Trushar R Patel

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7481160/publications.pdf

Version: 2024-02-01

94 papers	3,193 citations	201575 27 h-index	168321 53 g-index
106 all docs	106 docs citations	106 times ranked	5089 citing authors

#	Article	IF	Citations
1	Dynamic light scattering: a practical guide and applications in biomedical sciences. Biophysical Reviews, 2016, 8, 409-427.	1.5	1,132
2	Molecular mechanisms of viral hepatitis induced hepatocellular carcinoma. World Journal of Gastroenterology, 2020, 26, 5759-5783.	1.4	128
3	Vimentin Coil 1Aâ€"A Molecular Switch Involved in the Initiation of Filament Elongation. Journal of Molecular Biology, 2009, 390, 245-261.	2.0	90
4	Structural Decoding of the Netrin-1/UNC5 Interaction and its Therapeutical Implications in Cancers. Cancer Cell, 2016, 29, 173-185.	7.7	80
5	Immunological and Structural Properties of a Pectic Polymer from Glinus Oppositifolius. Glycobiology, 2007, 17, 1299-1310.	1.3	77
6	The Î²-Lactamase Gene Regulator AmpR Is a Tetramer That Recognizes and Binds the d-Ala-d-Ala Motif of Its Repressor UDP-N-acetylmuramic Acid (MurNAc)-pentapeptide. Journal of Biological Chemistry, 2015, 290, 2630-2643.	1.6	77
7	Structural decoding of netrin-4 reveals a regulatory function towards mature basement membranes. Nature Communications, 2016, 7, 13515.	5.8	74
8	Pectic polysaccharides from Biophytum petersianum Klotzsch, and their activation of macrophages and dendritic cells. Glycobiology, 2008, 18, 1074-1084.	1.3	58
9	Targeting Xist with compounds that disrupt RNA structure and X inactivation. Nature, 2022, 604, 160-166.	13.7	57
10	Binding of G-quadruplexes to the N-terminal Recognition Domain of the RNA Helicase Associated with AU-rich Element (RHAU). Journal of Biological Chemistry, 2013, 288, 35014-35027.	1.6	53
11	Zinc-finger protein CNBP alters the 3-D structure of lncRNA Braveheart in solution. Nature Communications, 2020, 11, 148.	5.8	53
12	LAR protein tyrosine phosphatase regulates focal adhesions via CDK1. Journal of Cell Science, 2016, 129, 2962-71.	1.2	52
13	Structures and Structureâ^'Activity Relationships of Three Mitogenic and Complement Fixing Pectic Arabinogalactans from the Malian Antiulcer PlantsCochlospermumtinctoriumA. Rich andVernoniakotschyanaSch. Bip. ex Walp. Biomacromolecules, 2006, 7, 71-79.	2.6	50
14	Weak Self-Association in a Carbohydrate System. Biophysical Journal, 2007, 93, 741-749.	0.2	50
15	Global conformation analysis of irradiated xyloglucans. Carbohydrate Polymers, 2008, 74, 845-851.	5.1	49
16	Host Transcription Factors in Hepatitis B Virus RNA Synthesis. Viruses, 2020, 12, 160.	1.5	47
17	Maltose-Binding Protein (MBP), a Secretion-Enhancing Tag for Mammalian Protein Expression Systems. PLoS ONE, 2016, 11, e0152386.	1.1	46
18	Global hydrodynamic analysis of the molecular flexibility of galactomannans. Carbohydrate Polymers, 2008, 72, 356-360.	5.1	44

