James T Kindt

List of Publications by Year
in descending order

Version: 2024-02-01

43 papers	801 citations	516710 16 h-index	526287 27 g-index
44 all docs	44 docs citations	44 times ranked	979 citing authors

#	Article	IF	Citations
1	Subtle changes in pH affect the packing and robustness of fatty acid bilayers. Soft Matter, 2022, 18, 3498-3504.	2.7	5
2	Free energy of micellization of dodecyl phosphocholine (DPC) from molecular simulation: Hybrid PEACHâ€BAR method. Journal of Computational Chemistry, 2021, 42, 2221-2232.	3.3	2
3	Bulk Self-Assembly of Giant, Unilamellar Vesicles. ACS Nano, 2020, 14, 14627-14634.	14.6	37
4	Engineering DNA-Functionalized Nanostructures to Bind Nucleic Acid Targets Heteromultivalently with Enhanced Avidity. Journal of the American Chemical Society, 2020, 142, 9653-9660.	13.7	9
5	Competing factors in grain boundary loop shrinkage: Two-dimensional hard sphere colloidal crystals. Journal of Chemical Physics, 2019, 151, 084505.	3.0	1
6	Ordering of colloidal hard spheres under gravity: from monolayer to multilayer. Soft Matter, 2019, 15, 1027-1037.	2.7	1
7	Simulations of NaCl Aggregation from Solution: Solvent Determines Topography of Free Energy Landscape. Journal of Computational Chemistry, 2019, 40, 135-147.	3.3	13
8	Derivation of micelle size-dependent free energies of aggregation for octyl phosphocholine from molecular dynamics simulation. Fluid Phase Equilibria, 2019, 485, 83-93.	2.5	8
9	Chemistry Unbound: Designing a New Four-Year Undergraduate Curriculum. Journal of Chemical Education, 2019, 96, 35-46.	2.3	32
10	Binding, folding and insertion of a Î²-hairpin peptide at a lipid bilayer surface: Influence of electrostatics and lipid tail packing. Biochimica Et Biophysica Acta - Biomembranes, 2018, 1860, 792-800.	2.6	11
11	Gibbs ensemble Monte Carlo with solvent repacking: phase coexistence of sizeâ€“asymmetrical binary Lennard-Jones mixtures. Molecular Simulation, 2018, 44, 300-308.	2.0	4
12	Partitioning of Size-Mismatched Impurities to Grain Boundaries in 2d Solid Hard-Sphere Monolayers. Langmuir, 2018, 34, 12947-12956.	3.5	8
13	Size-asymmetrical Lennard-Jones solid solutions: Interstitials and substitutions. Journal of Chemical Physics, 2018, 148, 164504.	3.0	1
14	Simulations of grain boundaries between ordered hard sphere monolayer domains: Orientation-dependent stiffness and its correlation with grain coarsening dynamics. Journal of Chemical Physics, 2018, 149, 044503.	3.0	5
15	Cluster Free Energies from Simple Simulations of Small Numbers of Aggregants: Nucleation of Liquid MTBE from Vapor and Aqueous Phases. Journal of Chemical Theory and Computation, 2017, 13, 1023-1033.	5.3	12
16	Extracting Aggregation Free Energies of Mixed Clusters from Simulations of Small Systems: Application to Ionic Surfactant Micelles. Journal of Chemical Theory and Computation, 2017, 13, 5195-5206.	5.3	12
17	Line Tension Assists Membrane Permeation at the Transition Temperature in Mixed-Phase Lipid Bilayers. Journal of Physical Chemistry B, 2016, 120, 11740-11750.	2.6	14
18	Coarse-grained molecular simulations of the melting kinetics of small unilamellar vesicles. Soft Matter, 2016, 12, 1765-1777.	2.7	15

