

# Pinak Chakrabarti

## List of Publications by Year in descending order

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78  
papers

5,126  
citations

147801

31  
h-index

88630

70  
g-index

79  
all docs

79  
docs citations

79  
times ranked

7031  
citing authors

#	ARTICLE	IF	CITATIONS
1	O <sub>2</sub> interaction, its occurrence and implications for protein structure and folding. <i>Proteins: Structure, Function and Bioinformatics</i> , 2022, 90, 1159-1169.	2.6	4
2	Intrinsically disordered proteins/regions and insight into their biomolecular interactions. <i>Biophysical Chemistry</i> , 2022, 283, 106769.	2.8	28
3	Virstatin-Conjugated Gold Nanoparticle with Enhanced Antimicrobial Activity against the <i>Vibrio cholerae</i> El Tor Biotype. <i>ACS Applied Bio Materials</i> , 2021, 4, 3089-3100.	4.6	13
4	RGS5-TGF $\beta$ 2-Smad2/3 axis switches pro- to anti-apoptotic signaling in tumor-residing pericytes, assisting tumor growth. <i>Cell Death and Differentiation</i> , 2021, 28, 3052-3076.	11.2	21
5	Effect of gold nanoparticles on the structure and neuroprotective function of protein L-isoaspartyl methyltransferase (PIMT). <i>Scientific Reports</i> , 2021, 11, 14296.	3.3	9
6	The gold nanoparticle reduces <i>Vibrio cholerae</i> pathogenesis by inhibition of biofilm formation and disruption of the production and structure of cholera toxin. <i>Colloids and Surfaces B: Biointerfaces</i> , 2021, 204, 111811.	5.0	13
7	Inhibition of microtubule assembly and cytotoxic effect of graphene oxide on human colorectal carcinoma cell HCT116. <i>Archives of Biochemistry and Biophysics</i> , 2021, 708, 108940.	3.0	12
8	Delineation of a new structural motif involving NHN $\beta$ turn. <i>Proteins: Structure, Function and Bioinformatics</i> , 2020, 88, 431-439.	2.6	3
9	The role of isoaspartate in fibrillation and its prevention by Protein-L-isoaspartyl methyltransferase. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2020, 1864, 129500.	2.4	16
10	The susceptibility of disulfide bonds towards radiation damage may be explained by S...O interactions. <i>IUCr</i> , 2020, 7, 825-834.	2.2	9
11	Differential processing of quorum sensing signals through phosphotransfer: structural insights from molecular dynamics simulations. <i>Journal of Proteins and Proteomics</i> , 2019, 10, 91-108.	1.5	0
12	The antibacterial and anticancer properties of zinc oxide coated iron oxide nanotextured composites. <i>Colloids and Surfaces B: Biointerfaces</i> , 2019, 177, 512-519.	5.0	43
13	Self-Assembly of Ferritin: Structure, Biological Function and Potential Applications in Nanotechnology. <i>Advances in Experimental Medicine and Biology</i> , 2019, 1174, 313-329.	1.6	23
14	Structural changes in DNA-binding proteins on complexation. <i>Nucleic Acids Research</i> , 2018, 46, 3298-3308.	14.5	11
15	Molecular features of interaction involving hen egg white lysozyme immobilized on graphene oxide and the effect on activity. <i>International Journal of Biological Macromolecules</i> , 2018, 120, 2390-2398.	7.5	14
16	Structural motif, topi and its role in protein function and fibrillation. <i>Molecular Omics</i> , 2018, 14, 247-256.	2.8	5
17	Structure and function of <i>Vibrio cholerae</i> accessory cholera enterotoxin in presence of gold nanoparticles: Dependence on morphology. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2017, 1861, 977-986.	2.4	18
18	PEG-functionalized zinc oxide nanoparticles induce apoptosis in breast cancer cells through reactive oxygen species-dependent impairment of DNA damage repair enzyme NEIL2. <i>Free Radical Biology and Medicine</i> , 2017, 103, 35-47.	2.9	61