#	Article	IF	Citations
19	Structure and hydrodynamics of a DNA G-quadruplex with a cytosine bulge. Nucleic Acids Research, 2018, 46, 5319-5331.	6.5	44
20	Activation of 2â€² 5â€²-Oligoadenylate Synthetase by Stem Loops at the 5â€²-End of the West Nile Virus Genome. PLoS ONE, 2014, 9, e92545.	1.1	43
21	Structural studies of RNA-protein complexes: A hybrid approach involving hydrodynamics, scattering, and computational methods. Methods, 2017, 118-119, 146-162.	1.9	39
22	Nano-structure of the laminin Î³-1 short arm reveals an extended and curved multidomain assembly. Matrix Biology, 2010, 29, 565-572.	1.5	34
23	Viral proteins targeting host protein kinase R to evade an innate immune response: a mini review. Biotechnology and Genetic Engineering Reviews, 2018, 34, 33-59.	2.4	34
24	DEAD-box helicases: the Yin and Yang roles in viral infections. Biotechnology and Genetic Engineering Reviews, 2018, 34, 3-32.	2.4	34
25	Molecular Flexibility of Methylcelluloses of Differing Degree of Substitution by Combined Sedimentation and Viscosity Analysis. Macromolecular Bioscience, 2008, 8, 1108-1115.	2.1	33
26	C1qâ€tumour necrosis factorâ€related protein 8 (<scp>CTRP8</scp>) is a novel interaction partner of relaxin receptor <scp>RXFP1</scp> in human brain cancer cells. Journal of Pathology, 2013, 231, 466-479.	2.1	33
27	Structural elucidation of full-length nidogen and the lamininâ€“nidogen complex in solution. Matrix Biology, 2014, 33, 60-67.	1.5	32
28	Analytical ultracentrifugation: A versatile tool for the characterisation of macromolecular complexes in solution. Methods, 2016, 95, 55-61.	1.9	29
29	Pressure Cell Assisted Solution Characterization of Galactomannans. 3. Application of Analytical Ultracentrifugation Techniques. Biomacromolecules, 2006, 7, 3513-3520.	2.6	27
30	Recognition of viral RNA stemâ€“loops by the tandem double-stranded RNA binding domains of PKR. Rna, 2013, 19, 333-344.	1.6	27
31	The biomedical and bioengineering potential of protein nanocompartments. Biotechnology Advances, 2020, 41, 107547.	6.0	25
32	Molecular dissection of Wnt3a-Frizzled8 interaction reveals essential and modulatory determinants of Wnt signaling activity. BMC Biology, 2014, 12, 44.	1.7	24
33	Site Specific Cleavage Mediated by MMPs Regulates Function of Agrin. PLoS ONE, 2012, 7, e43669.	1.1	22
34	Resonance Energy Transfer between Green Fluorescent Protein Variants:â€‰ Complexities Revealed with Myosin Fusion Proteins. Biochemistry, 2006, 45, 10482-10491.	1.2	21
35	Solution conformation of adenovirus virus associated RNA-I and its interaction with PKR. Journal of Structural Biology, 2014, 185, 48-57.	1.3	21
36	Characterization of the termini of the West Nile virus genome and their interactions with the small isoform of the 2â€² 5â€²-oligoadenylate synthetase family. Journal of Structural Biology, 2015, 190, 236-249.	1.3	21

