

Rajarshi Chakrabarti

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2770675/publications.pdf>

Version: 2024-02-01

58
papers

1,125
citations

394421

19
h-index

477307

29
g-index

66
all docs

66
docs citations

66
times ranked

1169
citing authors

#	ARTICLE	IF	CITATIONS
1	Sequence coevolution and structure stabilization modulate olfactory receptor expression. <i>Biophysical Journal</i> , 2022, 121, 830-840.	0.5	4
2	Transport of a self-propelled tracer through a hairy cylindrical channel: interplay of stickiness and activity. <i>Soft Matter</i> , 2022, 18, 1310-1318.	2.7	12
3	Chemically symmetric and asymmetric self-driven rigid dumbbells in a 2D polymer gel. <i>Soft Matter</i> , 2022, 18, 2663-2671.	2.7	8
4	Motion of an active particle with dynamical disorder. <i>Soft Matter</i> , 2022, 18, 2332-2345.	2.7	11
5	Computational design of stapled peptide inhibitor against SARS-CoV-2 receptor binding domain. <i>Peptide Science</i> , 2022, 114, e24267.	1.8	8
6	Effect of Stapling on the Thermodynamics of mdm-p53 Binding. <i>Journal of Chemical Information and Modeling</i> , 2021, 61, 1989-2000.	5.4	8
7	A universal allosteric mechanism for G protein activation. <i>Molecular Cell</i> , 2021, 81, 1384-1396.e6.	9.7	33
8	Rouse model with fluctuating internal friction. <i>Journal of Rheology</i> , 2021, 65, 903-923.	2.6	3
9	Stochastic resetting and first arrival subjected to Gaussian noise and Poisson white noise. <i>Physical Review E</i> , 2021, 104, 034113.	2.1	8
10	How important are fluctuations in the treatment of internal friction in polymers?. <i>Soft Matter</i> , 2021, 17, 7133-7157.	2.7	3
11	Microscopic structural features of water in aqueous-reline mixtures of varying compositions. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 3779-3793.	2.8	17
12	In Silico Elucidation of Molecular Picture of Water-Choline Chloride Mixture. <i>Journal of Physical Chemistry B</i> , 2021, 125, 13212-13228.	2.6	10
13	Translational and rotational dynamics of a self-propelled Janus probe in crowded environments. <i>Soft Matter</i> , 2020, 16, 8482-8491.	2.7	26
14	Directing the Diffusion of a Nonmagnetic Nanosized Active Particle with External Magnetic Fields. <i>Journal of Physical Chemistry B</i> , 2020, 124, 8188-8197.	2.6	4
15	Escape of a passive particle from an activity-induced energy landscape: emergence of slow and fast effective diffusion. <i>Soft Matter</i> , 2020, 16, 7103-7115.	2.7	33
16	Choline Chloride as a Nano-Crowder Protects HP36 from Urea-Induced Denaturation: Insights from Solvent Dynamics and Protein-Solvent Interactions. <i>ChemPhysChem</i> , 2020, 21, 552-567.	2.1	25
17	Structural instability and divergence from conserved residues underlie intracellular retention of mammalian odorant receptors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 2957-2967.	7.1	27
18	How Do Branched Detergents Stabilize GPCRs in Micelles?. <i>Biochemistry</i> , 2020, 59, 2125-2134.	2.5	37

#	ARTICLE	IF	CITATIONS
19	Wet and dry internal friction can be measured with the Jarzynski equality. <i>Physical Review Research</i> , 2020, 2, .	3.6	9
20	Prediction of Conformation Specific Thermostabilizing Mutations for Class A G Protein-Coupled Receptors. <i>Journal of Chemical Information and Modeling</i> , 2019, 59, 3744-3754.	5.4	5
21	Effects of active fluctuations on energetics of a colloidal particle: Superdiffusion, dissipation and entropy production. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2019, 530, 121574.	2.6	49
22	Variable G protein determinants of GPCR coupling selectivity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 12054-12059.	7.1	111
23	Enhanced diffusion, swelling, and slow reconfiguration of a single chain in non-Gaussian active bath. <i>Journal of Chemical Physics</i> , 2019, 150, 094902.	3.0	52
24	Azadirachtin inhibits amyloid formation, disaggregates pre-formed fibrils and protects pancreatic β -cells from human islet amyloid polypeptide/amylin-induced cytotoxicity. <i>Biochemical Journal</i> , 2019, 476, 889-907.	3.7	26
25	Transport of probe particles in a polymer network: effects of probe size, network rigidity and probe-polymer interaction. <i>Soft Matter</i> , 2019, 15, 8992-9002.	2.7	39
26	Machine Learning for Prioritization of Thermostabilizing Mutations for G-Protein Coupled Receptors. <i>Biophysical Journal</i> , 2019, 117, 2228-2239.	0.5	15
27	Salt Induced Structural Collapse, Swelling, and Signature of Aggregation of Two ssDNA Strands: Insights from Molecular Dynamics Simulation. <i>Journal of Physical Chemistry B</i> , 2019, 123, 47-56.	2.6	16
28	Engineering Salt Bridge Networks between Transmembrane Helices Confers Thermostability in G-Protein-Coupled Receptors. <i>Journal of Chemical Theory and Computation</i> , 2018, 14, 6574-6585.	5.3	10
29	Rheological consequences of wet and dry friction in a dumbbell model with hydrodynamic interactions and internal viscosity. <i>Journal of Chemical Physics</i> , 2018, 149, 094903.	3.0	10
30	Entropy production and work fluctuation relations for a single particle in active bath. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2018, 511, 302-315.	2.6	51
31	Can an ammonium-based room temperature ionic liquid counteract the urea-induced denaturation of a small peptide?. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 7772-7787.	2.8	23
32	Ammonium based stabilizers effectively counteract urea-induced denaturation in a small protein: insights from molecular dynamics simulations. <i>RSC Advances</i> , 2017, 7, 52888-52906.	3.6	24
33	How does the tail length and the separation between the tagged monomers influence the reconfiguration of a chain with internal friction for different solvent-quality?. <i>Journal of Physics: Conference Series</i> , 2016, 759, 012014.	0.4	1
34	Molecular dynamics simulation elucidates the preferential binding affinity of sodium and tetramethylammonium ions for tetrameric Nafion unit under aqueous conditions. <i>RSC Advances</i> , 2016, 6, 97961-97968.	3.6	6
35	Spontaneous Unzipping of Xylonucleic Acid Assisted by a Single-Walled Carbon Nanotube: A Computational Study. <i>Journal of Physical Chemistry B</i> , 2016, 120, 3642-3652.	2.6	17
36	Chain reconfiguration in active noise. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2016, 49, 195601.	2.1	59

