Dimitri Y Chirgadze

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2366749/publications.pdf

Version: 2024-02-01

67 papers 4,042 citations

33 h-index 61 g-index

72 all docs 72 docs citations

times ranked

72

5823 citing authors

| # | Article | IF | CITATIONS |
|----------------|---|----------------------------|-----------------------|
| 1 | Structural basis for the interaction of <scp>SARSâ€CoV</scp> â€2 virulence factor nsp1 with <scp>DNA</scp> polymerase α–primase. Protein Science, 2022, 31, 333-344. | 7.6 | 23 |
| 2 | Structural insights into inhibitor regulation of the DNA repair protein DNA-PKcs. Nature, 2022, 601, 643-648. | 27.8 | 36 |
| 3 | Mechanisms of inhibition and activation of extrasynaptic $\hat{l}\pm\hat{l}^2$ GABAA receptors. Nature, 2022, 602, 529-533. | 27.8 | 31 |
| 4 | Cryo-EM structures of staphylococcal IsdB bound to human hemoglobin reveal the process of heme extraction. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2116708119. | 7.1 | 6 |
| 5 | Differential assembly diversifies GABAA receptor structures and signalling. Nature, 2022, 604, 190-194. | 27.8 | 36 |
| 6 | The structure of EXTL3 helps to explain the different roles of bi-domain exostosins in heparan sulfate synthesis. Nature Communications, $2022,13,.$ | 12.8 | 14 |
| 7 | Dimers of DNA-PK create a stage for DNA double-strand break repair. Nature Structural and Molecular Biology, 2021, 28, 13-19. | 8.2 | 67 |
| 8 | Cryo-EM of NHEJ supercomplexes provides insights into DNA repair. Molecular Cell, 2021, 81, 3400-3409.e3. | 9.7 | 62 |
| 9 | Using cryo-EM to understand antimycobacterial resistance in the catalase-peroxidase (KatG) from Mycobacterium tuberculosis. Structure, 2021, 29, 899-912.e4. | 3.3 | 13 |
| 10 | Single-particle cryo-EM at atomic resolution. Nature, 2020, 587, 152-156. | 27.8 | 572 |
| 11 | | | |
| | CryoEM structures of human CMG–ATPγS–DNA and CMG–AND-1 complexes. Nucleic Acids Research, 2020, 48, 6980-6995. | 14.5 | 56 |
| 12 | CryoEM structures of human CMG–ATPγS–DNA and CMG–AND-1 complexes. Nucleic Acids Research, 2020, 48, 6980-6995. The Influence of Pathogenic Mutations in α-Synuclein on Biophysical and Structural Characteristics of Amyloid Fibrils. ACS Nano, 2020, 14, 5213-5222. | 14.5 | 56 |
| 12 | 2020, 48, 6980-6995. The Influence of Pathogenic Mutations in α-Synuclein on Biophysical and Structural Characteristics of | | |
| | 2020, 48, 6980-6995. The Influence of Pathogenic Mutations in α-Synuclein on Biophysical and Structural Characteristics of Amyloid Fibrils. ACS Nano, 2020, 14, 5213-5222. Understanding the structure and role of DNA-PK in NHEJ: How X-ray diffraction and cryo-EM | 14.6 | 58 |
| 13 | 2020, 48, 6980-6995. The Influence of Pathogenic Mutations in α-Synuclein on Biophysical and Structural Characteristics of Amyloid Fibrils. ACS Nano, 2020, 14, 5213-5222. Understanding the structure and role of DNA-PK in NHEJ: How X-ray diffraction and cryo-EM contribute in complementary ways. Progress in Biophysics and Molecular Biology, 2019, 147, 26-32. Gluconeogenic precursor availability regulates flux through the glyoxylate shunt in Pseudomonas | 14.6 2.9 | 58 15 |
| 13 | The Influence of Pathogenic Mutations in α-Synuclein on Biophysical and Structural Characteristics of Amyloid Fibrils. ACS Nano, 2020, 14, 5213-5222. Understanding the structure and role of DNA-PK in NHEJ: How X-ray diffraction and cryo-EM contribute in complementary ways. Progress in Biophysics and Molecular Biology, 2019, 147, 26-32. Gluconeogenic precursor availability regulates flux through the glyoxylate shunt in Pseudomonas aeruginosa. Journal of Biological Chemistry, 2018, 293, 14260-14269. DNA-PKcs structure suggests an allosteric mechanism modulating DNA double-strand break repair. | 14.6 2.9 3.4 | 58 15 43 |
| 13 14 15 | The Influence of Pathogenic Mutations in α-Synuclein on Biophysical and Structural Characteristics of Amyloid Fibrils. ACS Nano, 2020, 14, 5213-5222. Understanding the structure and role of DNA-PK in NHEJ: How X-ray diffraction and cryo-EM contribute in complementary ways. Progress in Biophysics and Molecular Biology, 2019, 147, 26-32. Gluconeogenic precursor availability regulates flux through the glyoxylate shunt in Pseudomonas aeruginosa. Journal of Biological Chemistry, 2018, 293, 14260-14269. DNA-PKcs structure suggests an allosteric mechanism modulating DNA double-strand break repair. Science, 2017, 355, 520-524. | 14.6 2.9 3.4 12.6 | 58 15 43 155 |

