Amar Nath Gupta

List of Publications by Year
in descending order

37 papers	814 citations	687363 13 h-index	526287 27 g-index
37 all docs	37 docs citations	37 times ranked	1025 citing authors

#	Article	IF	Citations
1	The catalytic core of <i>Leishmania donovani</i> RECQ helicase unwinds a wide spectrum of DNA substrates and is stimulated by replication protein A. FEBS Journal, 2022, 289, 394-416.	4.7	0
2	Plasmid DNA Undergoes Two Compaction Regimes under Macromolecular Crowding. ACS Macro Letters, 2022, 11, 186-192.	4.8	2
3	Electric field-driven conformational changes in the elastin protein. Physical Chemistry Chemical Physics, 2021, 23, 4195-4204.	2.8	8
4	Hierarchical cage-frame type nanostructure of CeO₂for bio sensing applications: from glucose to protein detection. Nanotechnology, 2021, 32, 025504.	2.6	12
5	Interactive patches over amyloid- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î²</mml:mi></mml:math> oligomers mediate fractal self-assembly. Physical Review E, 2021, 104, 064404.	2.1	0
6	Glucose-induced structural changes and anomalous diffusion of elastin. Colloids and Surfaces B: Biointerfaces, 2020, 188, 110776.	5.0	6
7	Simultaneous Detection of Tyrosine and Structureâ€Specific Intrinsic Fluorescence in the Fibrillation of Alzheimer's Associated Peptides. ChemPhysChem, 2020, 21, 2585-2598.	2.1	7
8	Curcumin Complexed with Graphene Derivative for Breast Cancer Therapy. ACS Applied Bio Materials, 2020, 3, 6284-6296.	4.6	29
9	Anisotropy <i>versus</i> fluctuations in the fractal self-assembly of gold nanoparticles. Soft Matter, 2020, 16, 7778-7788.	2.7	4
10	Fibril growth captured by electrical properties of amyloid- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î²</mml:mi></mml:math> and human islet amyloid polypeptide. Physical Review E, 2020, 101, 062413.	2.1	8
11	Unveiling the transition path region in the one-dimensional free energy landscape of proteins. Chemical Physics Letters, 2020, 750, 137498.	2.6	0
12	Fractal self-assembly and aggregation of human amylin. Soft Matter, 2020, 16, 3143-3153.	2.7	17
13	Quantification of protein aggregation rates and quenching effects of amylinâ€“inhibitor complexes. Physical Chemistry Chemical Physics, 2019, 21, 20083-20094.	2.8	10
14	Observation of Structural Growth of Fibrils of Amylin Protein. Biophysical Journal, 2019, 116, 492a.	0.5	0
15	Quantifying DNA Elasticity in the Course of Binding of Small Molecule to DNA. Biophysical Journal, 2019, 116, 358a.	0.5	0
16	Aggregation of amylin: Spectroscopic investigation. International Journal of Biological Macromolecules, 2019, 133, 1242-1248.	7.5	8
17	DNA supported graphene quantum dots for Ag ion sensing. Nanotechnology, 2019, 30, 255501.	2.6	21
18	Achieving sensitive and stable indium oxide thin films for gamma radiation monitoring. Sensors and Actuators A: Physical, 2019, 285, 378-385.	4.1	19

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19	Repulsive interaction induces fibril formation and their growth. International Journal of Biological Macromolecules, 2019, 123, 20-25.	7.5	10
20	An extensive study on the structural evolution and gamma radiation stability of TeO 2 thin films. Materials Science in Semiconductor Processing, 2018, 74, 347-351.	4.0	7
21	Compaction of Plasmid DNA by Macromolecular Crowding. Macromolecules, 2017, 50, 1666-1671.	4.8	15
22	Pharmacological chaperone reshapes the energy landscape for folding and aggregation of the prion protein. Nature Communications, 2016, 7, 12058.	12.8	38
23	Folding Rate and Transition Path Time of a Single-Molecule Protein. Biophysical Journal, 2016, 110, 55a.	0.5	0
24	Anti-Prion Ligand Binding Promotes Native PrP Folding Over Misfolding at the Single Molecule Level. Biophysical Journal, 2015, 108, 204a.	0.5	0
25	Transition Path Times for the Folding of Nucleic Acids and Proteins Determined from Experimentally-Reconstructed Energy Landscape Profiles. Biophysical Journal, 2013, 104, 165a.	0.5	0
26	Energy landscape analysis of native folding of the prion protein yields the diffusion constant, transition path time, and rates. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 14452-14457.	7.1	140
27	Phthalocyanine tetrasulfonates bind to multiple sites on natively-folded prion protein. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2012, 1824, 826-832.	2.3	14
28	Reconstruction of the Energy Landscape Profile for Native Folding of Thepprion Protein from Single-Molecule Force Spectroscopy. Biophysical Journal, 2012, 102, 54a.	0.5	0
29	Direct observation of multiple misfolding pathways in a single prion protein molecule. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 5283-5288.	7.1	131
30	Experimental validation of free-energy-landscape reconstruction from non-equilibrium single-molecule force spectroscopy measurements. Nature Physics, 2011, 7, 631-634.	16.7	138
31	Experimental Validation of Free Energy Landscape Reconstructions from Non-Equilibrium Single-Molecule Pulling Experiments. Biophysical Journal, 2011, 100, 484a.	0.5	0
32	Effect of crowding on the conformation of interwound DNA strands from neutron scattering measurements and Monte Carlo simulations. Physical Review E, 2010, 81, 061905.	2.1	13
33	Temporal evolution of self-organization of gelatin molecules and clusters on quartz surface. Physical Review E, 2007, 76, 051912.	2.1	6
34	Surface Patch Binding Induced Intermolecular Complexation and Phase Separation in Aqueous Solutions of Similarly Charged Gelatinâ˘'Chitosan Molecules. Journal of Physical Chemistry B, 2007, 111, 10137-10145.	2.6	56
35	Effect of gelatin molecular charge heterogeneity on formation of intermolecular complexes and coacervation transition. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 1511-1520.	2.1	17
36	Swelling and de-swelling kinetics of gelatin hydrogels in ethanolâ€"water marginal solvent. International Journal of Biological Macromolecules, 2006, 39, 240-249.	7.5	35

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37	Flory Temperature and Upper Critical Solution Temperature of Gelatin Solutions. Biomacromolecules, 2005, 6, 1623-1627.	5.4	43