

# Sumit K Chaturvedi

## List of Publications by Year in descending order

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Version: 2024-02-01

60  
papers

2,329  
citations

218381

26  
h-index

205818

48  
g-index

61  
all docs

61  
docs citations

61  
times ranked

2245  
citing authors

#	ARTICLE	IF	CITATIONS
1	Elucidating the interaction of limonene with bovine serum albumin: a multi-technique approach. <i>Molecular BioSystems</i> , 2015, 11, 307-316.	2.9	220
2	Vitamin k3 inhibits protein aggregation: Implication in the treatment of amyloid diseases. <i>Scientific Reports</i> , 2016, 6, 26759.	1.6	152
3	Biophysical and molecular docking insight into the interaction of cytosine Î²-D arabinofuranoside with human serum albumin. <i>Journal of Luminescence</i> , 2015, 164, 123-130.	1.5	130
4	Protein aggregation: From background to inhibition strategies. <i>International Journal of Biological Macromolecules</i> , 2017, 103, 208-219.	3.6	128
5	Ascorbic acid inhibits human insulin aggregation and protects against amyloid induced cytotoxicity. <i>Archives of Biochemistry and Biophysics</i> , 2017, 621, 54-62.	1.4	119
6	SDS Can Be Utilized as an Amyloid Inducer: A Case Study on Diverse Proteins. <i>PLoS ONE</i> , 2012, 7, e29694.	1.1	113
7	Protein misfolding and aggregation: Mechanism, factors and detection. <i>Process Biochemistry</i> , 2016, 51, 1183-1192.	1.8	107
8	Vitamin B12 offers neuronal cell protection by inhibiting AÎ²-42 amyloid fibrillation. <i>International Journal of Biological Macromolecules</i> , 2017, 99, 477-482.	3.6	98
9	Protonation favors aggregation of lysozyme with SDS. <i>Soft Matter</i> , 2014, 10, 2591.	1.2	96
10	Biophysical insight into the anti-amyloidogenic behavior of taurine. <i>International Journal of Biological Macromolecules</i> , 2015, 80, 375-384.	3.6	78
11	Investigating the site selective binding of busulfan to human serum albumin: Biophysical and molecular docking approaches. <i>International Journal of Biological Macromolecules</i> , 2018, 107, 1414-1421.	3.6	73
12	Unraveling Comparative Anti-Amyloidogenic Behavior of Pyrazinamide and D-Cycloserine: A Mechanistic Biophysical Insight. <i>PLoS ONE</i> , 2015, 10, e0136528.	1.1	71
13	Anti-amyloidogenic behavior and interaction of Diallylsulfide with Human Serum Albumin. <i>International Journal of Biological Macromolecules</i> , 2016, 92, 1220-1228.	3.6	68
14	Comparative insight into surfactants mediated amyloidogenesis of lysozyme. <i>International Journal of Biological Macromolecules</i> , 2016, 83, 315-325.	3.6	68
15	Attenuation of amyloid fibrillation in presence of Warfarin: A biophysical investigation. <i>International Journal of Biological Macromolecules</i> , 2017, 95, 713-718.	3.6	66
16	DNA binding and nuclease activity of copper(II) complexes of tridentate ligands. <i>Inorganica Chimica Acta</i> , 2011, 376, 264-270.	1.2	58
17	Capreomycin inhibits the initiation of amyloid fibrillation and suppresses amyloid induced cell toxicity. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2018, 1866, 549-557.	1.1	57
18	Probing the interaction of cephalosporin antibiotic cefazidime with human serum albumin: A biophysical investigation. <i>International Journal of Biological Macromolecules</i> , 2017, 105, 292-299.	3.6	56

