Hender Lopez

List of Publications by Year
in descending order

29 papers	637 citations	516561 16 h-index	580701 25 g-index
30 all docs	30 docs citations	30 times ranked	902 citing authors

#	ARTICLE	IF	CITATIONS
1	Coarse-grained model of adsorption of blood plasma proteins onto nanoparticles. Journal of Chemical Physics, 2015, 143, 243138.	1.2	63
2	Gradient Dynamics Description for Films of Mixtures and Suspensions: Dewetting Triggered by Coupled Film Height and Concentration Fluctuations. Physical Review Letters, 2013, 111, 117801.	2.9	51
3	A shock-capturing SPH scheme based on adaptive kernel estimation. Journal of Computational Physics, 2006, 212, 124-149.	1.9	46
4	Nestmate recognition signals of the leaf-cutting ant Atta laevigata. Journal of Insect Physiology, 2002, 48, 287-295.	0.9	41
5	Adaptive kernel estimation and SPH tensile instability. Computers and Mathematics With Applications, 2008, 55, 23-50.	1.4	35
6	Classification and biological identity of complex nano shapes. Communications Materials, 2020, 1, .	2.9	34
7	Time-dependent boundary conditions with lead-sample Coulomb correlations: Application to classical and quantum nanoscale electron device simulators. Physical Review B, 2010, 82, .	1.1	32
8	Protein Short-Time Diffusion in a Naturally Crowded Environment. Journal of Physical Chemistry Letters, 2019, 10, 1709-1715.	2.1	30
9	Oscillation of viscous drops with smoothed particle hydrodynamics. Physical Review E, 2006, 73, 051201.	0.8	29
10	Continuous and Discontinuous Dynamic Unbinding Transitions in Drawn Film Flow. Physical Review Letters, 2014, 112, 137803.	2.9	27
11	Label-free in-flow detection of receptor recognition motifs on the biomolecular corona of nanoparticles. Nanoscale, 2018, 10, 5474-5481.	2.8	27
12	A multiscale model of protein adsorption on a nanoparticle surface. Modelling and Simulation in Materials Science and Engineering, 2019, 27, 084003.	0.8	26
13	An adaptive SPH method for strong shocks. Journal of Computational Physics, 2009, 228, 5888-5907.	1.9	24
14	Entangled trajectory dynamics in the Husimi representation. Journal of Chemical Physics, 2006, 125, 154111.	1.2	23
15	Leaf-cutter ant species (Hymenoptera: Atta) differ in the types of cues used to differentiate between self and others. Animal Behaviour, 2006, 71, 945-952.	0.8	21
16	Contact inhibition of locomotion and mechanical cross-talk between cell–cell and cell–substrate adhesion determine the pattern of junctional tension in epithelial cell aggregates. Molecular Biology of the Cell, 2016, 27, 3436-3448.	0.9	21
17	A Nanoscale Shape-Discovery Framework Supporting Systematic Investigations of Shape-Dependent Biological Effects and Immunomodulation. ACS Nano, 2022, 16, 1547-1559.	7.3	16
18	Multiscale Modelling of Bionano Interface. Advances in Experimental Medicine and Biology, 2017, 947, 173-206.	0.8	14

#	Article	IF	Citations
19	In depth characterisation of the biomolecular coronas of polymer coated inorganic nanoparticles with differential centrifugal sedimentation. Scientific Reports, 2021, 11, 6443.	1.6	14
20	Boundary conditions with Pauli exclusion and charge neutrality: application to the Monte Carlo simulation of ballistic nanoscale devices. Journal of Computational Electronics, 2008, 7, 213-216.	1.3	13
21	A microfluidic approach for synthesis and kinetic profiling of branched gold nanostructures. Nanoscale Horizons, 2022, 7, 288-298.	4.1	12
22	Low-Resolution Models for the Interaction Dynamics of Coated Gold Nanoparticles with β2-microglobulin. International Journal of Molecular Sciences, 2019, 20, 3866.	1.8	10
23	Impact of dynamic sub-populations within grafted chains on the protein binding and colloidal stability of PEGylated nanoparticles. Nanoscale, 2021, 13, 5344-5355.	2.8	8
24	Using single nanoparticle tracking obtained by nanophotonic force microscopy to simultaneously characterize nanoparticle size distribution and nanoparticle–surface interactions. Nanoscale, 2017, 9, 4524-4535.	2.8	7
25	Role of contact inhibition of locomotion and junctional mechanics in epithelial collective responses to injury. Physical Biology, 2018, 15, 024001.	0.8	6
26	Smaller are noisier: Signal-to-noise ratio and bit-error degradation in bulk-, quantum well- and quantum wire-nanoscale FETs. AIP Conference Proceedings, 2007, , .	0.3	4
27	Spin-dependent injection model for Monte Carlo device simulation. Journal of Applied Physics, 2008, 104, .	1.1	2
28	Eigenstate fitting in the k · p method. Journal of Computational Electronics, 2007, 6, 195-198.	1.3	1
29	High-frequency behavior of the Datta–Das spin transistor. Applied Physics Letters, 2008, 93, 193502.	1.5	0