| # | Article | IF | Citations |
|----|--|------|-----------|
| 19 | DNA-PKcs, Allostery, and DNA Double-Strand Break Repair. Methods in Enzymology, 2017, 592, 145-157. | 1.0 | 5 |
| 20 | Structural basis for collagen recognition by the immune receptor OSCAR. Blood, 2016, 127, 529-537. | 1.4 | 45 |
| 21 | The crystal structure of <i>Clostridium perfringens</i> SleM, a muramidase involved in cortical hydrolysis during spore germination. Proteins: Structure, Function and Bioinformatics, 2016, 84, 1681-1689. | 2.6 | 7 |
| 22 | Structural and functional analysis of SleL, a peptidoglycan lysin involved in germination of B acillus spores. Proteins: Structure, Function and Bioinformatics, 2015, 83, 1787-1799. | 2.6 | 12 |
| 23 | Structure of a Single-Chain Fv Bound to the 17 N-Terminal Residues of Huntingtin Provides Insights into Pathogenic Amyloid Formation and Suppression. Journal of Molecular Biology, 2015, 427, 2166-2178. | 4.2 | 21 |
| 24 | Achieving high signal-to-noise in cell regulatory systems: Spatial organization of multiprotein transmembrane assemblies of FGFR and MET receptors. Progress in Biophysics and Molecular Biology, 2015, 118, 103-111. | 2.9 | 21 |
| 25 | A new look at sodium channel \hat{l}^2 subunits. Open Biology, 2015, 5, 140192. | 3.6 | 111 |
| 26 | Crystal structure of the PepSY-containing domain of the YpeB protein involved in germination of <i>bacillus</i> spores. Proteins: Structure, Function and Bioinformatics, 2015, 83, 1914-1921. | 2.6 | 7 |
| 27 | 5-Formylcytosine alters the structure of the DNA double helix. Nature Structural and Molecular Biology, 2015, 22, 44-49. | 8.2 | 140 |
| 28 | Asymmetry in the Multiprotein Systems of Molecular Biology. , 2015, , 231-237. | | 2 |
| 29 | Expanding the Solvent Chemical Space for Self-Assembly of Dipeptide Nanostructures. ACS Nano, 2014, 8, 1243-1253. | 14.6 | 146 |
| 30 | Crystal Structure and Molecular Imaging of the Nav Channel \hat{l}^2 3 Subunit Indicates a Trimeric Assembly. Journal of Biological Chemistry, 2014, 289, 10797-10811. | 3.4 | 67 |
| 31 | A Nanobody Binding to Non-Amyloidogenic Regions of the Protein Human Lysozyme Enhances Partial Unfolding but Inhibits Amyloid Fibril Formation. Journal of Physical Chemistry B, 2013, 117, 13245-13258. | 2.6 | 42 |
| 32 | Structural and functional insights into the role of the N-terminal Mps1 TPR domain in the SAC (spindle assembly checkpoint). Biochemical Journal, 2012, 448, 321-328. | 3.7 | 19 |
| 33 | Crystal structure of folliculin reveals a hidDENN function in genetically inherited renal cancer. Open Biology, 2012, 2, 120071. | 3.6 | 97 |
| 34 | Spatial and temporal organization of multi-protein assemblies: achieving sensitive control in information-rich cell-regulatory systems. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2012, 370, 3023-3039. | 3.4 | 28 |
| 35 | Structural Insights into the Role of Domain Flexibility in Human DNA Ligase IV. Structure, 2012, 20, 1212-1222. | 3.3 | 44 |
| 36 | Spatial and Temporal Organisation of Multiprotein Systems of Cell Regulation and Signalling: What Can We Learn from NHEJ System of Double-Strand Break Repair?. NATO Science for Peace and Security Series A: Chemistry and Biology, 2012, , 1-31. | 0.5 | 1 |

| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 37 | Non-homologous end-joining partners in a helical dance: structural studies of XLF–XRCC4 interactions. Biochemical Society Transactions, 2011, 39, 1387-1392. | 3.4 | 65 |
| 38 | Structure of a Blinkin-BUBR1 Complex Reveals an Interaction Crucial for Kinetochore-Mitotic Checkpoint Regulation via an Unanticipated Binding Site. Structure, 2011, 19, 1691-1700. | 3.3 | 68 |
| 39 | Crystal structure of DNA-PKcs reveals a large open-ring cradle comprised of HEAT repeats. Nature, 2010, 463, 118-121. | 27.8 | 195 |
| 40 | Nanostructured films from hierarchical self-assembly of amyloidogenic proteins. Nature Nanotechnology, 2010, 5, 204-207. | 31.5 | 338 |
| 41 | Structural Biology of DNA Repair: Spatial Organisation of the Multicomponent Complexes of Nonhomologous End Joining. Journal of Nucleic Acids, 2010, 2010, 1-19. | 1.2 | 24 |
| 42 | Structural Basis for the Activity and Substrate Specificity of Fluoroacetyl-CoA Thioesterase FlK. Journal of Biological Chemistry, 2010, 285, 22495-22504. | 3.4 | 24 |
| 43 | Thyroid stimulating autoantibody M22 mimics TSH binding to the TSH receptor leucine rich domain: a comparative structural study of protein–protein interactions. Journal of Molecular Endocrinology, 2009, 42, 381-395. | 2.5 | 33 |
| 44 | The Crystal Structure of the N-Terminal Region of BUB1 Provides Insight into the Mechanism of BUB1 Recruitment to Kinetochores. Structure, 2009, 17, 105-116. | 3.3 | 45 |
| 45 | The effect of protein–precipitant interfaces and applied shear on the nucleation and growth of lysozyme crystals. Acta Crystallographica Section D: Biological Crystallography, 2009, 65, 1127-1139. | 2.5 | 7 |
| 46 | Inhibition of <i>Mycobacterium tuberculosis</i> Pantothenate Synthetase by Analogues of the Reaction Intermediate. ChemBioChem, 2008, 9, 2606-2611. | 2.6 | 56 |
| 47 | Crystal structure of human XLF/Cernunnos reveals unexpected differences from XRCC4 with implications for NHEJ. EMBO Journal, 2008, 27, 290-300. | 7.8 | 106 |
| 48 | FSH and TSH binding to their respective receptors: similarities, differences and implication for glycoprotein hormone specificity. Journal of Molecular Endocrinology, 2008, 41, 145-164. | 2.5 | 27 |
| 49 | Crystal Structure of Escherichia coli Ketopantoate Reductase in a Ternary Complex with NADP+ and Pantoate Bound. Journal of Biological Chemistry, 2007, 282, 8487-8497. | 3.4 | 39 |
| 50 | Crystal Structure of the TSH Receptor in Complex with a Thyroid-Stimulating Autoantibody. Thyroid, 2007, 17, 395-410. | 4.5 | 205 |
| 51 | Nucleophile Selectivity of Chorismate-Utilizing Enzymes. ChemBioChem, 2007, 8, 622-624. | 2.6 | 8 |
| 52 | Structure of an Xrcc4–DNA ligase IV yeast ortholog complex reveals a novel BRCT interaction mode. DNA Repair, 2006, 5, 362-368. | 2.8 | 60 |
| 53 | Crystal Structures of Yersinia enterocolitica Salicylate Synthase and its Complex with the Reaction Products Salicylate and Pyruvate. Journal of Molecular Biology, 2006, 357, 524-534. | 4.2 | 45 |
| 54 | Crystal structures of the PLP- and PMP-bound forms of BtrR, a dual functional aminotransferase involved in butirosin biosynthesis. Proteins: Structure, Function and Bioinformatics, 2006, 65, 220-230. | 2.6 | 19 |

