Daniel Harries

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3859852/publications.pdf

Version: 2024-02-01

101 papers	4,774 citations	70961 41 h-index	98622 67 g-index
104 all docs	104 docs citations	104 times ranked	5178 citing authors

#	Article	IF	Citations
1	Entropy of Branching Out: Linear versus Branched Alkylthiols Ligands on CdSe Nanocrystals. ACS Nano, 2022, 16, 4308-4321.	7.3	15
2	Macromolecular Crowding Is More than Hard-Core Repulsions. Annual Review of Biophysics, 2022, 51, 267-300.	4.5	51
3	How Glycine Betaine Modifies Lipid Membrane Interactions. ChemSystemsChem, 2021, 3, e2100010.	1.1	3
4	Cyclodextrin solubilization in hydrated reline: Resolving the unique stabilization mechanism in a deep eutectic solvent. Journal of Chemical Physics, 2021, 154, 224505.	1.2	5
5	Osmolytes and crowders regulate aggregation of the cancer-related L106R mutant of the Axin protein. Biophysical Journal, 2021, 120, 3455-3469.	0.2	1
6	Calcium Ions Promote Membrane Fusion by Forming Negative-Curvature Inducing Clusters on Specific Anionic Lipids. ACS Nano, 2021, 15, 12880-12887.	7.3	23
7	Î²-Hairpin Miniprotein Stabilization in Trehalose Glass Is Facilitated by an Emergent Compact Non-Native State. Journal of Physical Chemistry Letters, 2021, 12, 7659-7664.	2.1	2
8	Molecular self-assembly under nanoconfinement: indigo carmine scroll structures entrapped within polymeric capsules. Nanoscale, 2021, 13, 20462-20470.	2.8	4
9	Properties of Aqueous Trehalose Mixtures: Glass Transition and Hydrogen Bonding. Journal of Chemical Theory and Computation, 2020, 16, 1249-1262.	2.3	39
10	Heterogeneous Electrofreezing of Superâ€Cooled Water on Surfaces of Pyroelectric Crystals is Triggered by Trigonal Planar Ions. Angewandte Chemie - International Edition, 2020, 59, 15575-15579.	7.2	5
11	Confinement in Nanodiscs Anisotropically Modifies Lipid Bilayer Elastic Properties. Journal of Physical Chemistry B, 2020, 124, 7166-7175.	1.2	26
12	Heterogeneous Electrofreezing of Superâ€Cooled Water on Surfaces of Pyroelectric Crystals is Triggered by Trigonal Planar Ions. Angewandte Chemie, 2020, 132, 15705-15709.	1.6	3
13	InnenrÃ¼cktitelbild: Heterogeneous Electrofreezing of Superâ€Cooled Water on Surfaces of Pyroelectric Crystals is Triggered by Trigonal Planar Ions (Angew. Chem. 36/2020). Angewandte Chemie, 2020, 132, 15895-15895.	1.6	0
14	Bridges of Calcium Bicarbonate Tightly Couple Dipolar Lipid Membranes. Langmuir, 2020, 36, 10715-10724.	1.6	6
15	Restructuring a Deep Eutectic Solvent by Water: The Nanostructure of Hydrated Choline Chloride/Urea. Journal of Chemical Theory and Computation, 2020, 16, 3335-3342.	2.3	78
16	Stressing crystals with solutes: Effects of added solutes on crystalline caffeine and their relevance to determining transfer free energies. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 599, 124889.	2.3	2
17	How Sugars Modify Caffeine Self-Association and Solubility: Resolving a Mechanism of Selective Hydrotropy. Journal of the American Chemical Society, 2019, 141, 18056-18063.	6.6	20
18	The taste of KCl â€“ What a difference a sugar makes. Food Chemistry, 2018, 255, 165-173.	4.2	14

