Thomas D Grant

List of Publications by Year in descending order

56 papers	2,312 citations	394421 19 h-index	345221 36 g-index
62 all docs	62 docs citations	62 times ranked	3520 citing authors

#	Article	IF	Citations
1	Co-flow injection for serial crystallography at X-ray free-electron lasers. Journal of Applied Crystallography, 2022, 55, 1-13.	4.5	12
2	Synchronous RNA conformational changes trigger ordered phase transitions in crystals. Nature Communications, 2021, 12, 1762.	12.8	17
3	Reply to: Limitations of the iterative electron density reconstruction algorithm from solution scattering data. Nature Methods, 2021, 18, 246-248.	19.0	5
4	Segmented flow generator for serial crystallography at the European X-ray free electron laser. Nature Communications, 2020, 11, 4511.	12.8	27
5	Crystallization of ApoA1 and ApoE4 Nanolipoprotein Particles and Initial XFEL-Based Structural Studies. Crystals, 2020, 10, 886.	2.2	6
6	AB Initio Electron Density Determination Directly from Solution Scattering Data. Biophysical Journal, 2020, 118, 487a.	0.5	0
7	XFEL and NMR Structures of Francisella Lipoprotein Reveal Conformational Space of Drug Target against Tularemia. Structure, 2020, 28, 540-547.e3.	3.3	8
8	Rhodopsin's Ultra-Fast Activation Dynamics in Bilayer and Micelle Environments. Biophysical Journal, 2020, 118, 92a.	0.5	0
9	Membrane Protein Dynamics Revealed by X-Ray Scattering with a Femtosecond Free-Electron Laser. Biophysical Journal, 2020, 118, 365a.	0.5	1
10	A fixed-target platform for serial femtosecond crystallography in a hydrated environment. IUCrJ, 2020, 7, 30-41.	2.2	21
11	Study of Ultra-Fast Rhodopsin Activation Dynamics with Molecular Dynamics Simulations. Biophysical Journal, 2019, 116, 205a.	0.5	0
12	Membrane protein megahertz crystallography at the European XFEL. Nature Communications, 2019, 10, 5021.	12.8	47
13	Structural basis of ligand recognition at the human MT1 melatonin receptor. Nature, 2019, 569, 284-288.	27.8	140
14	Snapshot of an oxygen intermediate in the catalytic reaction of cytochromecoxidase. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 3572-3577.	7.1	70
15	X-ray Emission Spectroscopy at X-ray Free Electron Lasers: Limits to Observation of the Classical Spectroscopic Response for Electronic Structure Analysis. Journal of Physical Chemistry Letters, 2019, 10, 441-446.	4.6	8
16	3D printed droplet generation devices for serial femtosecond crystallography enabled by surface coating. Journal of Applied Crystallography, 2019, 52, 997-1008.	4.5	19
17	Structural consequences of transforming growth factor beta-1 activation from near-therapeutic X-ray doses. Journal of Synchrotron Radiation, 2019, 26, 967-979.	2.4	10
18	Superposition of Macromolecular Electronâ€Ðensity Maps in Xâ€ray Solution Scattering (SAXS). FASEB Journal, 2019, 33, 779.27.	0.5	0

#	Article	IF	Citations
19	Structural studies on low-dose X-ray radiation induced transforming growth factor beta-1 (TGFÎ²-1) activation. Acta Crystallographica Section A: Foundations and Advances, 2019, 75, a82-a82.	0.1	0
20	Structural consequences on transforming growth factor beta-1 activation from near-therapeutic X-ray doses. Acta Crystallographica Section A: Foundations and Advances, 2019, 75, a233-a233.	0.1	0
21	Ab initio electron density determination directly from solution scattering data. Nature Methods, 2018, 15, 191-193.	19.0	169
22	Enzyme intermediates captured â€œon the flyâ€•by mix-and-inject serial crystallography. BMC Biology, 2018, 16, 59.	3.8	117
23	Biological Small Angle Scattering. , 2018, , .		7
24	Examples of Biological Small Angle Scattering. , 2018, , .		8
25	Solving the phase problem in solution scattering. Acta Crystallographica Section A: Foundations and Advances, 2018, 74, a158-a158.	0.1	0
26	Using X-ray free-electron laser to capture intermediate states. Acta Crystallographica Section A: Foundations and Advances, 2018, 74, a15-a15.	0.1	0
27	Developments on the Horizon. , 2018, , .		0
28	Examples of Data Collection and Processing. , 2018, , .		0
29	Making the Best Use of Beamtime. , 2018, , .		0
30	Instrumental and Experimental Considerations. , 2018, , .		0
31	Distinct Instrumental Approaches to SAXS. , 2018, , .		0
32	Shape Reconstructions from Small Angle Scattering Data. , 2018, , .		0
33	Before the Beamtime. , 2018, , .		0
34	Quantities Directly Measurable by Scattering. , 2018, , .		0
35	Pushing the Envelope. , 2018, , .		1
36	Structural enzymology using X-ray free electron lasers. Structural Dynamics, 2017, 4, 044003.	2.3	92