#	Article	IF	Citations
37	Damaged starch characterisation by ultracentrifugation. Carbohydrate Research, 2006, 341, 130-137.	1.1	20
38	Determination of a molecular shape for netrin-4 from hydrodynamic and small angle X-ray scattering measurements. Matrix Biology, 2012, 31, 135-140.	1.5	20
39	Current approaches for RNA-labelling to identify RNA-binding proteins. Biochemistry and Cell Biology, 2020, 98, 31-41.	0.9	20
40	Human DDX17 Unwinds Rift Valley Fever Virus Non-Coding RNAs. International Journal of Molecular Sciences, 2021, 22, 54.	1.8	20
41	Biophysical Characterization of G-Quadruplex Recognition in the PITX1 mRNA by the Specificity Domain of the Helicase RHAU. PLoS ONE, 2015, 10, e0144510.	1.1	19
42	Impact of the structural integrity of the three-way junction of adenovirus VAI RNA on PKR inhibition. PLoS ONE, 2017, 12, e0186849.	1.1	19
43	Identification and characterization of a G-quadruplex structure in the pre-core promoter region of hepatitis B virus covalently closed circular DNA. Journal of Biological Chemistry, 2021, 296, 100589.	1.6	18
44	Tâ€shaped arrangement of the recombinant agrin G3 â€“ IgG Fc protein. Protein Science, 2011, 20, 931-940.	3.1	16
45	Nanoscale Assembly of High-Mobility Group AT-Hook 2 Protein with DNA Replication Fork. Biophysical Journal, 2017, 113, 2609-2620.	0.2	16
46	Human DDX3X Unwinds Japanese Encephalitis and Zika Viral 5â€² Terminal Regions. International Journal of Molecular Sciences, 2021, 22, 413.	1.8	15
47	Biodefense Implications of New-World Hantaviruses. Frontiers in Bioengineering and Biotechnology, 2020, 8, 925.	2.0	14
48	Microscale thermophoresis: warming up to a new biomolecular interaction technique. Biochemist, 2019, 41, 8-12.	0.2	13
49	The role of zyxin in regulation of malignancies. Heliyon, 2018, 4, e00695.	1.4	12
50	Nanoscale Structure Determination of Murray Valley Encephalitis and Powassan Virus Non-Coding RNAs. Viruses, 2020, 12, 190.	1.5	12
51	Bioinformatic Analysis of Structure and Function of LIM Domains of Human Zyxin Family Proteins. International Journal of Molecular Sciences, 2021, 22, 2647.	1.8	12
52	Inhibition of glycosylation on a camelid antibody uniquely affects its FcÎ³RI binding activity. European Journal of Pharmaceutical Sciences, 2017, 96, 428-439.	1.9	11
53	Examination of the Discrepancy between Size Estimates for Ovalbumin from Small-Angle X-ray Scattering and Other Physicochemical Measurements. Journal of Physical Chemistry B, 2011, 115, 10725-10729.	1.2	10
54	Regulation of Platelet Derived Growth Factor Signaling by Leukocyte Common Antigen-related (LAR) Protein Tyrosine Phosphatase: A Quantitative Phosphoproteomics Study. Molecular and Cellular Proteomics, 2016, 15, 1823-1836.	2.5	10

#	Article	IF	Citations
55	Comprehensive Analysis of Hepatitis B Virus Promoter Region Mutations. Viruses, 2018, 10, 603.	1.5	10
56	Molecular characterization of the RNA-protein complex directing â^'2/â^'1 programmed ribosomal frameshifting during arterivirus replicase expression. Journal of Biological Chemistry, 2020, 295, 17904-17921.	1.6	10
57	A potential for overestimating the absolute magnitudes of second virial coefficients by small-angle X-ray scattering. Analytical Biochemistry, 2013, 435, 159-165.	1.1	9
58	Allowance for radial dilution in evaluating the concentration dependence of sedimentation coefficients for globular proteins. European Biophysics Journal, 2018, 47, 291-295.	1.2	9
59	Absence of a catalytic water confers resistance to the neurotoxin gabaculine. FASEB Journal, 2010, 24, 404-414.	0.2	8
60	Biophysical analysis of a lethal laminin alpha-1 mutation reveals altered self-interaction. Matrix Biology, 2016, 49, 93-105.	1.5	8
61	Solution Structure of C. elegans UNC-6: A Nematode Paralogue of the Axon Guidance Protein Netrin-1. Biophysical Journal, 2019, 116, 2121-2130.	0.2	8
62	Crystal structure of the TreS:Pep2 complex, initiating Î±-glucan synthesis in the GlgE pathway of mycobacteria. Journal of Biological Chemistry, 2019, 294, 7348-7359.	1.6	8
63	Biophysical characterisation of human LincRNA-p21 sense and antisense Alu inverted repeats. Nucleic Acids Research, 2022, 50, 5881-5898.	6.5	8
64	Conformational Itinerary of Pseudomonas aeruginosa 1,6-Anhydro-N-acetylmuramic Acid Kinase during Its Catalytic Cycle. Journal of Biological Chemistry, 2014, 289, 4504-4514.	1.6	7
65	A Cholesterol Analog Induces an Oligomeric Reorganization of VDAC. Biophysical Journal, 2019, 116, 847-859.	0.2	7
66	Intrinsic disorder in the partitioning protein KorB persists after co-operative complex formation with operator DNA and KorA. Biochemical Journal, 2017, 474, 3121-3135.	1.7	6
67	Solution structure and oligomeric state of the E. coliglycerol facilitator. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183191.	1.4	6
68	Evidence for Self-Association of a Miniaturized Version of Agrin from Hydrodynamic and Small-Angle X-ray Scattering Measurements. Journal of Physical Chemistry B, 2011, 115, 11286-11293.	1.2	5
69	Analytical ultracentrifugation: still the gold standard that offers multiple solutions. European Biophysics Journal, 2020, 49, 673-676.	1.2	5
70	Reassessment of the size of the supermolecular state of Dishevelledâ€ƒ. Journal of Molecular Recognition, 2011, 24, 843-846.	1.1	4
71	Structural Studies of Macromolecules in Solution using Small Angle X-Ray Scattering. Journal of Visualized Experiments, 2018, , .	0.2	4
72	Analytical ultracentrifugation (AUC): a seminal tool offering multiple solutions. European Biophysics Journal, 2018, 47, 693-696.	1.2	4

