 2523-34	3.4	14
237	Bacterial twitching motility is coordinated by a two-dimensional tug-of-war with directional memory. *Nature Communications*, **2014**, 5, 3759	17.4	58
236	Cooperative wrapping of nanoparticles by membrane tubes. *Soft Matter*, **2014**, 10, 3570-7	3.6	56
235	Coupling of bending and stretching deformations in vesicle membranes. *Advances in Colloid and Interface Science*, **2014**, 208, 14-24	14.3	63
234	Deducing the kinetics of protein synthesis in vivo from the transition rates measured in vitro. *PLoS Computational Biology*, **2014**, 10, e1003909	5	34
233	Remodeling of membrane compartments: some consequences of membrane fluidity. *Biological Chemistry*, **2014**, 395, 253-74	4.5	45
232	Membrane morphology is actively transformed by covalent binding of the protein Atg8 to PE-lipids. *PLoS ONE*, **2014**, 9, e115357	3.7	44
231	Elastic Coupling Effects in Cooperative Transport by a Pair of Molecular Motors. *Cellular and Molecular Bioengineering*, **2013**, 6, 48-64	3.9	15
230	Spontaneous tubulation of membranes and vesicles reveals membrane tension generated by spontaneous curvature. *Faraday Discussions*, **2013**, 161, 305-31; discussion 419-59	3.6	179
229	Effect of ribosome shielding on mRNA stability. *Physical Biology*, **2013**, 10, 046008	3	34
228	Binding constants of membrane-anchored receptors and ligands depend strongly on the nanoscale roughness of membranes. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 15283-8	11.5	92
227	Domain formation in cholesterol/phospholipid membranes exposed to adhesive surfaces or environments. *Soft Matter*, **2013**, 9, 8438	3.6	19
226	Effect of tension and curvature on the chemical potential of lipids in lipid aggregates. *Physical Chemistry Chemical Physics*, **2013**, 15, 876-81	3.6	17

225	Network Complexity and Parametric Simplicity for Cargo Transport by Two Molecular Motors. *Journal of Statistical Physics*, **2013**, 150, 205-234	1.5	14
224	Bifurcation of velocity distributions in cooperative transport of filaments by fast and slow motors. *Biophysical Journal*, **2013**, 104, 666-76	2.9	10
223	Phase diagram and tie-line determination for the ternary mixture DOPC/eSM/cholesterol. *Biophysical Journal*, **2013**, 104, 1456-64	2.9	74
222	Standard Gibbs energies of formation and equilibrium constants from ab-initio calculations: Covalent dimerization of NO2 and synthesis of NH3. *Journal of Chemical Thermodynamics*, **2013**, 62, 211-221	2.9	5
221	Importance of polar solvation and configurational entropy for design of antiretroviral drugs targeting HIV-1 protease. *Journal of Physical Chemistry B*, **2013**, 117, 5793-805	3.4	37
220	On phosphate release in actin filaments. *Biophysical Journal*, **2013**, 104, 2778-9	2.9	2
219	Cooperative slowdown of water rotation near densely charged ions is intense but short-ranged. *Journal of Physical Chemistry B*, **2013**, 117, 10556-66	3.4	21
218	Adhesion-induced phase behavior of two-component membranes and vesicles. *International Journal of Molecular Sciences*, **2013**, 14, 2203-29	6.3	8
217	Complex degradation processes lead to non-exponential decay patterns and age-dependent decay rates of messenger RNA. *PLoS ONE*, **2013**, 8, e55442	3.7	32
216	Dwell time distributions of the molecular motor myosin V. *PLoS ONE*, **2013**, 8, e55366	3.7	7
215	Wetting-induced budding of vesicles in contact with several aqueous phases. *Journal of Physical Chemistry B*, **2012**, 116, 1819-23	3.4	29
214	Mechanical compressibility of the glycosylphosphatidylinositol (GPI) anchor backbone governed by independent glycosidic linkages. *Journal of the American Chemical Society*, **2012**, 134, 18964-72	16.4	29
213	Concentration dependence of the interfacial tension for aqueous two-phase polymer solutions of dextran and polyethylene glycol. *Langmuir*, **2012**, 28, 3831-9	4	84
