

# Bishwajit Kundu

## List of Publications by Year in descending order

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Version: 2024-02-01

51  
papers

1,260  
citations

394421

19  
h-index

377865

34  
g-index

52  
all docs

52  
docs citations

52  
times ranked

1820  
citing authors

#	ARTICLE	IF	CITATIONS
1	Antifungal activities of selected essential oils against <i>Fusarium oxysporum</i> f. sp. <i>lycopersici</i> 1322, with emphasis on <i>Syzygium aromaticum</i> essential oil. <i>Journal of Bioscience and Bioengineering</i> , 2017, 123, 308-313.	2.2	116
2	Curcumin binds to the pre-fibrillar aggregates of Cu/Zn superoxide dismutase (SOD1) and alters its amyloidogenic pathway resulting in reduced cytotoxicity. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2015, 1854, 426-436.	2.3	106
3	Nucleation-dependent conformational conversion of the Y145Stop variant of human prion protein: Structural clues for prion propagation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 12069-12074.	7.1	92
4	Clove and lemongrass oil based non-ionic nanoemulsion for suppressing the growth of plant pathogenic <i>Fusarium oxysporum</i> f.sp. <i>lycopersici</i> . <i>Industrial Crops and Products</i> , 2018, 123, 353-362.	5.2	87
5	Structural stability and functional analysis of L-asparaginase from <i>Pyrococcus furiosus</i> . <i>Biochemistry (Moscow)</i> , 2010, 75, 375-381.	1.5	64
6	Hyperthermophilic asparaginase mutants with enhanced substrate affinity and antineoplastic activity: structural insights on their mechanism of action. <i>FASEB Journal</i> , 2012, 26, 1161-1171.	0.5	64
7	Modulation of Proteinase K-resistant Prion Protein in Cells and Infectious Brain Homogenate by Redox Iron: Implications for Prion Replication and Disease Pathogenesis. <i>Molecular Biology of the Cell</i> , 2007, 18, 3302-3312.	2.1	58
8	Use of a hydrophobic dye to indirectly probe the structural organization and conformational plasticity of molecules in amorphous aggregates of carbonic anhydrase. <i>Biochemical and Biophysical Research Communications</i> , 2002, 293, 572-577.	2.1	57
9	Arjunolic acid, a peroxisome proliferator-activated receptor $\beta$ agonist, regresses cardiac fibrosis by inhibiting non-canonical TGF- $\beta$ signaling. <i>Journal of Biological Chemistry</i> , 2017, 292, 16440-16462.	3.4	50
10	Stable self-assembled nanostructured hen egg white lysozyme exhibits strong anti-proliferative activity against breast cancer cells. <i>Colloids and Surfaces B: Biointerfaces</i> , 2015, 130, 237-245.	5.0	49
11	Polyphenols in combination with $\beta$ -cyclodextrin can inhibit and disaggregate $\beta$ -synuclein amyloids under cell mimicking conditions: A promising therapeutic alternative. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2017, 1865, 589-603.	2.3	49
12	Hydrophobic dye inhibits aggregation of molten carbonic anhydrase during thermal unfolding and refolding. , 1999, 37, 321-324.		34
13	Prion metal interaction: Is prion pathogenesis a cause or a consequence of metal imbalance?. <i>Chemico-Biological Interactions</i> , 2009, 181, 282-291.	4.0	29
14	Thermodynamic Stabilization of the Folded Domain of Prion Protein Inhibits Prion Infection in Vivo. <i>Cell Reports</i> , 2013, 4, 248-254.	6.4	28
15	Exploring the aggregation-prone regions from structural domains of human TDP-43. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2019, 1867, 286-296.	2.3	27
16	Structural and functional insights into an archaeal L-asparaginase obtained through the linker-less assembly of constituent domains. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2014, 70, 3187-3197.	2.5	25
17	Gelsolin Amyloidogenesis Is Effectively Modulated by Curcumin and Emetine Conjugated PLGA Nanoparticles. <i>PLoS ONE</i> , 2015, 10, e0127011.	2.5	24
18	L-Asparaginase as a new molecular target against leishmaniasis: insights into the mechanism of action and structure-based inhibitor design. <i>Molecular BioSystems</i> , 2015, 11, 1887-1896.	2.9	23