#	Article	IF	Citations
19	A local instantaneous surface method for extracting membrane elastic moduli from simulation: Comparison with other strategies. Chemical Physics, 2018, 514, 31-43.	0.9	22
20	Revisiting Hydrogen Bond Thermodynamics in Molecular Simulations. Journal of Chemical Theory and Computation, 2017, 13, 2851-2857.	2.3	26
21	Impact of trehalose on the activity of sodium and potassium chloride in aqueous solutions: Why trehalose is worth its salt. Food Chemistry, 2017, 237, 1209-1215.	4.2	12
22	Determination of bending rigidity and tilt modulus of lipid membranes from real-space fluctuation analysis of molecular dynamics simulations. Physical Chemistry Chemical Physics, 2017, 19, 16806-16818.	1.3	98
23	How do Cosolutes Stabilize Macromolecules? From Bridging to Depletion Attraction. Biophysical Journal, 2017, 112, 195a.	0.2	1
24	TMAO mediates effective attraction between lipid membranes by partitioning unevenly between bulk and lipid domains. Physical Chemistry Chemical Physics, 2017, 19, 29862-29871.	1.3	21
25	Thermodynamic Mechanism of Protein Stabilization: Crowders vs. Osmolytes. Biophysical Journal, 2016, 110, 212a-213a.	0.2	0
26	Implementation of a methodology for determining elastic properties of lipid assemblies from molecular dynamics simulations. BMC Bioinformatics, 2016, 17, 161.	1.2	25
27	Competing processes of micellization and fibrillization in native and reduced casein proteins. Physical Chemistry Chemical Physics, 2016, 18, 22516-22525.	1.3	10
28	Reversible Modulation of DNA-Based Hydrogel Shapes by Internal Stress Interactions. Journal of the American Chemical Society, 2016, 138, 16112-16119.	6.6	105
29	Nonclassical Crystal Growth as Explanation for the Riddle of Polarity in Centrosymmetric Glycine Crystals. Journal of the American Chemical Society, 2016, 138, 14756-14763.	6.6	14
30	Properties of Polyvinylpyrrolidone in a Deep Eutectic Solvent. Journal of Physical Chemistry A, 2016, 120, 3253-3259.	1.1	46
31	Macromolecular compaction by mixed solutions: Bridging versus depletion attraction. Current Opinion in Colloid and Interface Science, 2016, 22, 80-87.	3.4	36
32	Macromolecular Stabilization by Excluded Cosolutes: Mean Field Theory of Crowded Solutions. Journal of Chemical Theory and Computation, 2015, 11, 3478-3490.	2.3	30
33	Cholesterol under oxidative stressâ€"How lipid membranes sense oxidation as cholesterol is being replaced by oxysterols. Free Radical Biology and Medicine, 2015, 84, 30-41.	1.3	57
34	The contribution of capping layer dielectric properties to nanoparticle stability. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 483, 239-247.	2.3	2
35	Osmolyte Induced Changes in Peptide Conformational Ensemble Correlate with Slower Amyloid Aggregation: A Coarse-Grained Simulation Study. Journal of Chemical Theory and Computation, 2015, 11, 5918-5928.	2.3	12
36	Is the depletion force entropic? Molecular crowding beyond steric interactions. Current Opinion in Colloid and Interface Science, 2015, 20, 3-10.	3.4	106

#	Article	IF	Citations
37	Curvature and Lipid Packing Modulate the Elastic Properties of Lipid Assemblies: Comparing H_{II} and Lamellar Phases. Journal of Physical Chemistry Letters, 2014, 5, 4201-4206.	2.1	23
38	Molecular origins of bending rigidity in lipids with isolated and conjugated double bonds: The effect of cholesterol. Chemistry and Physics of Lipids, 2014, 178, 18-26.	1.5	27
39	Effect of salt on the formation of salt-bridges in Î²-hairpin peptides. Chemical Communications, 2014, 50, 8193-8196.	2.2	11
40	Origin of Enthalpic Depletion Forces. Journal of Physical Chemistry Letters, 2014, 5, 1061-1065.	2.1	74
41	Soft Matter Physics of Lipid Membraneâ€“Based Assemblies. , 2014, , 3-30.		8
42	Counterion release in membraneâ€“biopolymer interactions. Soft Matter, 2013, 9, 9268.	1.2	40
43	Balance of enthalpy and entropy in depletion forces. Current Opinion in Colloid and Interface Science, 2013, 18, 495-501.	3.4	86
44	Modulating the structure and interactions of lipidâ€“peptide complexes by varying membrane composition and solution conditions. Soft Matter, 2013, 9, 7117.	1.2	15
45	How Cholesterol Tilt Modulates the Mechanical Properties of Saturated and Unsaturated Lipid Membranes. Journal of Physical Chemistry B, 2013, 117, 2411-2421.	1.2	62
46	How sterol tilt regulates properties and organization of lipid membranes and membrane insertions. Chemistry and Physics of Lipids, 2013, 169, 113-123.	1.5	34
47	Calculating the Bending Modulus for Multicomponent Lipid Membranes in Different Thermodynamic Phases. Journal of Chemical Theory and Computation, 2013, 9, 3866-3871.	2.3	102
48	Diversity in the mechanisms of cosolute action on biomolecular processes. Faraday Discussions, 2013, 160, 225-237.	1.6	67
49	Effect of capsid confinement on the chromatin organization of the SV40 minichromosome. Nucleic Acids Research, 2013, 41, 1569-1580.	6.5	29
50	Insights into the disparate action of osmolytes and macromolecular crowders on amyloid formation. Prion, 2012, 6, 26-31.	0.9	26
51	9.4 Coarse Grained Methods: Applications to Membranes. , 2012, , 53-75.		0
52	RNA Encapsidation by SV40-Derived Nanoparticles Follows a Rapid Two-State Mechanism. Journal of the American Chemical Society, 2012, 134, 8823-8830.	6.6	86
53	Unraveling the Molecular Mechanism of Enthalpy Driven Peptide Folding by Polyol Osmolytes. Journal of Chemical Theory and Computation, 2011, 7, 3816-3828.	2.3	50
54	Molecular Properties from Conformational Ensembles. 1. Dipole Moments of Molecules with Multiple Internal Rotations. Journal of Physical Chemistry A, 2011, 115, 5794-5809.	1.1	1