| # | Article | IF | CITATION |
|----|---|-----|----------|
| 55 | Knowledge-Based Real-Space Explorations for Low-Resolution Structure Determination. Structure, 2006, 14, 1313-1320. | 3.3 | 27 |
| 56 | High-resolution crystal structure of the human Notch 1 ankyrin domain. Biochemical Journal, 2005, 392, 13-20. | 3.7 | 51 |
| 57 | Crystal structure of the β-chain of human hepatocyte growth factor-like/macrophage stimulating protein. FEBS Journal, 2005, 272, 5799-5807. | 4.7 | 23 |
| 58 | Characteristics of a Monoclonal Antibody to the Thyrotropin Receptor that Acts as a Powerful Thyroid-Stimulating Autoantibody Antagonist. Thyroid, 2005, 15, 672-682. | 4.5 | 44 |
| 59 | Characteristics of a Human Monoclonal Autoantibody to the Thyrotropin Receptor: Sequence Structure and Function. Thyroid, 2004, 14, 560-570. | 4.5 | 92 |
| 60 | Snapshot of Protein Structure Evolution Reveals Conservation of Functional Dimerization through Intertwined Folding. Structure, 2004, 12, 1489-1494. | 3.3 | 15 |
| 61 | Structural constraints on protein self-processing in L-aspartate-Â-decarboxylase. EMBO Journal, 2003, 22, 6193-6204. | 7.8 | 56 |
| 62 | Molecular Dissection of the Interaction between the Small G Proteins Rac1 and RhoA and Protein Kinase C-related Kinase 1 (PRK1). Journal of Biological Chemistry, 2003, 278, 50578-50587. | 3.4 | 49 |
| 63 | A New Crystal Form of the NK1 Splice Variant of HGF/SF Demonstrates Extensive Hinge Movement and Suggests That the NK1 Dimer Originates by Domain Swapping. Journal of Molecular Biology, 2002, 319, 283-288. | 4.2 | 22 |
| 64 | Asymmetry in the Multiprotein Systems of Molecular Biology. Structural Chemistry, 2002, 13, 405-412. | 2.0 | 13 |
| 65 | Crystal structures of NK1-heparin complexes reveal the basis for NK1 activity and enable engineering of potent agonists of the MET receptor. EMBO Journal, 2001, 20, 5543-5555. | 7.8 | 107 |
| 66 | Crystal structure of the NK1 fragment of HGF/SF suggests a novel mode for growth factor dimerization and receptor binding. Nature Structural Biology, 1999, 6, 72-79. | 9.7 | 110 |
| 67 | Insights into the structure of hepatocyte growth factor/scatter factor (HGF/SF) and implications for receptor activation, FFRS Letters, 1998, 430, 126-129 | 2.8 | 29 |