#	Article	IF	Citations
73	Asparagine-84, a regulatory allosteric site residue, helps maintain the quaternary structure of Campylobacter jejuni dihydrodipicolinate synthase. Journal of Structural Biology, 2020, 209, 107409.	1.3	4
74	Structural and Hydrodynamic Characterization of Dimeric Human Oligoadenylate Synthetase 2. Biophysical Journal, 2020, 118, 2726-2740.	0.2	4
75	Application of novel analytical ultracentrifuge analysis to solutions of fungal mannans. European Biophysics Journal, 2017, 46, 235-245.	1.2	3
76	Analytical ultracentrifuge: an ideal tool for characterization of non-coding RNAs. European Biophysics Journal, 2020, 49, 809-818.	1.2	3
77	Non-coding RNAs in virology: an RNA genomics approach. Biotechnology and Genetic Engineering Reviews, 2018, 34, 90-106.	2.4	2
78	Use of molecular crowding for the detection of protein self-association by size-exclusion chromatography. Analytical Biochemistry, 2019, 584, 113392.	1.1	2
79	Canadian Science Meets Parliament: Building relationships between scientists and policymakers. Science and Public Policy, 2020, 47, 298-298.	1.2	2
80	The macromolecular state of Aâ€kinase anchoring protein. Journal of Molecular Recognition, 2012, 25, 11-14.	1.1	1
81	Interaction studies of a protein and carbohydrate system using an integrated approach: a case study of the miniagrinâ€“heparin system. European Biophysics Journal, 2018, 47, 751-759.	1.2	1
82	Canadian Science Meets Parliament: Building relationships between scientists and policymakers. Science and Public Policy, 2020, , .	1.2	1
83	Molecular mechanism of quorum sensing inhibition in Streptococcus by the phage protein paratox. Journal of Biological Chemistry, 2021, 297, 100992.	1.6	1
84	G-Quadruplex in hepatitis B virus. Biophysical Journal, 2022, 121, 66a.	0.2	1
85	Solution Conformation of Extracellular Matrix Proteins. Biophysical Journal, 2012, 102, 381a.	0.2	0
86	G4 Quadruplex Recognition in the Human DEAH-Box Helicase RHAU. Biophysical Journal, 2012, 102, 486a.	0.2	0
87	Mapping of Netrin-1 Binding to its Dependence Receptors. Biophysical Journal, 2014, 106, 478a-479a.	0.2	0
88	Studying Biomolecular Interactions: A Hybrid Approach. Biophysical Journal, 2017, 112, 485a.	0.2	0
89	Solution Structures of Wildtype and Deglycosylated Neuropilin 1. Biophysical Journal, 2018, 114, 404a.	0.2	0
90	Experimental determination of second virial coefficients by small-angle X-ray scattering: a problem revisited. European Biophysics Journal, 2019, 48, 781-787.	1.2	0

#	Article	IF	Citations
91	Towards Obtaining a Nanoscale Structure of Terminal Regions of japanese Encephalitis Virus Genome. Biophysical Journal, 2019, 116, 354a.	0.2	0
92	Biophysical Studies of Non-Coding RNAS. Biophysical Journal, 2020, 118, 222a.	0.2	0
93	Investigating Japanese encephalitis virus long-range terminal region interactions. Biophysical Journal, 2022, 121, 206a.	0.2	0
94	Investigating flaviviral genomic cyclization. Biophysical Journal, 2022, 121, 311a.	0.2	0