Daniel J Beltran-Villegas

List of Publications by Year
in descending order

29 papers	638 citations	471061 17 h-index	580395 25 g-index
29 all docs	29 docs citations	29 times ranked	594 citing authors

#	Article	IF	Citations
1	Interfacial Colloidal Crystallization via Tunable Hydrogel Depletants. Langmuir, 2008, 24, 10776-10785.	1.6	63
2	Spatially controlled reversible colloidal self-assembly. Journal of Chemical Physics, 2009, 131, 134705.	1.2	45
3	Colloidal crystal grain boundary formation and motion. Scientific Reports, 2014, 4, 6132.	1.6	38
4	Phase behavior of Janus colloids determined by sedimentation equilibrium. Soft Matter, 2014, 10, 4593-4602.	1.2	37
5	Charged Micelle Depletion Attraction and Interfacial Colloidal Phase Behavior. Langmuir, 2010, 26, 18710-18717.	1.6	36
6	Rich Janus colloid phase behavior under steady shear. Soft Matter, 2016, 12, 4071-4081.	1.2	35
7	Anomalous Silica Colloid Stability and Gel Layer Mediated Interactions. Langmuir, 2013, 29, 8835-8844.	1.6	33
8	Free energy landscapes for colloidal crystal assembly. Soft Matter, 2011, 7, 3280.	1.2	32
9	Binding kinetics of lock and key colloids. Journal of Chemical Physics, 2015, 142, 174909.	1.2	28
10	Assembly of Amphiphilic Block Copolymers and Nanoparticles in Solution: Coarse-Grained Molecular Simulation Study. Journal of Chemical & Engineering Data, 2018, 63, 2351-2367.	1.0	27
11	PRISM Theory Study of Amphiphilic Block Copolymer Solutions with Varying Copolymer Sequence and Composition. Macromolecules, 2017, 50, 7419-7431.	2.2	25
12	Computational Reverse-Engineering Analysis for Scattering Experiments on Amphiphilic Block Polymer Solutions. Journal of the American Chemical Society, 2019, 141, 14916-14930.	6.6	24
13	A Smoluchowski model of crystallization dynamics of small colloidal clusters. Journal of Chemical Physics, 2011, 135, 154506.	1.2	23
14	Self-Consistent Colloidal Energy and Diffusivity Landscapes in Macromolecular Solutions. Langmuir, 2013, 29, 12337-12341.	1.6	23
15	Colloidal cluster crystallization dynamics. Journal of Chemical Physics, 2012, 137, 134901.	1.2	22
16	Optimal Design of a Colloidal Self-Assembly Process. IEEE Transactions on Control Systems Technology, 2014, 22, 1956-1963.	3.2	20
17	Size dependent thermodynamics and kinetics in electric field mediated colloidal crystal assembly. Soft Matter, 2013, 9, 9208.	1.2	18
18	Fokkerâ€“Planck analysis of separation dependent potentials and diffusion coefficients in simulated microscopy experiments. Journal of Chemical Physics, 2010, 132, 044707.	1.2	17

#	Article	IF	Citations
19	Concentrated Diffusing Colloidal Probes of Ca²⁺-Dependent Cadherin Interactions. Langmuir, 2010, 26, 18976-18984.	1.6	14
20	Development of a New Coarse-Grained Model to Simulate Assembly of Cellulose Chains Due to Hydrogen Bonding. Journal of Chemical Theory and Computation, 2020, 16, 4599-4614.	2.3	14
21	Coarse-grained molecular dynamics simulations of Î±-1,3-glucan. Soft Matter, 2019, 15, 4669-4681.	1.2	13
22	Rotator-to-Lamellar Phase Transition in Janus Colloids Driven by Pressure Anisotropy. Physical Review Letters, 2016, 117, 128001.	2.9	11
23	Kinetic modeling and design of colloidal lock and key assembly. Journal of Colloid and Interface Science, 2016, 463, 242-257.	5.0	9
24	PANIâ€“LDPE composites: Effect of blending conditions. Polymer Composites, 2009, 30, 22-28.	2.3	8
25	Molecular dynamics simulations and PRISM theory study of solutions of nanoparticles and triblock copolymers with solvophobic end blocks. Molecular Systems Design and Engineering, 2018, 3, 453-472.	1.7	8
26	Shear-Induced Alignment of Janus Particle Lamellar Structures. Langmuir, 2018, 34, 1051-1060.	1.6	7
27	MDP based optimal control for a colloidal self-assembly system. , 2013, , .		4
28	Janus particle rotator-to-lamellar nucleation and growth kinetics. Journal of Chemical Physics, 2017, 146, .	1.2	2
29	Phase diagram of Janus particles: The missing dimension of pressure anisotropy. Journal of Chemical Physics, 2017, 147, 064510.	1.2	2