AndrÃ©sÂ CÃ³rdoba

List of Publications by Year
in descending order

29 papers	572 citations	687363 13 h-index	677142 22 g-index
30 all docs	30 docs citations	30 times ranked	611 citing authors

#	Article	IF	Citations
1	Treating inertia in passive microbead rheology. Physical Review E, 2012, 85, 021504.	2.1	69
2	Tension-Dependent Free Energies of Nucleosome Unwrapping. ACS Central Science, 2016, 2, 660-666.	11.3	67
3	Lipase supported on granular activated carbon and activated carbon cloth as a catalyst in the synthesis of biodiesel fuel. Journal of Molecular Catalysis B: Enzymatic, 2010, 66, 166-171.	1.8	56
4	The plasticizing effect of alginate on the thermoplastic starch/glycerin blends. Carbohydrate Polymers, 2008, 73, 409-416.	10.2	48
5	Chromate reduction by Arthrobacter CR47 in biofilm packed bed reactors. Journal of Hazardous Materials, 2008, 151, 274-279.	12.4	35
6	Competing effects of particle and medium inertia on particle diffusion in viscoelastic materials, and their ramifications for passive microrheology. Physical Review E, 2012, 85, 041504.	2.1	35
7	Elimination of inertia from a Generalized Langevin Equation: Applications to microbead rheology modeling and data analysis. Journal of Rheology, 2012, 56, 185-212.	2.6	33
8	The analytic solution of Stokes for time-dependent creeping flow around a sphere: Application to linear viscoelasticity as an ingredient for the generalized Stokesâ€“Einstein relation and microrheology analysis. Journal of Non-Newtonian Fluid Mechanics, 2013, 200, 3-8.	2.4	29
9	1CPN: A coarse-grained multi-scale model of chromatin. Journal of Chemical Physics, 2019, 150, 215102.	3.0	29
10	The effects of hydrodynamic interaction and inertia in determining the high-frequency dynamic modulus of a viscoelastic fluid with two-point passive microrheology. Physics of Fluids, 2012, 24, .	4.0	23
11	A Molecular View of the Dynamics of dsDNA Packing Inside Viral Capsids in the Presence of Ions. Biophysical Journal, 2017, 112, 1302-1315.	0.5	20
12	Polymer rheology predictions from first principles using the slip-link model. Journal of Rheology, 2020, 64, 1035-1043.	2.6	17
13	Analytic slip-link expressions for universal dynamic modulus predictions of linear monodisperse polymer melts. Rheologica Acta, 2015, 54, 169-183.	2.4	16
14	Quantitative fit of a model for proving of bread dough and determination of dough properties. Journal of Food Engineering, 2010, 96, 440-448.	5.2	13
15	Mechanical Response of DNAâ€“Nanoparticle Crystals to Controlled Deformation. ACS Central Science, 2016, 2, 614-620.	11.3	13
16	The effects of compressibility, hydrodynamic interaction and inertia on two-point, passive microrheology of viscoelastic materials. Soft Matter, 2013, 9, 3521.	2.7	9
17	The role of filament length, finite-extensibility and motor force dispersity in stress relaxation and buckling mechanisms in non-sarcomeric active gels. Soft Matter, 2015, 11, 38-57.	2.7	9
18	Ionic Transport in Electrostatic Janus Membranes. An Explicit Solvent Molecular Dynamic Simulation. ACS Nano, 2022, 16, 3768-3775.	14.6	9

#	Article	IF	Citations
19	A single-chain model for active gels I: active dumbbell model. RSC Advances, 2014, 4, 17935.	3.6	8
20	Comparative analysis for three different immobilisation strategies in the hexavalent chromium biosorption process using Bacillus sphaericus Sâ€layer. Canadian Journal of Chemical Engineering, 2011, 89, 1281-1287.	1.7	6
21	Anisotropy and probe-medium interactions in the microrheology of nematic fluids. Journal of Rheology, 2016, 60, 75-95.	2.6	6
22	A boundary integral method for computing forces on particles in unsteady Stokes and linear viscoelastic fluids. International Journal for Numerical Methods in Fluids, 2016, 82, 198-217.	1.6	5
23	Examination of Nonuniversalities in Entangled Polymer Melts during the Start-Up of Steady Shear Flow. Macromolecules, 2021, 54, 8033-8042.	4.8	4
24	Nonequilibrium thermodynamics for soft matter made easy(er). Physics of Fluids, 2021, 33, .	4.0	4
25	Effect of charge inversion on nanoconfined flow of multivalent ionic solutions. Physical Chemistry Chemical Physics, 2022, , .	2.8	4
26	MUnCH: a calculator for propagating statistical and other sources of error in passive microrheology. Rheologica Acta, 0, , 1.	2.4	3
27	The Effects of the Interplay between Motor and Brownian Forces on the Rheology of Active Gels. Journal of Physical Chemistry B, 2018, 122, 4267-4277.	2.6	1
28	A simple microswimmer model inspired by the general equation for nonequilibrium reversibleâ€“irreversible coupling. Journal of Chemical Physics, 2020, 152, 194902.	3.0	1
29	A Single-Chain Model to Predict Buckling in Active Gels. Biophysical Journal, 2014, 106, 164a.	0.5	0