

Paul D. Adams

List of Publications by Year in descending order

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Version: 2024-02-01

351
papers

100,900
citations

4658

85
h-index

261

299
g-index

361
all docs

361
docs citations

361
times ranked

71257
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Integration of software tools for integrative modeling of biomolecular systems. <i>Journal of Structural Biology</i> , 2022, 214, 107841. | 2.8 | 7 |
| 2 | Modular automated bottom-up proteomic sample preparation for high-throughput applications. <i>PLoS ONE</i> , 2022, 17, e0264467. | 2.5 | 3 |
| 3 | A Synthetic Gene Library Yields a Previously Unknown Glycoside Phosphorylase That Degrades and Assembles Poly- β -1,3-GlcNAc, Completing the Suite of β -Linked GlcNAc Polysaccharides. <i>ACS Central Science</i> , 2022, 8, 430-440. | 11.3 | 7 |
| 4 | O/N-Specificity in Glycosyltransferase Catalysis: From Mechanistic Understanding to Engineering. <i>ACS Catalysis</i> , 2021, 11, 1810-1815. | 11.2 | 42 |
| 5 | Cryo-EM model validation recommendations based on outcomes of the 2019 EMDataResource challenge. <i>Nature Methods</i> , 2021, 18, 156-164. | 19.0 | 73 |
| 6 | Protein identification from electron cryomicroscopy maps by automated model building and side-chain matching. <i>Acta Crystallographica Section D: Structural Biology</i> , 2021, 77, 457-462. | 2.3 | 9 |
| 7 | Mechanism Across Scales: A Holistic Modeling Framework Integrating Laboratory and Field Studies for Microbial Ecology. <i>Frontiers in Microbiology</i> , 2021, 12, 642422. | 3.5 | 12 |
| 8 | Efficient production of oxidized terpenoids via engineering fusion proteins of terpene synthase and cytochrome P450. <i>Metabolic Engineering</i> , 2021, 64, 41-51. | 7.0 | 33 |
| 9 | Engineering <i>Saccharomyces cerevisiae</i> for isoprenol production. <i>Metabolic Engineering</i> , 2021, 64, 154-166. | 7.0 | 34 |
| 10 | Experimental and theoretical insights into the effects of pH on catalysis of bond-cleavage by the lignin peroxidase isozyme H8 from <i>Phanerochaete chrysosporium</i> . <i>Biotechnology for Biofuels</i> , 2021, 14, 108. | 6.2 | 10 |
| 11 | A multiplexed nanostructure-initiator mass spectrometry (NIMS) assay for simultaneously detecting glycosyl hydrolase and lignin modifying enzyme activities. <i>Scientific Reports</i> , 2021, 11, 11803. | 3.3 | 7 |
| 12 | Reply to Wang et al.: Clear evidence of binding of Ox to the oxygen-evolving complex of photosystem II is best observed in the omit map. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, e2102342118. | 7.1 | 7 |
| 13 | Accurate prediction of protein structures and interactions using a three-track neural network. <i>Science</i> , 2021, 373, 871-876. | 12.6 | 2,843 |
| 14 | Macromolecular refinement of X-ray and cryoelectron microscopy structures with Phenix/OPLS3e for improved structure and ligand quality. <i>Structure</i> , 2021, 29, 913-921.e4. | 3.3 | 29 |
| 15 | CERES: a cryo-EM re-refinement system for continuous improvement of deposited models. <i>Acta Crystallographica Section D: Structural Biology</i> , 2021, 77, 48-61. | 2.3 | 14 |
| 16 | Structural dynamics in the water and proton channels of photosystem II during the S2 to S3 transition. <i>Nature Communications</i> , 2021, 12, 6531. | 12.8 | 73 |
| 17 | Cryo-EM map interpretation and protein model building using iterative map segmentation. <i>Protein Science</i> , 2020, 29, 87-99. | 7.6 | 27 |
| 18 | Structural Mechanism of Regioselectivity in an Unusual Bacterial Acyl-CoA Dehydrogenase. <i>Journal of the American Chemical Society</i> , 2020, 142, 835-846. | 13.7 | 9 |