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19	Zinc oxide nanoparticles provide anti-cholera activity by disrupting the interaction of cholera toxin with the human GM1 receptor. <i>Journal of Biological Chemistry</i> , 2017, 292, 18303-18311.	3.4	23
20	Modelling of growth kinetics of <i>Vibrio cholerae</i> in presence of gold nanoparticles: effect of size and morphology. <i>Scientific Reports</i> , 2017, 7, 9671.	3.3	20
21	A novel secondary structure based on fused five-membered rings motif. <i>Scientific Reports</i> , 2016, 6, 31483.	3.3	7
22	Tumor-associated mesenchymal stem cells inhibit naïve T cell expansion by blocking cysteine export from dendritic cells. <i>International Journal of Cancer</i> , 2016, 139, 2068-2081.	5.1	37
23	Anoctamin 6 Contributes to Cl <sup>-</sup> Secretion in Accessory Cholera Enterotoxin (Ace)-stimulated Diarrhea. <i>Journal of Biological Chemistry</i> , 2016, 291, 26816-26836.	3.4	25
24	The antimicrobial activity of ZnO nanoparticles against <i>Vibrio cholerae</i> : Variation in response depends on biotype. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2016, 12, 1499-1509.	3.3	87
25	Effects of Small Molecule Calcium-Activated Chloride Channel Inhibitors on Structure and Function of Accessory Cholera Enterotoxin (Ace) of <i>Vibrio cholerae</i> . <i>PLoS ONE</i> , 2015, 10, e0141283.	2.5	5
26	Defining the loop structures in proteins based on composite $\beta^2$ -turn mimics. <i>Protein Engineering, Design and Selection</i> , 2015, 28, 153-161.	2.1	17
27	Identification of the target DNA sequence and characterization of DNA binding features of HlyU, and suggestion of a redox switch for hlyA expression in the human pathogen <i>Vibrio cholerae</i> from in silico studies. <i>Nucleic Acids Research</i> , 2015, 43, 1407-1417.	14.5	16
28	Flexibility in the N-terminal actin-binding domain: Clues from <i>in silico</i> mutations and molecular dynamics. <i>Proteins: Structure, Function and Bioinformatics</i> , 2015, 83, 696-710.	2.6	7
29	$\beta^2$ -Turn: A novel $\beta^2$ -turn mimic in globular proteins stabilized by main-chain to side-chain C <sub>1</sub> H <sub>2</sub> N <sub>1</sub> O interaction. <i>Proteins: Structure, Function and Bioinformatics</i> , 2015, 83, 203-214.	2.6	7
30	Changes in protein structure at the interface accompanying complex formation. <i>IUCr</i> , 2015, 2, 643-652.	2.2	21
31	Crystal structure and activity of protein L-isoaspartyl-O-methyltransferase from <i>Vibrio cholerae</i> , and the effect of AdoHcy binding. <i>Archives of Biochemistry and Biophysics</i> , 2015, 583, 140-149.	3.0	10
32	Antibacterial effect of silver nanoparticles and the modeling of bacterial growth kinetics using a modified Gompertz model. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2015, 1850, 299-306.	2.4	132
33	Water and side-chain embedded $\beta^2$ -turns. <i>Biopolymers</i> , 2014, 101, 441-453.	2.4	6
34	Crystal structure of HlyU, the hemolysin gene transcription activator, from <i>Vibrio cholerae</i> N16961 and functional implications. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2014, 1844, 2346-2354.	2.3	15
35	CH <sub>2</sub> hydrogen bonds in biological macromolecules. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 12648-12683.	2.8	392
36	Bactericidal effect of polyethyleneimine capped ZnO nanoparticles on multiple antibiotic resistant bacteria harboring genes of high-pathogenicity island. <i>Colloids and Surfaces B: Biointerfaces</i> , 2014, 121, 44-53.	5.0	45