212	Intermittent depolymerization of actin filaments is caused by photo-induced dimerization of actin protomers. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 10769-74	11.5	31
211	Distinct transport regimes for two elastically coupled molecular motors. *Physical Review Letters*, **2012**, 108, 208101	7.4	56
210	Critical motor number for fractional steps of cytoskeletal filaments in gliding assays. *PLoS ONE*, **2012**, 7, e43219	3.7	4
209	Lipid membranes in contact with aqueous phases of polymer solutions. *Soft Matter*, **2012**, 8, 6409	3.6	34
208	Tubulation and aggregation of spherical nanoparticles adsorbed on vesicles. *Physical Review Letters* , **2012**, 109, 188102	7.4	115

207	Curvature of double-membrane organelles generated by changes in membrane size and composition. *PLoS ONE*, **2012**, 7, e32753	3.7	39
206	Chemomechanical coupling and motor cycles of myosin V. *Biophysical Journal*, **2011**, 100, 1747-55	2.9	30
205	Line tension and stability of domains in cell-adhesion zones mediated by long and short receptor-ligand complexes. *PLoS ONE*, **2011**, 6, e23284	3.7	24
204	Co-operative transport by molecular motors. *Biochemical Society Transactions*, **2011**, 39, 1211-5	5.1	20
203	Translation by Ribosomes with mRNA Degradation: Exclusion Processes on Aging Tracks. *Journal of Statistical Physics*, **2011**, 145, 1385-1404	1.5	13
202	Droplet-induced budding transitions of membranes. *Soft Matter*, **2011**, 7, 6914	3.6	24
201	Vesicles with multiple membrane domains. *Soft Matter*, **2011**, 7, 6092	3.6	58
200	Importance of polar solvation for cross-reactivity of antibody and its variants with steroids. *Journal of Physical Chemistry B*, **2011**, 115, 7661-9	3.4	32
199	Length-dependent translation of messenger RNA by ribosomes. *Physical Review E*, **2011**, 83, 042903	2.4	18
198	Sequences of phase transitions in Ising models on correlated networks. *Physical Review E*, **2011**, 83, 061129	2.4	4
197	Membrane nanotubes induced by aqueous phase separation and stabilized by spontaneous curvature. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 4731-6	11.5	120
196	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
195	Individual actin filaments in a microfluidic flow reveal the mechanism of ATP hydrolysis and give insight into the properties of profilin. *PLoS Biology*, **2011**, 9, e1001161	9.7	105
194	Asymptotic properties of degree-correlated scale-free networks. *Physical Review E*, **2010**, 81, 046103	2.4	33
193	Treadmilling of actin filaments via Brownian dynamics simulations. *Journal of Chemical Physics*, **2010**, 133, 155105	3.9	11
192	Bidirectional transport by molecular motors: enhanced processivity and response to external forces. *Biophysical Journal*, **2010**, 98, 2610-8	2.9	83
191	Morphological wetting transitions at ring-shaped surface domains. *Langmuir*, **2010**, 26, 11878-85	4	17
190	Stability of spherical vesicles in electric fields. *Langmuir*, **2010**, 26, 12390-407	4	51

189	Equilibrium morphologies and effective spring constants of capillary bridges. *Langmuir*, **2010**, 26, 18734-41	4	33
188	Solvent-exposed tails as prestalk transition states for membrane fusion at low hydration. *Journal of the American Chemical Society*, **2010**, 132, 6710-8	16.4	118
187	Fusion-relevant changes in lipid shape of hydrated cholesterol hemisuccinate induced by pH and counterion species. *Journal of Physical Chemistry B*, **2010**, 114, 14941-6	3.4	11
186	Semiflexible polymer rings on topographically and chemically structured surfaces. *Soft Matter*, **2010**, 6, 5461	3.6	5
185	Modelling semiflexible polymers: shape analysis, buckling instabilities, and force generation. *Soft Matter*, **2010**, 6, 5764	3.6	12
184	Effect of cholesterol on the rigidity of saturated and unsaturated membranes: fluctuation and electrodeformation analysis of giant vesicles. *Soft Matter*, **2010**, 6, 1472	3.6	232
183	Cargo Transport by Teams of Molecular Motors: Basic Mechanisms for Intracellular Drug Delivery **2010**, 289-309		1