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|----|--|------|-----------|
| 19 | Characterization of a Metal-Resistant <i>Bacillus</i> Strain With a High Molybdate Affinity ModA From Contaminated Sediments at the Oak Ridge Reservation. <i>Frontiers in Microbiology</i> , 2020, 11, 587127. | 3.5 | 11 |
| 20 | Novel bacterial clade reveals origin of form I Rubisco. <i>Nature Plants</i> , 2020, 6, 1158-1166. | 9.3 | 46 |
| 21 | Improvement of cryo-EM maps by density modification. <i>Nature Methods</i> , 2020, 17, 923-927. | 19.0 | 243 |
| 22 | Draft Genome Sequence of <i>Bacillus</i> sp. Strain EB106-08-02-XG196, Isolated from High-Nitrate-Contaminated Sediment. <i>Microbiology Resource Announcements</i> , 2020, 9, . | 0.6 | 0 |
| 23 | A Global Ramachandran Score Identifies Protein Structures with Unlikely Stereochemistry. <i>Structure</i> , 2020, 28, 1249-1258.e2. | 3.3 | 86 |
| 24 | Implementation of the riding hydrogen model in CCTBX to support the next generation of X-ray and neutron joint refinement in Phenix. <i>Methods in Enzymology</i> , 2020, 634, 177-199. | 1.0 | 8 |
| 25 | An iron (II) dependent oxygenase performs the last missing step of plant lysine catabolism. <i>Nature Communications</i> , 2020, 11, 2931. | 12.8 | 11 |
| 26 | Response of <i>Pseudomonas putida</i> to Complex, Aromatic-Rich Fractions from Biomass. <i>ChemSusChem</i> , 2020, 13, 4455-4467. | 6.8 | 23 |
| 27 | What are the current limits on determination of protonation state using neutron macromolecular crystallography?. <i>Methods in Enzymology</i> , 2020, 634, 225-255. | 1.0 | 0 |
| 28 | Structure and Function of BorB, the Type II Thioesterase from the Borrelidin Biosynthetic Gene Cluster. <i>Biochemistry</i> , 2020, 59, 1630-1639. | 2.5 | 10 |
| 29 | Untangling the sequence of events during the S ₂ → S ₃ transition in photosystem II and implications for the water oxidation mechanism. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 12624-12635. | 7.1 | 149 |
| 30 | Improved chemistry restraints for crystallographic refinement by integrating the Amber force field into <i>Phenix</i> . <i>Acta Crystallographica Section D: Structural Biology</i> , 2020, 76, 51-62. | 2.3 | 29 |
| 31 | Density modification of cryo-EM maps. <i>Acta Crystallographica Section D: Structural Biology</i> , 2020, 76, 912-925. | 2.3 | 28 |
| 32 | Arginine off-kilter: guanidinium is not as planar as restraints denote. <i>Acta Crystallographica Section D: Structural Biology</i> , 2020, 76, 1159-1166. | 2.3 | 7 |
| 33 | Cryo_fit: Democratization of flexible fitting for cryo-EM. <i>Journal of Structural Biology</i> , 2019, 208, 1-6. | 2.8 | 30 |
| 34 | Automated Cells-To-Peptides Sample Preparation Workflow for High-Throughput, Quantitative Proteomic Assays of Microbes. <i>Journal of Proteome Research</i> , 2019, 18, 3752-3761. | 3.7 | 32 |
| 35 | Optimization of the IPP-bypass mevalonate pathway and fed-batch fermentation for the production of isoprenol in <i>Escherichia coli</i> . <i>Metabolic Engineering</i> , 2019, 56, 85-96. | 7.0 | 46 |
| 36 | Structural insights into dehydratase substrate selection for the borrelidin and fluvirucin polyketide synthases. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2019, 46, 1225-1235. | 3.0 | 7 |