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37	Reassessing buried surface areas in protein-protein complexes. <i>Protein Science</i> , 2013, 22, 1453-1457.	7.6	27
38	Protein l-isoaspartyl-O-methyltransferase of <i>Vibrio cholerae</i> : Interaction with cofactors and effect of osmolytes on unfolding. <i>Biochimie</i> , 2013, 95, 912-921.	2.6	7
39	The Molecular Basis of Inactivation of Metronidazole-Resistant <i>Helicobacter pylori</i> Using Polyethyleneimine Functionalized Zinc Oxide Nanoparticles. <i>PLoS ONE</i> , 2013, 8, e70776.	2.5	39
40	Interaction of Polyethyleneimine-Functionalized ZnO Nanoparticles with Bovine Serum Albumin. <i>Langmuir</i> , 2012, 28, 11142-11152.	3.5	132
41	ZnO Nanoparticles as an Antibacterial Agent Against <i>E. coli</i> . <i>Science of Advanced Materials</i> , 2012, 4, 173-178.	0.7	15
42	Contrasting Effect of Gold Nanoparticles and Nanorods with Different Surface Modifications on the Structure and Activity of Bovine Serum Albumin. <i>Langmuir</i> , 2011, 27, 7722-7731.	3.5	192
43	Polyethyleneimine Functionalized ZnO Quantum Dots and their Binding Interaction with Bovine Serum Albumin Protein. <i>Materials Research Society Symposia Proceedings</i> , 2011, 1316, 1.	0.1	0
44	Accessory Cholera Enterotoxin, Ace, from <i>Vibrio cholerae</i> : Structure, Unfolding, and Virstatin Binding. <i>Biochemistry</i> , 2011, 50, 2962-2972.	2.5	25
45	Anti-Tumor Chloroquine-Gold Nanocomposites and their Binding Interaction with Bovine Serum Albumin: Biophysical and Biochemical Aspects of Protein Binding. <i>Materials Research Society Symposia Proceedings</i> , 2011, 1316, 1.	0.1	0
46	The effect of zinc oxide nanoparticles on the structure of the periplasmic domain of the <i>Vibrio cholerae</i> ToxR protein. <i>FEBS Journal</i> , 2010, 277, 4184-4194.	4.7	69
47	Structure and Activity of Lysozyme on Binding to ZnO Nanoparticles. <i>Langmuir</i> , 2010, 26, 3506-3513.	3.5	156
48	The Subunit Interfaces of Weakly Associated Homodimeric Proteins. <i>Journal of Molecular Biology</i> , 2010, 398, 146-160.	4.2	107
49	Role of Surface Adsorbed Anionic Species in Antibacterial Activity of ZnO Quantum Dots Against <i>Escherichia coli</i> . <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 6427-6433.	0.9	68
50	pi-Turns: types, systematics and the context of their occurrence in protein structures. <i>BMC Structural Biology</i> , 2008, 8, 39.	2.3	19
51	Protein-protein interaction and quaternary structure. <i>Quarterly Reviews of Biophysics</i> , 2008, 41, 133-180.	5.7	354
52	Structural studies on <i>Vibrio cholerae</i> ToxR periplasmic and cytoplasmic domains. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2007, 1774, 1331-1338.	2.3	4
53	Geometry of nonbonded interactions involving planar groups in proteins. <i>Progress in Biophysics and Molecular Biology</i> , 2007, 95, 83-137.	2.9	171
54	Peptide segments in protein-protein interfaces. <i>Journal of Biosciences</i> , 2007, 32, 101-111.	1.1	37