#	Article	IF	Citations
55	Linking Trehalose Self-Association with Binary Aqueous Solution Equation of State. Journal of Physical Chemistry B, 2011, 115, 624-634.	1.2	66
56	Self-assembly of DNA nanotubes with controllable diameters. Nature Communications, 2011, 2, 540.	5.8	74
57	Curvature Instability in a Chiral Amphiphile Self-Assembly. Physical Review Letters, 2011, 106, 238105.	2.9	60
58	Impact of sterol tilt on membrane bending rigidity in cholesterol and 7DHC-containing DMPC membranes. Soft Matter, 2011, 7, 10299.	1.2	18
59	Osmolytes Induce Changes in the Conformational Landscape of a Model Peptide. Biophysical Journal, 2011, 100, 396a-397a.	0.2	0
60	Crowding Alone Cannot Account for Cosolute Effect on Amyloid Aggregation. PLoS ONE, 2011, 6, e15608.	1.1	62
61	Ion-specific hydration effects: Extending the Poisson-Boltzmann theory. Current Opinion in Colloid and Interface Science, 2011, 16, 542-550.	3.4	133
62	Modeling Signaling Processes across Cellular Membranes Using a Mesoscopic Approach. Annual Reports in Computational Chemistry, 2010, 6, 236-261.	0.9	5
63	Nematic Order in Small Systems: Measuring the Elastic and Wall-Anchoring Constants in Vibrofluidized Granular Rods. Physical Review Letters, 2010, 105, 168001.	2.9	41
64	Osmotic stress regulates the strength and kinetics of sugar binding to the maltoporin channel. Journal of Physics Condensed Matter, 2010, 22, 454110.	0.7	9
65	Cholesterol Orientation and Tilt Modulus in DMPC Bilayers. Biophysical Journal, 2010, 98, 80a.	0.2	1
66	Enthalpically driven peptide stabilization by protective osmolytes. Chemical Communications, 2010, 46, 6449.	2.2	103
67	Cholesterol Orientation and Tilt Modulus in DMPC Bilayers. Journal of Physical Chemistry B, 2010, 114, 7524-7534.	1.2	81
68	Depletion forces drive polymer-like self-assembly in vibrofluidized granular materials. Soft Matter, 2010, 6, 1026.	1.2	26
69	The Dynamic Side of the Hofmeister Effect: A Singleâ€Molecule Nanopore Study of Specific Complex Formation. ChemPhysChem, 2009, 10, 1445-1449.	1.0	29
70	Ions in Mixed Dielectric Solvents: Density Profiles and Osmotic Pressure between Charged Interfaces. Journal of Physical Chemistry B, 2009, 113, 6001-6011.	1.2	62
71	Osmotically Induced Reversible Transitions in Lipid-DNA Mesophases. Biophysical Journal, 2009, 96, L43-L45.	0.2	17
72	Modeling Membrane Deformations and Lipid Demixing upon Protein-Membrane Interaction: The BAR Dimer Adsorption. Biophysical Journal, 2009, 97, 1626-1635.	0.2	63