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|----|--|-----|-----------|
| 37 | Massively Parallel Fitness Profiling Reveals Multiple Novel Enzymes in <i>Pseudomonas putida</i> Lysine Metabolism. MBio, 2019, 10, . | 4.1 | 60 |
| 38 | Methyl ketone production by <i>Pseudomonas putida</i> is enhanced by plant-derived amino acids. Biotechnology and Bioengineering, 2019, 116, 1909-1922. | 3.3 | 29 |
| 39 | A rapid methods development workflow for high-throughput quantitative proteomic applications. PLoS ONE, 2019, 14, e0211582. | 2.5 | 17 |
| 40 | Announcing mandatory submission of PDBx/mmCIF format files for crystallographic depositions to the Protein Data Bank (PDB). Acta Crystallographica Section D: Structural Biology, 2019, 75, 451-454. | 2.3 | 46 |
| 41 | Iron- and aluminium-induced depletion of molybdenum in acidic environments impedes the nitrogen cycle. Environmental Microbiology, 2019, 21, 152-163. | 3.8 | 22 |
| 42 | Iron-sulfur clusters have no right angles. Acta Crystallographica Section D: Structural Biology, 2019, 75, 16-20. | 2.3 | 16 |
| 43 | Macromolecular structure determination using X-rays, neutrons and electrons: recent developments in <i>Phenix</i> . Acta Crystallographica Section D: Structural Biology, 2019, 75, 861-877. | 2.3 | 4,060 |
| 44 | Updated validation and deposition tools in the <i>Phenix</i> GUI. Acta Crystallographica Section A: Foundations and Advances, 2019, 75, a339-a339. | 0.1 | 0 |
| 45 | Developing a shared computing and networking infrastructure for the ALS-ENABLE structural biology program at the Advanced Light Source. Acta Crystallographica Section A: Foundations and Advances, 2019, 75, a248-a248. | 0.1 | 0 |
| 46 | Efficient real-space refinement for cryo-EM and crystallography. Acta Crystallographica Section A: Foundations and Advances, 2019, 75, e86-e86. | 0.1 | 0 |
| 47 | Microbial Functional Gene Diversity Predicts Groundwater Contamination and Ecosystem Functioning. MBio, 2018, 9, . | 4.1 | 57 |
| 48 | Integrated analysis of isopentenyl pyrophosphate (IPP) toxicity in isoprenoid-producing <i>Escherichia coli</i> . Metabolic Engineering, 2018, 47, 60-72. | 7.0 | 106 |
| 49 | Toward industrial production of isoprenoids in <i>Escherichia coli</i> : Lessons learned from CRISPR-Cas9 based optimization of a chromosomally integrated mevalonate pathway. Biotechnology and Bioengineering, 2018, 115, 1000-1013. | 3.3 | 39 |
| 50 | Employing a biochemical protecting group for a sustainable indigo dyeing strategy. Nature Chemical Biology, 2018, 14, 256-261. | 8.0 | 143 |
| 51 | <i>DiSCaMB</i> : a software library for aspherical atom model X-ray scattering factor calculations with CPUs and GPUs. Journal of Applied Crystallography, 2018, 51, 193-199. | 4.5 | 24 |
| 52 | Discovery of enzymes for toluene synthesis from anoxic microbial communities. Nature Chemical Biology, 2018, 14, 451-457. | 8.0 | 47 |
| 53 | Interactive comparison and remediation of collections of macromolecular structures. Protein Science, 2018, 27, 182-194. | 7.6 | 13 |
| 54 | MolProbity: More and better reference data for improved all-atom structure validation. Protein Science, 2018, 27, 293-315. | 7.6 | 2,776 |

