Nathan A Mahynski

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2398642/publications.pdf

Version: 2024-02-01

40	510	623734	752698
papers	citations	14 h-index	20 g-index

41	41	41	532
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Flat-histogram extrapolation as a useful tool in the age of big data. Molecular Simulation, 2021, 47, 395-407.	2.0	7
2	Symmetry-derived structure directing agents for two-dimensional crystals of arbitrary colloids. Soft Matter, 2021, 17, 7853-7866.	2.7	4
3	Seabird Tissue Archival and Monitoring Project (STAMP) Data from 1999-2010. Journal of Research of the National Institute of Standards and Technology, 2021, 126, .	1.2	1
4	Dynamic arrest of adhesive hard rod dispersions. Soft Matter, 2020, 16, 1279-1286.	2.7	9
5	Extrapolation and interpolation strategies for efficiently estimating structural observables as a function of temperature and density. Journal of Chemical Physics, 2020, 153, 144101.	3.0	12
6	Symmetry-Based Crystal Structure Enumeration in Two Dimensions. Journal of Physical Chemistry A, 2020, 124, 3276-3285.	2.5	4
7	Grand canonical inverse design of multicomponent colloidal crystals. Soft Matter, 2020, 16, 3187-3194.	2.7	16
8	Using symmetry to elucidate the importance of stoichiometry in colloidal crystal assembly. Nature Communications, 2019, 10, 2028.	12.8	14
9	On the virial coefficients of confined fluids: Analytic expressions for the thermodynamic properties of hard particles with attractions in slit and cylindrical pores to second order. Journal of Chemical Physics, 2019, 150, 044704.	3.0	5
10	Molecular simulation of capillary phase transitions in flexible porous materials. Journal of Chemical Physics, 2018, 148, 124115.	3.0	11
11	FEASST: Free Energy and Advanced Sampling Simulation Toolkit. Journal of Research of the National Institute of Standards and Technology, 2018, 123, 1-3.	1.2	16
12	Monte Carlo simulation of cylinders with short-range attractions. AIP Advances, 2018, 8, 095210.	1.3	9
13	Flat-Histogram Monte Carlo as an Efficient Tool To Evaluate Adsorption Processes Involving Rigid and Deformable Molecules. Journal of Chemical Theory and Computation, 2018, 14, 6149-6158.	5.3	16
14	Predicting structural properties of fluids by thermodynamic extrapolation. Journal of Chemical Physics, 2018, 148, 194105.	3.0	12
15	Assembly of three-dimensional binary superlattices from multi-flavored particles. Soft Matter, 2018, 14, 6303-6312.	2.7	15
16	Tuning flexibility to control selectivity in soft porous crystals. Journal of Chemical Physics, 2017, 146, 044706.	3.0	6
17	Predicting low-temperature free energy landscapes with flat-histogram Monte Carlo methods. Journal of Chemical Physics, 2017, 146, 074101.	3.0	13
18	Directionally Interacting Spheres and Rods Form Ordered Phases. ACS Nano, 2017, 11, 4950-4959.	14.6	19

#	Article	IF	Citations
19	Relationship between pore-size distribution and flexibility of adsorbent materials: statistical mechanics and future material characterization techniques. Adsorption, 2017, 23, 593-602.	3.0	9
20	Temperature extrapolation of multicomponent grand canonical free energy landscapes. Journal of Chemical Physics, 2017, 147, 054105.	3.0	16
21	Reentrant equilibrium disordering in nanoparticleâ€“polymer mixtures. Npj Computational Materials, 2017, 3, .	8.7	2
22	Assembly of multi-flavored two-dimensional colloidal crystals. Soft Matter, 2017, 13, 5397-5408.	2.7	19
23	Multivariable extrapolation of grand canonical free energy landscapes. Journal of Chemical Physics, 2017, 147, 234111.	3.0	12
24	Communication: Predicting virial coefficients and alchemical transformations by extrapolating Mayer-sampling Monte Carlo simulations. Journal of Chemical Physics, 2017, 147, 231102.	3.0	9
25	Controlling relative polymorph stability in soft porous crystals with a barostat. Journal of Chemical Physics, 2017, 146, 224706.	3.0	1
26	Multicomponent adsorption in mesoporous flexible materials with flat-histogram Monte Carlo methods. Journal of Chemical Physics, 2016, 145, 174709.	3.0	11
27	Bottom-Up Colloidal Crystal Assembly with a Twist. ACS Nano, 2016, 10, 5459-5467.	14.6	32
28	Entropic control over nanoscale colloidal crystals. Molecular Physics, 2016, 114, 2586-2596.	1.7	3
29	Void-Based Assembly of Colloidal Crystals: Using Structure-Directing Agents to Direct the Assembly of Open Colloidal Crystals. GIT Laboratory Journal Europe, 2016, 5, 1-5.	0.0	0
30	Coarse-graining and phase behavior of model star polymerâ€“colloid mixtures in solvents of varying quality. Journal of Chemical Physics, 2015, 143, 243108.	3.0	7
31	Tuning polymer architecture to manipulate the relative stability of different colloid crystal morphologies. Soft Matter, 2015, 11, 5146-5153.	2.7	13
32	Grafted nanoparticles as soft patchy colloids: Self-assembly versus phase separation. Journal of Chemical Physics, 2015, 142, 074901.	3.0	21
33	Relative stability of the FCC and HCP polymorphs with interacting polymers. Soft Matter, 2015, 11, 280-289.	2.7	22
34	Flow-induced demixing of polymer-colloid mixtures in microfluidic channels. Journal of Chemical Physics, 2014, 140, 094903.	3.0	17
35	Stabilizing colloidal crystals by leveraging void distributions. Nature Communications, 2014, 5, 4472.	12.8	50
36	Structure of phase-separated athermal colloid-polymer systems in the protein limit. Physical Review E, 2013, 87, 022309.	2.1	16

#	Article	IF	Citations
37	Phase behavior of athermal colloid-star polymer mixtures. Journal of Chemical Physics, 2013, 139, 024907.	3.0	18
38	Reduced Water Density in a Poly(ethylene oxide) Brush. Journal of Physical Chemistry Letters, 2012, 3, 1589-1595.	4.6	13
39	Pressure and density scaling for colloid-polymer systems in the protein limit. Physical Review E, 2012, 85, 051402.	2.1	18
40	Crystallization of Bidisperse Repulsive Colloids in Two-Dimensional Space: A Study of Model Systems Constructed at the Airâ^'Water Interface. Langmuir, 2010, 26, 11737-11749.	3.5	9