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19	Grand canonical Monte Carlo using solvent repacking: Application to phase behavior of hard disk mixtures. Journal of Chemical Physics, 2015, 143, 124109.	3.0	9
20	On the Relationship Between Plateau Modulus and Shear Relaxation Time in Transient Networks. Macromolecular Theory and Simulations, 2015, 24, 208-217.	1.4	2
21	Molecular Simulation of the DPPE Lipid Bilayer Gel Phase: Coupling between Molecular Packing Order and Tail Tilt Angle. Journal of Physical Chemistry B, 2015, 119, 8725-8733.	2.6	25
22	Determining Bulk Equilibrium Constants for Cluster Formation from Constant NVT Ensemble Simulations at Small N. Physics Procedia, 2014, 53, 63-70.	1.2	3
23	Accounting for Finite-Number Effects on Cluster Size Distributions in Simulations of Equilibrium Aggregation. Journal of Chemical Theory and Computation, 2013, 9, 147-152.	5.3	16
24	Effects of defects on the shear stress relaxation in self-assembled protein networks. Soft Matter, 2012, 8, 2895.	2.7	2
25	Dynamics of the Gel to Fluid Phase Transformation in Unilamellar DPPC Vesicles. Journal of Physical Chemistry B, 2012, 116, 13749-13756.	2.6	33
26	Hydrophobic Mismatch and Lipid Sorting Near OmpA in Mixed Bilayers: Atomistic and Coarse-Grained Simulations. Biophysical Journal, 2012, 102, 2279-2287.	0.5	15
27	Atomistic simulation of mixed-lipid bilayers: mixed methods for mixed membranes. Molecular Simulation, 2011, 37, 516-524.	2.0	11
28	Atomistic Simulations of Bicelle Mixtures. Biophysical Journal, 2010, 98, 2895-2903.	0.5	29
29	Atomistic Simulation of Hydrophobic Matching Effects on Lipid Composition near a Helical Peptide Embedded in Mixed-Lipid Bilayers. Journal of Physical Chemistry B, 2010, 114, 8076-8080.	2.6	21
30	Determination of Phase Transition Temperatures for Atomistic Models of Lipids from Temperature-Dependent Stripe Domain Growth Kinetics. Journal of Physical Chemistry B, 2010, 114, 11468-11473.	2.6	32
31	Atomistic Simulations of Mixed-Lipid Bilayers in Gel and Fluid Phases. Langmuir, 2009, 25, 352-359.	3.5	37
32	Bilayer Edge and Curvature Effects on Partitioning of Lipids by Tail Length: Atomistic Simulations. Biophysical Journal, 2008, 95, 2647-2657.	0.5	41
33	Simulation and theory of flexible equilibrium polymers under poor solvent conditions. Journal of Chemical Physics, 2007, 126, 134906.	3.0	10
34	Simulations of edge behavior in a mixed-lipid bilayer: Fluctuation analysis. Journal of Chemical Physics, 2007, 126, 045105.	3.0	23
35	Equilibrium Distributions of Dipalmitoyl Phosphatidylcholine and Dilauroyl Phosphatidylcholine in a Mixed Lipid Bilayer:Â Atomistic Semigrand Canonical Ensemble Simulations. Journal of Physical Chemistry B, 2006, 110, 25875-25882.	2.6	28
36	Coarse-Grained Model Simulations of Mixed-Lipid Systems:â€‰ Composition and Line Tension of a Stabilized Bilayer Edge. Langmuir, 2006, 22, 998-1005.	3.5	46

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37	Simulation and theory of self-assembly and network formation in reversibly cross-linked equilibrium polymers. Journal of Chemical Physics, 2005, 123, 144901.	3.0	10
38	Monte Carlo simulation of the self-assembly and phase behavior of semiflexible equilibrium polymers. Journal of Chemical Physics, 2004, 120, 10328-10338.	3.0	44
39	Molecular Dynamics Simulations of the Lipid Bilayer Edge. Biophysical Journal, 2004, 87, 182-192.	0.5	87
40	Grand Canonical Monte Carlo Simulations of Equilibrium Polymers and Networks. ACS Symposium Series, 2003, , 298-312.	0.5	2
41	Simulation and Theory of Self-Assembled Networks:Â Ends, Junctions, and Loopsâ€. Journal of Physical Chemistry B, 2002, 106, 8223-8232.	2.6	35
42	Pivot-coupled grand canonical Monte Carlo method for ring simulations. Journal of Chemical Physics, 2002, 116, 6817-6825.	3.0	9
43	Chain self-assembly and phase transitions in semiflexible polymer systems. Journal of Chemical Physics, 2001, 114, 1432-1439.	3.0	36