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37	FRET, SAXS and Molecular Simulations Resolve the Solution Structures of Three Coexisting Conformers of Flexible RNA Four-Way Junction. Biophysical Journal, 2017, 112, 367a.	0.5	0
38	Structure of the full-length glucagon class B G-protein-coupled receptor. Nature, 2017, 546, 259-264.	27.8	179
39	Crystal structure of CO-bound cytochrome c oxidase determined by serial femtosecond X-ray crystallography at room temperature. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 8011-8016.	7.1	51
40	Structures of riboswitch RNA reaction states by mix-and-inject XFEL serial crystallography. Nature, 2017, 541, 242-246.	27.8	251
41	Femtosecond structural dynamics drives the trans/cis isomerization in photoactive yellow protein. Science, 2016, 352, 725-729.	12.6	348
42	Structural and Functional Characterization of Aerobactin Synthetase IucA from a Hypervirulent Pathotype of Klebsiella pneumoniae. Biochemistry, 2016, 55, 3559-3570.	2.5	21
43	Serial femtosecond X-ray diffraction of enveloped virus microcrystals. Structural Dynamics, 2015, 2, 041720.	2.3	11
44	Microfluidic sorting of protein nanocrystals by size for X-ray free-electron laser diffraction. Structural Dynamics, 2015, 2, 041719.	2.3	24
45	Towards a generalised approach for the time-resolved crystallographic study of enzymes. Acta Crystallographica Section A: Foundations and Advances, 2015, 71, s25-s25.	0.1	0
46	The accurate assessment of small-angle X-ray scattering data. Acta Crystallographica Section D: Biological Crystallography, 2015, 71, 45-56.	2.5	34
47	A hybrid NMR/SAXSâ€based approach for discriminating oligomeric protein interfaces using <scp>R</scp>osetta. Proteins: Structure, Function and Bioinformatics, 2015, 83, 309-317.	2.6	33
48	The Structure of the PanD/PanZ Protein Complex Reveals Negative Feedback Regulation of Pantothenate Biosynthesis by Coenzyme A. Chemistry and Biology, 2015, 22, 492-503.	6.0	30
49	Time-resolved serial crystallography captures high-resolution intermediates of photoactive yellow protein. Science, 2014, 346, 1242-1246.	12.6	418
50	A new view on crystal harvesting. Journal of Applied Crystallography, 2014, 47, 1158-1161.	4.5	2
51	Comparing Chemistry to Outcome: The Development of a Chemical Distance Metric, Coupled with Clustering and Hierarchal Visualization Applied to Macromolecular Crystallography. PLoS ONE, 2014, 9, e100782.	2.5	14
52	Chemical clustering and visualization applied to macromolecular crystallography. Acta Crystallographica Section A: Foundations and Advances, 2014, 70, C1145-C1145.	0.1	0
53	The Structure of Yeast Glutaminyl-tRNA Synthetase and Modeling of Its Interaction with tRNA. Journal of Molecular Biology, 2013, 425, 2480-2493.	4.2	13
54	Purification and SAXS Analysis of the Integrin Linked Kinase, PINCH, Parvin (IPP) Heterotrimeric Complex. PLoS ONE, 2013, 8, e55591.	2.5	12

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55	Structural conservation of an ancient tRNA sensor in eukaryotic glutaminyl-tRNA synthetase. Nucleic Acids Research, 2012, 40, 3723-3731.	14.5	14
56	Small angle Xâ€ray scattering as a complementary tool for highâ€throughput structural studies. Biopolymers, 2011, 95, 517-530.	2.4	69