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	Molecular Dynamics Simulations of the Lipid Bilayer Edge. Biophysical Journal, 2004, 87, 182-192.	0.5	87
2	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
3	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
4	Bilayer Edge and Curvature Effects on Partitioning of Lipids by Tail Length: Atomistic Simulations. Biophysical Journal, 2008, 95, 2647-2657.	0.5	41
5	Atomistic Simulations of Mixed-Lipid Bilayers in Gel and Fluid Phases. Langmuir, 2009, 25, 352-359.	3.5	37
6	Bulk Self-Assembly of Giant, Unilamellar Vesicles. ACS Nano, 2020, 14, 14627-14634.	14.6	37
7	Chain self-assembly and phase transitions in semiflexible polymer systems. Journal of Chemical Physics, 2001, 114, 1432-1439.	3.0	36
8	Simulation and Theory of Self-Assembled Networks:Â Ends, Junctions, and Loopsâ€. Journal of Physical Chemistry B, 2002, 106, 8223-8232.	2.6	35
9	Dynamics of the Gel to Fluid Phase Transformation in Unilamellar DPPC Vesicles. Journal of Physical Chemistry B, 2012, 116, 13749-13756.	2.6	33
10	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
11	Chemistry Unbound: Designing a New Four-Year Undergraduate Curriculum. Journal of Chemical Education, 2019, 96, 35-46.	2.3	32
12	Atomistic Simulations of Bicelle Mixtures. Biophysical Journal, 2010, 98, 2895-2903.	0.5	29
13	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
14	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
15	Simulations of edge behavior in a mixed-lipid bilayer: Fluctuation analysis. Journal of Chemical Physics, 2007, 126, 045105.	3.0	23
16	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
17	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
18	Hydrophobic Mismatch and Lipid Sorting Near OmpA in Mixed Bilayers: Atomistic and Coarse-Grained Simulations. Biophysical Journal, 2012, 102, 2279-2287.	0.5	15

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19	Coarse-grained molecular simulations of the melting kinetics of small unilamellar vesicles. Soft Matter, 2016, 12, 1765-1777.	2.7	15
20	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
21	Simulations of NaCl Aggregation from Solution: Solvent Determines Topography of Free Energy Landscape. Journal of Computational Chemistry, 2019, 40, 135-147.	3.3	13
22	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
23	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
24	Atomistic simulation of mixed-lipid bilayers: mixed methods for mixed membranes. Molecular Simulation, 2011, 37, 516-524.	2.0	11
25	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
26	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
27	Simulation and theory of flexible equilibrium polymers under poor solvent conditions. Journal of Chemical Physics, 2007, 126, 134906.	3.0	10
28	Pivot-coupled grand canonical Monte Carlo method for ring simulations. Journal of Chemical Physics, 2002, 116, 6817-6825.	3.0	9
29	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
30	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
31	Partitioning of Size-Mismatched Impurities to Grain Boundaries in 2d Solid Hard-Sphere Monolayers. Langmuir, 2018, 34, 12947-12956.	3.5	8
32	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
33	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
34	Subtle changes in pH affect the packing and robustness of fatty acid bilayers. Soft Matter, 2022, 18, 3498-3504.	2.7	5
35	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
36	Determining Bulk Equilibrium Constants for Cluster Formation from Constant NVT Ensemble Simulations at Small N. Physics Procedia, 2014, 53, 63-70.	1.2	3

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37	Grand Canonical Monte Carlo Simulations of Equilibrium Polymers and Networks. ACS Symposium Series, 2003, , 298-312.	0.5	2
38	Effects of defects on the shear stress relaxation in self-assembled protein networks. Soft Matter, 2012, 8, 2895.	2.7	2
39	On the Relationship Between Plateau Modulus and Shear Relaxation Time in Transient Networks. Macromolecular Theory and Simulations, 2015, 24, 208-217.	1.4	2
40	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
41	Size-asymmetrical Lennard-Jones solid solutions: Interstitials and substitutions. Journal of Chemical Physics, 2018, 148, 164504.	3.0	1
42	Competing factors in grain boundary loop shrinkage: Two-dimensional hard sphere colloidal crystals. Journal of Chemical Physics, 2019, 151, 084505.	3.0	1
43	Ordering of colloidal hard spheres under gravity: from monolayer to multilayer. Soft Matter, 2019, 15, 1027-1037.	2.7	1