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19	N-terminal domain of <i>Pyrococcus furiosus</i> l-asparaginase functions as a non-specific, stable, molecular chaperone. <i>FEBS Journal</i> , 2013, 280, 2688-2699.	4.7	21
20	Selective Interception of Gelsolin Amyloidogenic Stretch Results in Conformationally Distinct Aggregates with Reduced Toxicity. <i>ACS Chemical Neuroscience</i> , 2014, 5, 982-992.	3.5	21
21	L-Asparaginase of <i>Leishmania donovani</i> : Metabolic target and its role in Amphotericin B resistance. <i>International Journal for Parasitology: Drugs and Drug Resistance</i> , 2017, 7, 337-349.	3.4	20
22	Modulation of prion polymerization and toxicity by rationally designed peptidomimetics. <i>Biochemical Journal</i> , 2017, 474, 123-147.	3.7	17
23	The Gelsolin Pathogenic D187N Mutant Exhibits Altered Conformational Stability and Forms Amyloidogenic Oligomers. <i>Biochemistry</i> , 2018, 57, 2359-2372.	2.5	16
24	Formation of amyloid fibrils by bovine carbonic anhydrase. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2008, 1784, 930-935.	2.3	15
25	Biophysical insight into the heparin-peptide interaction and its modulation by a small molecule. <i>Journal of Molecular Recognition</i> , 2018, 31, e2674.	2.1	13
26	The excised heat-shock domain of $\beta$ crystallin is a folded, proteolytically susceptible trimer with significant surface hydrophobicity and a tendency to self-aggregate upon heating. <i>Protein Expression and Purification</i> , 2004, 36, 263-271.	1.3	11
27	Clues for divergent, polymorphic amyloidogenesis through dissection of amyloid forming steps of bovine carbonic anhydrase and its critical amyloid forming stretch. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2016, 1864, 794-804.	2.3	11
28	Domains of <i>Pyrococcus furiosus</i> l-asparaginase fold sequentially and assemble through strong intersubunit associative forces. <i>Extremophiles</i> , 2015, 19, 681-691.	2.3	10
29	Hyperthermophilic l-asparaginase bypasses monomeric intermediates during folding to retain cooperativity and avoid amyloid assembly. <i>Archives of Biochemistry and Biophysics</i> , 2017, 622, 36-46.	3.0	9
30	Endoplasmic Reticulum Stress Induces Myostatin High Molecular Weight Aggregates and Impairs Mature Myostatin Secretion. <i>Molecular Neurobiology</i> , 2018, 55, 8355-8373.	4.0	9
31	Most Variable Genes and Transcription Factors in Acute Lymphoblastic Leukemia Patients. <i>Interdisciplinary Sciences, Computational Life Sciences</i> , 2019, 11, 668-678.	3.6	9
32	Prion protein transcription is auto-regulated through dynamic interactions with G-quadruplex motifs in its own promoter. <i>Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms</i> , 2020, 1863, 194479.	1.9	9
33	Predicting alternate structure attainment and amyloidogenesis: A nonlinear signal analysis approach. <i>Biochemical and Biophysical Research Communications</i> , 2005, 338, 1410-1416.	2.1	8
34	Identification and validation of l-asparaginase as a potential metabolic target against <i>Mycobacterium tuberculosis</i> . <i>Journal of Cellular Biochemistry</i> , 2019, 120, 143-154.	2.6	8
35	Heat induces end to end repetitive association in <i>P. furiosus</i> l-asparaginase which enables its thermophilic property. <i>Scientific Reports</i> , 2020, 10, 21702.	3.3	8
36	Peptide scanning-based identification of regions of $\beta$ -II crystallin involved in thermal aggregation: Evidence of the involvement of structurally analogous, helix-containing loops from the two double Greek key domains of the molecule. <i>Archives of Biochemistry and Biophysics</i> , 2003, 410, 69-75.	3.0	7

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37	Protective Effects of a Neurohypophyseal Hormone Analogue on Prion Aggregation, Cellular Internalization, and Toxicity. ACS Chemical Neuroscience, 2020, 11, 2422-2430.	3.5	6
38	Manipulation of Unfolding-Induced Protein Aggregation by Peptides Selected for Aggregate-Binding Ability through Phage Display Library Screening. Biochemical and Biophysical Research Communications, 2002, 291, 903-907.	2.1	5
39	Interplay between CedA, rpoB and double stranded DNA: A step towards understanding CedA mediated cell division in E. coli. International Journal of Biological Macromolecules, 2018, 107, 2026-2033.	7.5	5
40	Specific keratinase derived designer peptides potently inhibit A $\beta$ aggregation resulting in reduced neuronal toxicity and apoptosis. Biochemical Journal, 2019, 476, 1817-1841.	3.7	5
41	Human Epididymis Protein 4 Quantification and Interaction Network Analysis in Seminal Plasma. Protein and Peptide Letters, 2019, 26, 458-465.	0.9	4
42	DNA intercalators as amyloid assembly modulators: mechanistic insights. RSC Advances, 2017, 7, 493-506.	3.6	3
43	Heterologous expression of an engineered protein domain acts as chaperone and enhances thermotolerance of Escherichia coli. International Journal of Biological Macromolecules, 2018, 107, 2086-2093.	7.5	3
44	Identification of functional interactome of a key cell division regulatory protein CedA of E.coli. International Journal of Biological Macromolecules, 2018, 106, 763-767.	7.5	3
45	Hybrid mesoporous silica-based nanocarriers for responsive drug release in cancerous cell line. Applied Nanoscience (Switzerland), 2021, 11, 217-228.	3.1	3
46	Antimicrobial-resistant <i>Neisseria gonorrhoeae</i> can be targeted using inhibitors against evolutionary conserved asparaginase. Journal of Cellular Biochemistry, 2022, 123, 1171-1182.	2.6	3
47	Application of a protein domain as chaperone for enhancing biological activity and stability of other proteins. Journal of Biotechnology, 2020, 310, 68-79.	3.8	2
48	Distinct functional properties of secretory l-asparaginase Rv1538c involved in phagosomal survival of Mycobacterium tuberculosis. Biochimie, 2021, 182, 1-12.	2.6	2
49	Investigating the role of l-asparaginase as a potential therapeutic target against gonorrhea infections. Biophysical Journal, 2022, 121, 190a.	0.5	2
50	Interplay between DtxR and nitric oxide reductase activities: a functional genomics approach indicating involvement of homologous protein domains in bacterial pathogenesis. International Journal of Experimental Pathology, 2007, 88, 377-385.	1.3	1
51	Protein engineering: Methods and applications. , 2022, , 641-668.		1