## Xiangjun Xing

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7574478/publications.pdf

Version: 2024-02-01

516561 454834 45 917 16 30 citations g-index h-index papers 46 46 46 932 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Topological Defects in Spherical Nematics. Physical Review Letters, 2008, 101, 037802.	2.9	129
2	Smectic polymer vesicles. Soft Matter, 2009, 5, 3446.	1.2	90
3	Morphology of nematic and smectic vesicles. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 5202-5206.	3.3	76
4	Symmetries and elasticity of nematic gels. Physical Review E, 2002, 66, 011702.	0.8	72
5	Gradual Crossover from Subdiffusion to Normal Diffusion: A Many-Body Effect in Protein Surface Water. Physical Review Letters, 2018, 120, 248101.	2.9	56
6	Fluctuating nematic elastomer membranes. Physical Review E, 2003, 68, 021108.	0.8	52
7	Facilitated translocation of polypeptides through a single nanopore. Journal of Physics Condensed Matter, 2010, 22, 454117.	0.7	40
8	Polygonal Micellar Aggregates of a Triblock Terpolymer Containing a Liquid Crystalline Block. Macromolecules, 2013, 46, 7436-7442.	2.2	38
9	Effects of image charges, interfacial charge discreteness, and surface roughness on the zeta potential of spherical electric double layers. Journal of Chemical Physics, 2012, 137, 034708.	1.2	36
10	Universal Elasticity and Fluctuations of Nematic Gels. Physical Review Letters, 2003, 90, 168301.	2.9	25
11	Thermal fluctuations and anomalous elasticity of homogeneous nematic elastomers. Europhysics Letters, 2003, 61, 769-775.	0.7	25
12	Scaling of Entropic Shear Rigidity. Physical Review Letters, 2004, 93, 225701.	2.9	21
13	Thermal Fluctuations and Rubber Elasticity. Physical Review Letters, 2007, 98, 075502.	2.9	21
14	Poisson-Boltzmann theory for two parallel uniformly charged plates. Physical Review E, 2011, 83, 041410.	0.8	19
15	Nonlinear elasticity, fluctuations and heterogeneity of nematic elastomers. Annals of Physics, 2008, 323, 105-203.	1.0	18
16	Topology of Smectic Order on Compact Substrates. Physical Review Letters, 2008, 101, 147801.	2.9	17
17	Nematic elastomers: From a microscopic model to macroscopic elasticity theory. Physical Review E, 2008, 77, 051802.	0.8	16
18	Soft random solids and their heterogeneous elasticity. Physical Review E, 2009, 80, 031140.	0.8	14

#	Article	IF	Citations
19	Topology and Geometry of Smectic Order on Compact Curved Substrates. Journal of Statistical Physics, 2009, 134, 487-536.	0.5	14
20	Phenomenological Theory of Isotropic-Genesis Nematic Elastomers. Physical Review Letters, 2012, 108, 257803.	2.9	11
21	A GPU-based large-scale Monte Carlo simulation method for systems with long-range interactions. Journal of Computational Physics, 2017, 338, 252-268.	1.9	11
22	Covariant formulation of nonlinear Langevin theory with multiplicative Gaussian white noises. Physical Review Research, 2020, 2, .	1.3	11
23	Elastic heterogeneity of soft random solids. Europhysics Letters, 2007, 80, 26004.	0.7	9
24	Renormalized Surface Charge Density for a Strongly Charged Plate in Asymmetric Electrolytes: Exact Asymptotic Expansion in Poisson Boltzmann Theory. Journal of Statistical Physics, 2013, 151, 1121-1139.	0.5	8
25	Mellin Transform and Image Charge Method for Dielectric Sphere in an Electrolyte. SIAM Journal on Applied Mathematics, 2013, 73, 1396-1415.	0.8	8
26	Strong coupling thermodynamics and stochastic thermodynamics from the unifying perspective of time-scale separation. Physical Review Research, 2022, 4, .	1.3	8
27	Phases and transitions in phantom nematic elastomer membranes. Physical Review E, 2005, 71, 011802.	0.8	7
28	Isotropic-cholesteric transition of a weakly chiral elastomer cylinder. Physical Review E, 2008, 78, 021709.	0.8	7
29	Correlation potential of a test ion near a strongly charged plate. Physical Review E, 2014, 89, 032305.	0.8	7
30	A multi-scale Monte Carlo method for electrolytes. New Journal of Physics, 2015, 17, 083062.	1.2	7
31	One-dimensional nature of protein low-energy vibrations. Physical Review Research, 2020, 2, .	1.3	7
32	STATISTICAL PHYSICS OF ISOTROPIC-GENESIS NEMATIC ELASTOMERS: I. STRUCTURE AND CORRELATIONS AT HIGH TEMPERATURES. International Journal of Modern Physics B, 2013, 27, 1330012.	1.0	6
33	Nanoporous Vesicular Membranes of Amphiphilic Polymers Containing <i>Trans</i> / <i> Cis</i> Isomers. CCS Chemistry, 2022, 4, 2651-2661.	4.6	6
34	Publisher's Note: Thermal Fluctuations and Rubber Elasticity [Phys. Rev. Lett.98, 075502 (2007)]. Physical Review Letters, 2007, 98, .	2.9	5
35	Time-Slicing Path-integral in Curved Space. Quantum - the Open Journal for Quantum Science, 0, 6, 694.	0.0	4
36	Vacancy diffusion in the triangular-lattice dimer model. Physical Review E, 2008, 78, 021112.	0.8	3

#	Article	IF	Citations
37	Charge Renormalization and Charge Oscillation in Asymmetric Primitive Model of Electrolytes. Journal of Statistical Physics, 2016, 165, 970-989.	0.5	3
38	Charged plate in asymmetric electrolytes: One-loop renormalization of surface charge density and Debye length due to ionic correlations. Physical Review E, 2016, 94, 042615.	0.8	3
39	The Poisson-Boltzmann theory for the two-plates problem: Some exact results. Interdisciplinary Sciences, Computational Life Sciences, 2011, 3, 266-271.	2.2	1
40	Generalized Deam–Edwards approach to the statistical mechanics of randomly crosslinked systems. New Journal of Physics, 2013, 15, 085017.	1.2	1
41	Depletion zones and crystallography on pinched spheres. Physical Review E, 2018, 97, 032605.	0.8	1
42	Information swimmer: Self-propulsion without energy dissipation. Physical Review Research, 2020, 2, .	1.3	1
43	Alignment destabilizes crystal order in active systems. Physical Review E, 2021, 104, 064605.	0.8	1
44	Biaxial deformations of rubber: A comparison between entanglement theory and elastic fluctuation theory. Physical Review E, 2011, 84, 021801.	0.8	0
45	Thermodynamics of Small Systems and Time-Scale Separation., 2022,, 291-302.		0