182	Interactions of alkali metal chlorides with phosphatidylcholine vesicles. *Langmuir*, **2010**, 26, 18951-8	4	104
181	Impact of Slip Cycles on the Operation Modes and Efficiency of Molecular Motors. *Journal of Statistical Physics*, **2010**, 141, 1-16	1.5	10
180	Cooperative behavior of molecular motors: Cargo transport and traffic phenomena. *Physica E: Low-Dimensional Systems and Nanostructures*, **2010**, 42, 649-661	3	32
179	Traffic by multiple species of molecular motors. *Physical Review E*, **2009**, 80, 041928	2.4	19
178	Actin polymerization and depolymerization coupled to cooperative hydrolysis. *Physical Review Letters*, **2009**, 103, 048102	7.4	28
177	Intrinsic contact angle of aqueous phases at membranes and vesicles. *Physical Review Letters*, **2009**, 103, 238103	7.4	39
176	Adhesion of surfaces via particle adsorption: exact results for a lattice of fluid columns. *Journal of Statistical Mechanics: Theory and Experiment*, **2009**, 2009, P11006	1.9	1
175	Self-assembly of actin monomers into long filaments: Brownian dynamics simulations. *Journal of Chemical Physics*, **2009**, 131, 015102	3.9	16
174	Stochastic simulations of cargo transport by processive molecular motors. *Journal of Chemical Physics*, **2009**, 131, 245107	3.9	43
173	Dissipative particle dynamics of tension-induced membrane fusion. *Molecular Simulation*, **2009**, 35, 554-560	1.2	12
172	ACTIVE BIO-SYSTEMS: FROM SINGLE MOTOR MOLECULES TO COOPERATIVE CARGO TRANSPORT. *Biophysical Reviews and Letters*, **2009**, 04, 77-137	1.2	11

171	Transport by Molecular Motors in the Presence of Static Defects. *Journal of Statistical Physics*, **2009**, 135, 241-260	1.5	18
170	Energy Conversion by Molecular Motors Coupled to Nucleotide Hydrolysis. *Journal of Statistical Physics*, **2009**, 135, 951-975	1.5	21
169	Nanoparticle formation in giant vesicles: synthesis in biomimetic compartments. *Small*, **2009**, 5, 2033-7	11	51
168	Morphological transitions of liquid droplets on circular surface domains. *Langmuir*, **2009**, 25, 13493-502	4	6
167	The fusion of membranes and vesicles: pathway and energy barriers from dissipative particle dynamics. *Biophysical Journal*, **2009**, 96, 2658-75	2.9	139
166	Adhesion of membranesviareceptor□gand complexes: Domain formation, binding cooperativity, and active processes. *Soft Matter*, **2009**, 5, 3213	3.6	81
165	Vesicles in electric fields: Some novel aspects of membrane behavior. *Soft Matter*, **2009**, 5, 3201	3.6	124
164	Binding cooperativity of membrane adhesion receptors. *Soft Matter*, **2009**, 5, 3354	3.6	55
163	Polymorphism of vesicles with multi-domain patterns. *Soft Matter*, **2009**, 5, 3303	3.6	28
162	Self-assembling network and bundle structures in systems of rods and crosslinkers □A Monte Carlo study. *Soft Matter*, **2009**, 5, 1504	3.6	16
161	Traffic by Small Teams of Molecular Motors **2009**, 695-700		
160	Transport of beads by several kinesin motors. *Biophysical Journal*, **2008**, 94, 532-41	2.9	153
159	Morphological transitions of vesicles induced by alternating electric fields. *Biophysical Journal*, **2008**, 95, L19-21	2.9	77
158	Tension-induced vesicle fusion: pathways and pore dynamics. *Soft Matter*, **2008**, 4, 1208-1214	3.6	84
157	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.Click here for	3.6	32
156	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
155	Transition from complete to partial wetting within membrane compartments. *Journal of the American Chemical Society*, **2008**, 130, 12252-3	16.4	56
154	Effects of the chemomechanical stepping cycle on the traffic of molecular motors. *Physical Review E*, **2008**, 78, 041909	2.4	36

153	Stable patterns of membrane domains at corrugated substrates. *Physical Review Letters*, **2008**, 100, 098103	7.4	37
152	Motility States of Molecular Motors Engaged in a Stochastic Tug-of-War. *Journal of Statistical Physics*, **2008**, 133, 1059-1081	1.5	51