#	Article	IF	Citations
73	Beyond standard Poissonâ€“Boltzmann theory: ion-specific interactions in aqueous solutions. Journal of Physics Condensed Matter, 2009, 21, 424106.	0.7	98
74	The Impact of Polyols on Water Structure in Solution: A Computational Study. Journal of Physical Chemistry A, 2009, 113, 7548-7555.	1.1	74
75	Matrix formalism for siteâ€specific binding of unstructured proteins to multicomponent lipid membranes. Journal of Peptide Science, 2008, 14, 368-373.	0.8	12
76	Protein Diffusion on Charged Membranes: A Dynamic Mean-Field Model Describes Time Evolution and Lipid Reorganization. Biophysical Journal, 2008, 94, 2580-2597.	0.2	49
77	A Practical Guide on How Osmolytes Modulate Macromolecular Properties. Methods in Cell Biology, 2008, 84, 679-735.	0.5	112
78	Interactions in Macromolecular Complexes Used as Nonviral Vectors for Gene Delivery. , 2008, , .		6
79	Measurement of Lipid Forces by X-Ray Diffraction and Osmotic Stress. Methods in Molecular Biology, 2007, 400, 405-419.	0.4	10
80	Swelling of phospholipids by monovalent salt. Journal of Lipid Research, 2006, 47, 302-309.	2.0	140
81	Spontaneous Patterning of Confined Granular Rods. Physical Review Letters, 2006, 96, 028002.	2.9	96
82	Abnormal sterols in cholesterol-deficiency diseases cause secretory granule malformation and decreased membrane curvature. Journal of Cell Science, 2006, 119, 1876-1885.	1.2	84
83	Ion induced lamellar-lamellar phase transition in charged surfactant systems. Journal of Chemical Physics, 2006, 124, 224702.	1.2	54
84	Alteration of Lipid Membrane Rigidity by Cholesterol and Its Metabolic Precursors. Macromolecular Symposia, 2005, 219, 39-50.	0.4	30
85	Polymorphism of DNA-anionic liposome complexes reveals hierarchy of ion-mediated interactions. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 11173-11178.	3.3	75
86	Solutes Probe Hydration in Specific Association of Cyclodextrin and Adamantane. Journal of the American Chemical Society, 2005, 127, 2184-2190.	6.6	177
87	Measured Depletion of Ions at the Biomembrane Interface. Journal of the American Chemical Society, 2005, 127, 11546-11547.	6.6	42
88	Gibbs adsorption isotherm combined with Monte Carlo sampling to see action of cosolutes on protein folding. Proteins: Structure, Function and Bioinformatics, 2004, 57, 311-321.	1.5	3
89	Enveloping of Charged Proteins by Lipid Bilayers. Journal of Physical Chemistry B, 2004, 108, 1491-1496.	1.2	23
90	Structure and Fluctuations of Charged Phosphatidylserine Bilayers in the Absence of Salt. Biophysical Journal, 2004, 86, 1574-1586.	0.2	263

#	Article	IF	Citations
91	Curvature and Charge Modulations in Lamellar DNAâˆ’Lipid Complexes. Journal of Physical Chemistry B, 2003, 107, 3624-3630.	1.2	28
92	Molecular Interactions in Lipids, DNA, and DNAâ€“Lipid Complexes. , 2003, , 301-332.		0
93	Macroion-Induced Compositional Instability of Binary Fluid Membranes. Physical Review Letters, 2002, 89, 268102.	2.9	46
94	Adsorption of charged macromolecules on mixed fluid membranes. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2002, 208, 41-50.	2.3	20
95	Lipid Demixing and Protein-Protein Interactions in the Adsorption of Charged Proteins on Mixed Membranes. Biophysical Journal, 2000, 79, 1747-1760.	0.2	145
96	The Phase Behavior of Cationic Lipidâ€“DNA Complexes. Biophysical Journal, 2000, 78, 1681-1697.	0.2	126
97	Direct Evidence for Counterion Release upon Cationic Lipidâˆ’DNA Condensation. Langmuir, 2000, 16, 303-306.	1.6	159
98	Solving the Poissonâˆ’Boltzmann Equation for Two Parallel Cylinders. Langmuir, 1998, 14, 3149-3152.	1.6	39
99	Structure, Stability, and Thermodynamics of Lamellar DNA-Lipid Complexes. Biophysical Journal, 1998, 75, 159-173.	0.2	224
100	Topological Defects and the Optimum Size of DNA Condensates. Biophysical Journal, 1998, 75, 714-720.	0.2	81
101	Conformational chain statistics in a model lipid bilayer: Comparison between mean field and Monte Carlo calculations. Journal of Chemical Physics, 1997, 106, 1609-1619.	1.2	39