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19	Measuring macromolecular size distributions and interactions at high concentrations by sedimentation velocity. <i>Nature Communications</i> , 2018, 9, 4415.	5.8	48
20	Elucidating the mode of action of urea on mammalian serum albumins and protective effect of sodium dodecyl sulfate. <i>Biochemical and Biophysical Research Communications</i> , 2013, 441, 681-688.	1.0	46
21	Monomeric Banana Lectin at Acidic pH Overrides Conformational Stability of Its Native Dimeric Form. <i>PLoS ONE</i> , 2013, 8, e62428.	1.1	38
22	Biophysical insights into the interaction of hen egg white lysozyme with therapeutic dye clofazimine: modulation of activity and SDS induced aggregation of model protein. <i>Journal of Biomolecular Structure and Dynamics</i> , 2017, 35, 2197-2210.	2.0	38
23	Use of fluorescence-detected sedimentation velocity to study high-affinity protein interactions. <i>Nature Protocols</i> , 2017, 12, 1777-1791.	5.5	37
24	DNA induced aggregation of stem bromelain; a mechanistic insight. <i>RSC Advances</i> , 2016, 6, 37591-37599.	1.7	31
25	Mechanisms of protein aggregation and inhibition. <i>Frontiers in Bioscience - Elite</i> , 2017, 9, 1-20.	0.9	28
26	Amyloidogenic behavior of different intermediate state of stem bromelain: A biophysical insight. <i>International Journal of Biological Macromolecules</i> , 2016, 91, 477-485.	3.6	27
27	Stabilizing proteins to prevent conformational changes required for amyloid fibril formation. <i>Journal of Cellular Biochemistry</i> , 2019, 120, 2642-2656.	1.2	26
28	Comparative binding study of anti-tuberculosis drug pyrazinamide with serum albumins. <i>RSC Advances</i> , 2016, 6, 85860-85869.	1.7	24
29	Elucidating the inhibitory potential of Vitamin A against fibrillation and amyloid associated cytotoxicity. <i>International Journal of Biological Macromolecules</i> , 2019, 129, 333-338.	3.6	23
30	Measuring Ultra-Weak Protein Self-Association by Non-ideal Sedimentation Velocity. <i>Journal of the American Chemical Society</i> , 2019, 141, 2990-2996.	6.6	22
31	Ion-dipole induced interaction between cationic gemini/TTAB and nonionic (Tween) surfactants: interfacial and microstructural phenomena. <i>RSC Advances</i> , 2013, 3, 6945.	1.7	18
32	Biophysical and molecular docking insight into interaction mechanism and thermal stability of human serum albumin isoforms with a semi-synthetic water-soluble camptothecin analog irinotecan hydrochloride. <i>Journal of Biomolecular Structure and Dynamics</i> , 2016, 34, 1545-1560.	2.0	16
33	Enhanced Sample Handling for Analytical Ultracentrifugation with 3D-Printed Centerpieces. <i>Analytical Chemistry</i> , 2019, 91, 5866-5873.	3.2	16
34	Crystal Structure of Chicken $^13\text{S}$ -Crystallin Reveals Lattice Contacts with Implications for Function in the Lens and the Evolution of the $^12\text{I}3$ -Crystallins. <i>Structure</i> , 2017, 25, 1068-1078.e2.	1.6	15
35	Nucleic acid-induced dimerization of HIV-1 Gag protein. <i>Journal of Biological Chemistry</i> , 2019, 294, 16480-16493.	1.6	15
36	Measuring aggregates, self-association, and weak interactions in concentrated therapeutic antibody solutions. <i>MABs</i> , 2020, 12, 1810488.	2.6	14