151	Giant vesicles in electric fields. *Soft Matter*, **2007**, 3, 817-827	3.6	169
150	Conformational diversity of the fibrillogenic fusion peptide B18 in different environments from molecular dynamics simulations. *Journal of Physical Chemistry B*, **2007**, 111, 4161-70	3.4	16
149	Novel method for measuring the adhesion energy of vesicles. *Langmuir*, **2007**, 23, 5423-9	4	32
148	Behavior of giant vesicles with anchored DNA molecules. *Biophysical Journal*, **2007**, 92, 4356-68	2.9	58
147	Chemomechanical Coupling of Molecular Motors: Thermodynamics, Network Representations, and Balance Conditions. *Journal of Statistical Physics*, **2007**, 130, 39-67	1.5	45
146	Activity patterns on random scale-free networks: global dynamics arising from local majority rules. *Journal of Statistical Mechanics: Theory and Experiment*, **2007**, 2007, P01009-P01009	1.9	3
145	Pathway of membrane fusion with two tension-dependent energy barriers. *Physical Review Letters*, **2007**, 98, 218101	7.4	147
144	Stretching of buckled filaments by thermal fluctuations. *Physical Review E*, **2007**, 76, 061914	2.4	29
143	Kinesin's network of chemomechanical motor cycles. *Physical Review Letters*, **2007**, 98, 258102	7.4	135
142	VISUALIZING SOFT MATTER: MESOSCOPIC SIMULATIONS OF MEMBRANES, VESICLES AND NANOPARTICLES. *Biophysical Reviews and Letters*, **2007**, 02, 33-55	1.2	17
141	Improved dissipative particle dynamics simulations of lipid bilayers. *Journal of Chemical Physics*, **2007**, 126, 015101	3.9	81
140	Cooperative Behaviour of Semiflexible Polymers and Filaments **2007**, 239-249		2
139	Traffic of Molecular Motors **2007**, 251-261		3
138	FILAMENT ORDERING AND CLUSTERING BY MOLECULAR MOTORS IN MOTILITY ASSAYS. *Biophysical Reviews and Letters*, **2006**, 01, 363-374	1.2	3
137	ELECTROFUSION OF MODEL LIPID MEMBRANES VIEWED WITH HIGH TEMPORAL RESOLUTION. *Biophysical Reviews and Letters*, **2006**, 01, 387-400	1.2	23
136	COOPERATIVE TRANSPORT BY SMALL TEAMS OF MOLECULAR MOTORS. *Biophysical Reviews and Letters*, **2006**, 01, 353-361	1.2	3

135	Time scales of membrane fusion revealed by direct imaging of vesicle fusion with high temporal resolution. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 15841-6	11.5	195
134	Adhesion of membranes via switchable molecules. *Physical Review E*, **2006**, 73, 061908	2.4	11
133	Adhesion of membranes with active stickers. *Physical Review Letters*, **2006**, 96, 048101	7.4	24
132	A practical guide to giant vesicles. Probing the membrane nanoregime via optical microscopy. *Journal of Physics Condensed Matter*, **2006**, 18, S1151-76	1.8	229
131	Novel Low-Density Structure for Hard Rods with Adhesive End Groups. *Macromolecules*, **2006**, 39, 7138-7143	5.5	11
130	Enhanced ordering of interacting filaments by molecular motors. *Physical Review Letters*, **2006**, 96, 258103	7.4	78
129	The computational route from bilayer membranes to vesicle fusion. *Journal of Physics Condensed Matter*, **2006**, 18, S1191-219	1.8	57
128	Line tension effects for liquid droplets on circular surface domains. *Langmuir*, **2006**, 22, 11041-59	4	37
127	Chapter 4 Membrane Adhesion and Domain Formation. *Behavior Research Methods*, **2006**, 63-127	6.1	13
126	Molecular motor traffic: From biological nanomachines to macroscopic transport. *Physica A: Statistical Mechanics and Its Applications*, **2006**, 372, 34-51	3.3	88
125	Buckling, Bundling, and Pattern Formation: From Semi-Flexible Polymers to Assemblies of Interacting Filaments. *Journal of Computational and Theoretical Nanoscience*, **2006**, 3, 898-911	0.3	7
124	The influence of non-anchored polymers on the curvature of vesicles. *Molecular Physics*, **2005**, 103, 3169-3183	1.7	11
123	Dissipative particle dynamics simulations of polymersomes. *Journal of Physical Chemistry B*, **2005**, 109, 17708-14	3.4	160
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