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55	Cloning, expression, purification, and characterization of <i>Vibrio cholerae</i> transcriptional activator, HlyU. <i>Protein Expression and Purification</i> , 2006, 48, 118-125.	1.3	11
56	ProFace: a server for the analysis of the physicochemical features of protein-protein interfaces. <i>BMC Structural Biology</i> , 2006, 6, 11.	2.3	73
57	Molecular modeling and characterization of <i>Vibrio cholerae</i> transcription regulator HlyU. <i>BMC Structural Biology</i> , 2006, 6, 24.	2.3	26
58	310-Helix adjoining $\hat{1}$ -helix and $\hat{2}$ -strand: Sequence and structural features and their conservation. <i>Biopolymers</i> , 2005, 78, 147-162.	2.4	25
59	Interresidue Contacts in Proteins and Protein-Protein Interfaces and Their Use in Characterizing the Homodimeric Interface. <i>Journal of Proteome Research</i> , 2005, 4, 1600-1609.	3.7	42
60	Disulfide bonds, their stereospecific environment and conservation in protein structures. <i>Protein Engineering, Design and Selection</i> , 2004, 17, 795-808.	2.1	109
61	Expanded turn conformations: Characterization and sequence-structure correspondence in $\hat{1}$ -turns with implications in helix folding. <i>Proteins: Structure, Function and Bioinformatics</i> , 2004, 55, 305-315.	2.6	39
62	A Dissection of Specific and Non-specific Protein-Protein Interfaces. <i>Journal of Molecular Biology</i> , 2004, 336, 943-955.	4.2	426
63	Sequence and Structure Patterns in Proteins from an Analysis of the Shortest Helices: Implications for Helix Nucleation. <i>Journal of Molecular Biology</i> , 2003, 326, 273-291.	4.2	71
64	Stereospecific Interactions of Proline Residues in Protein Structures and Complexes. <i>Journal of Molecular Biology</i> , 2003, 331, 925-940.	4.2	162
65	Silver(i) oxide-silver halide mediated alcoholysis of O-benzoyl-myo-inositol 1,3,5-orthoformates: intramolecular assistance by the sulfonyl group. <i>Perkin Transactions II RSC</i> , 2002, , 358-365.	1.1	9
66	Dissecting protein-protein recognition sites. <i>Proteins: Structure, Function and Bioinformatics</i> , 2002, 47, 334-343.	2.6	549
67	Variants of 310-helices in proteins. <i>Proteins: Structure, Function and Bioinformatics</i> , 2002, 48, 571-579.	2.6	42
68	Non-hydrogen Bond Interactions Involving the Methionine Sulfur Atom. <i>Journal of Biomolecular Structure and Dynamics</i> , 2001, 19, 115-128.	3.5	160
69	The interrelationships of side-chain and main-chain conformations in proteins. <i>Progress in Biophysics and Molecular Biology</i> , 2001, 76, 1-102.	2.9	189
70	Terminal residues in protein chains: Residue preference, conformation, and interaction. <i>Biopolymers</i> , 2000, 53, 467-475.	2.4	13
71	Environment of tryptophan side chains in proteins. <i>Proteins: Structure, Function and Bioinformatics</i> , 2000, 38, 288-300.	2.6	133
72	Conformational Similarity Indices Between Different Residues in Proteins and $\hat{1}$ -Helix Propensities. <i>Journal of Biomolecular Structure and Dynamics</i> , 2000, 18, 273-280.	3.5	10

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73	Environment of tryptophan side chains in proteins. <i>Proteins: Structure, Function and Bioinformatics</i> , 2000, 38, 288-300.	2.6	1
74	Estimates of the loss of main-chain conformational entropy of different residues on protein folding. , 1999, 36, 332-339.		21
75	Cis peptide bonds in proteins: residues involved, their conformations, interactions and locations 1 Edited by J. M. Thornton. <i>Journal of Molecular Biology</i> , 1999, 294, 271-288.	4.2	294
76	Different Types of Interactions Involving Cysteine Sulfhydryl Group in Proteins. <i>Journal of Biomolecular Structure and Dynamics</i> , 1998, 15, 1059-1072.	3.5	83
77	An electrophile–nucleophile interaction in metalloprotein structures. <i>Protein Science</i> , 1997, 6, 851-859.	7.6	17
78	Stereodivergent C–C Bond Formation on Arene–Chromium Template: Endo-Selective Allylation by Hosomi–Sakurai Reaction. <i>Journal of Organic Chemistry</i> , 1996, 61, 8362-8363.	3.2	23