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37	All tubulins are not alike: Heterodimer dissociation differs among different biological sources. <i>Journal of Biological Chemistry</i> , 2019, 294, 10315-10324.	1.6	13
38	Analyzing the interaction between porcine serum albumin (PSA) and ester-functionalized cationic gemini surfactants. <i>Process Biochemistry</i> , 2017, 63, 145-153.	1.8	12
39	A Reappraisal of Sedimentation Nonideality Coefficients for the Analysis of Weak Interactions of Therapeutic Proteins. <i>AAPS Journal</i> , 2019, 21, 35.	2.2	11
40	Peroxynitrite-induced structural perturbations in human IgG: A physicochemical study. <i>Archives of Biochemistry and Biophysics</i> , 2016, 603, 72-80.	1.4	9
41	Sedimentation of Reversibly Interacting Macromolecules with Changes in Fluorescence Quantum Yield. <i>Biophysical Journal</i> , 2017, 112, 1374-1382.	0.2	8
42	An insight into structural plasticity and conformational transitions of transcriptional co-activator Sus1. <i>PLoS ONE</i> , 2020, 15, e0229216.	1.1	8
43	An ester-functionalized cationic gemini surfactant mediated structural transitions of porcine serum albumin (PSA) via binding interaction. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2017, 516, 245-253.	2.3	7
44	Global multi-method analysis of interaction parameters for reversibly self-associating macromolecules at high concentrations. <i>Scientific Reports</i> , 2021, 11, 5741.	1.6	7
45	A copper(II) complex as selective turn-on fluorosensor for nitric oxide and its intracellular application. <i>Inorganica Chimica Acta</i> , 2015, 437, 201-206.	1.2	5
46	pH and alcohol induced structural transition in Ntf2 a nuclear transport factor of <i>Saccharomyces cerevisiae</i> . <i>International Journal of Biological Macromolecules</i> , 2020, 159, 79-86.	3.6	5
47	All Tubulins are Not Alike: Dimer Dissociation and Monomer Exchange Differ Depending on the Biological Source of Tubulin. <i>Biophysical Journal</i> , 2018, 114, 504a.	0.2	2
48	Characterization of CNL like protein fragment (CNL-LPF) from mature <i>Lageneria siceraria</i> seeds. <i>International Journal of Biological Macromolecules</i> , 2017, 104, 1194-1203.	3.6	1
49	Studying Multi-Protein Interactions by Fluorescence Detected Sedimentation Velocity Combining Hydrodynamic Separation of Complexes with Fluorescence Quenching Analysis. <i>Biophysical Journal</i> , 2019, 116, 194a.	0.2	1
50	Menadione Suppresses Amyloid Fibrillogenesis and Cytotoxicity: Implication in the Treatment of Systemic Amyloidosis. <i>Biophysical Journal</i> , 2016, 110, 533a.	0.2	0
51	A New Temporal Dimension for Multisignal Sedimentation Velocity as a Tool to Analyze Multicomponent Interactions. <i>Biophysical Journal</i> , 2017, 112, 192a.	0.2	0
52	A General Framework for the Boundary Structure in Multi-Component Sedimentation Velocity with Reversible Interactions. <i>Biophysical Journal</i> , 2017, 112, 199a.	0.2	0
53	Fluorescence Detected Sedimentation Velocity Analytical Ultracentrifugation for Investigating Affinity and Stoichiometry of Protein Interactions. <i>Biophysical Journal</i> , 2017, 112, 199a.	0.2	0
54	All Tubulins are Not the Same: Reversible Dissociation of AB-Tubulin Dimers Differ Depending on the Source of Tubulin. <i>Biophysical Journal</i> , 2017, 112, 360a.	0.2	0

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55	Sedimentation Boundary Structure of Multi-Component Solutions with Rapidly Reversible Interactions. <i>Biophysical Journal</i> , 2018, 114, 172a-173a.	0.2	0
56	Measuring Macromolecular Size-Distributions and Interactions at High Concentrations by Sedimentation Velocity. <i>Biophysical Journal</i> , 2019, 116, 158a.	0.2	0
57	All Tubulins are not Alike: Heterodimer Dissociation Differs Among Different Biological Sources: Comparison with Dimer Association. <i>Biophysical Journal</i> , 2020, 118, 597a-598a.	0.2	0
58	Nucleic Acid-Induced Dimerization of HIV-1 Gag Protein. <i>Biophysical Journal</i> , 2020, 118, 204a.	0.2	0
59	Studying Weak Macromolecular Interactions by Sedimentation Velocity of Highly Concentrated Solutions. <i>Biophysical Journal</i> , 2020, 118, 137a.	0.2	0
60	Utilizing 3D Printing for Enhanced Sample Handling in Analytical Ultracentrifugation. <i>Biophysical Journal</i> , 2020, 118, 201a.	0.2	0