#	ARTICLE	IF	CITATIONS
37	Unzipping of Double-Stranded Ribonucleic Acids by Graphene and Single-Walled Carbon Nanotube: Helix Geometry versus Surface Curvature. <i>Journal of Physical Chemistry C</i> , 2016, 120, 22681-22693.	3.1	19
38	Tracer diffusion in a sea of polymers with binding zones: mobile vs. frozen traps. <i>Soft Matter</i> , 2016, 12, 8554-8563.	2.7	54
39	Reconfiguration dynamics in folded and intrinsically disordered protein with internal friction: Effect of solvent quality and denaturant. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2016, 450, 165-179.	2.6	13
40	Probing the Salt Concentration Dependent Nucleobase Distribution in a Single-Stranded DNA@Single-Walled Carbon Nanotube Hybrid with Molecular Dynamics. <i>Journal of Physical Chemistry B</i> , 2016, 120, 455-466.	2.6	25
41	Thermodynamics of site-specific small molecular ion interactions with DNA duplex: a molecular dynamics study. <i>Molecular Simulation</i> , 2016, 42, 715-724.	2.0	6
42	Ion assisted structural collapse of a single stranded DNA: A molecular dynamics approach. <i>Chemical Physics</i> , 2015, 459, 137-147.	1.9	22
43	Looping dynamics of a flexible chain with internal friction at different degrees of compactness. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2015, 436, 377-386.	2.6	10
44	Looping and reconfiguration dynamics of a flexible chain with internal friction. <i>AIP Advances</i> , 2014, 4, .	1.3	18
45	Diffusion in an elastic medium: A model for macromolecule transport across the nuclear pore complex. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2014, 404, 65-78.	2.6	10
46	End to end loop formation in a single polymer chain with internal friction. <i>Chemical Physics Letters</i> , 2013, 582, 71-77.	2.6	13
47	Tracer diffusion in a crowded cylindrical channel. <i>Physical Review E</i> , 2013, 87, 062709.	2.1	21
48	Dynamics of end-to-end loop formation for an isolated chain in viscoelastic fluid. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2012, 391, 5326-5331.	2.6	19
49	Dynamics of end-to-end loop formation: A flexible chain in the presence of hydrodynamic interaction. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2012, 391, 4081-4087.	2.6	15
50	Packing correlations, collective scattering and compressibility of fractal-like aggregates in polymer nanocomposites and suspensions. <i>Soft Matter</i> , 2011, 7, 5397.	2.7	10
51	Bubble dynamics in double stranded DNA: A Rouse chain based approach. <i>Chemical Physics Letters</i> , 2011, 502, 107-111.	2.6	5
52	Dynamical disorder in presence of exponential sink. <i>Chemical Physics Letters</i> , 2010, 495, 60-62.	2.6	6
53	Polymer-mediated spatial organization of nanoparticles in dense melts: Transferability and an effective one-component approach. <i>Journal of Chemical Physics</i> , 2010, 133, 144905.	3.0	15
54	A lower bound to the survival probability and an approximate first passage time distribution for Markovian and non-Markovian dynamics in phase space. <i>Journal of Chemical Physics</i> , 2009, 131, 224504.	3.0	6

#	ARTICLE	IF	CITATIONS
55	Transient state work fluctuation theorem for a classical harmonic oscillator linearly coupled to a harmonic bath. <i>Pramana - Journal of Physics</i> , 2009, 72, 665-677.	1.8	4
56	Exact analytical evaluation of time dependent transmission coefficient from the method of reactive flux for an inverted parabolic barrier. <i>Journal of Chemical Physics</i> , 2007, 126, 134106.	3.0	10
57	Rate processes with dynamical disorder: A direct variational approach. <i>Journal of Chemical Physics</i> , 2006, 124, 204111.	3.0	17
58	A Universal Allosteric Mechanism for G Protein Activation. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0