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|----|--|------|-----------|
| 55 | A bacterial pioneer produces cellulase complexes that persist through community succession. <i>Nature Microbiology</i> , 2018, 3, 99-107. | 13.3 | 38 |
| 56 | Structures of the intermediates of Kokâ€™s photosynthetic water oxidation clock. <i>Nature</i> , 2018, 563, 421-425. | 27.8 | 386 |
| 57 | Distribution of evaluation scores for the models submitted to the second cryo-EM model challenge. <i>Data in Brief</i> , 2018, 20, 1629-1638. | 1.0 | 5 |
| 58 | Rapid characterization of the activities of lignin-modifying enzymes based on nanostructure-initiator mass spectrometry (NIMS). <i>Biotechnology for Biofuels</i> , 2018, 11, 266. | 6.2 | 14 |
| 59 | Renewable production of high density jet fuel precursor sesquiterpenes from <i>Escherichia coli</i> . <i>Biotechnology for Biofuels</i> , 2018, 11, 285. | 6.2 | 43 |
| 60 | Engineering glycoside hydrolase stability by the introduction of zinc binding. <i>Acta Crystallographica Section D: Structural Biology</i> , 2018, 74, 702-710. | 2.3 | 1 |
| 61 | A fully automatic method yielding initial models from high-resolution cryo-electron microscopy maps. <i>Nature Methods</i> , 2018, 15, 905-908. | 19.0 | 137 |
| 62 | Jungle Express is a versatile repressor system for tight transcriptional control. <i>Nature Communications</i> , 2018, 9, 3617. | 12.8 | 33 |
| 63 | Automated flow-based/digital microfluidic platform integrated with onsite electroporation process for multiplex genetic engineering applications. , 2018, , . | | 5 |
| 64 | Map segmentation, automated model-building and their application to the Cryo-EM Model Challenge. <i>Journal of Structural Biology</i> , 2018, 204, 338-343. | 2.8 | 6 |
| 65 | Evaluation system and web infrastructure for the second cryo-EM model challenge. <i>Journal of Structural Biology</i> , 2018, 204, 96-108. | 2.8 | 11 |
| 66 | From deep TLS validation to ensembles of atomic models built from elemental motions. II. Analysis of TLS refinement results by explicit interpretation. <i>Acta Crystallographica Section D: Structural Biology</i> , 2018, 74, 621-631. | 2.3 | 7 |
| 67 | Improved chemistry restraints for crystallographic refinement by integrating Amber molecular mechanics in Phenix. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2018, 74, a145-a145. | 0.1 | 2 |
| 68 | Evaluation of models determined by neutron diffraction and proposed improvements to their validation and deposition. <i>Acta Crystallographica Section D: Structural Biology</i> , 2018, 74, 800-813. | 2.3 | 15 |
| 69 | Automated map sharpening by maximization of detail and connectivity. <i>Acta Crystallographica Section D: Structural Biology</i> , 2018, 74, 545-559. | 2.3 | 218 |
| 70 | Real-space refinement in PHENIX for cryo-EM and crystallography. <i>Acta Crystallographica Section D: Structural Biology</i> , 2018, 74, 531-544. | 2.3 | 2,065 |
| 71 | New tools for the analysis and validation of cryo-EM maps and atomic models. <i>Acta Crystallographica Section D: Structural Biology</i> , 2018, 74, 814-840. | 2.3 | 575 |
| 72 | Polder maps: improving OMIT maps for ligand building and validation. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2018, 74, a308-a308. | 0.1 | 0 |

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|----|--|------|-----------|
| 73 | The collaborative crystallography program at the Advanced Light Source. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2018, 74, a431-a431. | 0.1 | 0 |
| 74 | High-throughput protein-ligand complex structure solution with Phenix. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2018, 74, a445-a445. | 0.1 | 0 |
| 75 | Self-assembled gold nanoparticle film for nanostructure-initiator mass spectrometry with passive on-line salt fractionation. , 2017, , . | | 0 |
| 76 | Parallel microarraying of microfluidic droplets for high-throughput integration with matrix-assisted laser desorption ionization mass spectrometry. , 2017, , . | | 0 |
| 77 | Accurate model annotation of a near-atomic resolution cryo-EM map. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 3103-3108. | 7.1 | 111 |
| 78 | Structure of the human TRiC/CCT Subunit 5 associated with hereditary sensory neuropathy. <i>Scientific Reports</i> , 2017, 7, 3673. | 3.3 | 31 |
| 79 | Structure of aryl O-demethylase offers molecular insight into a catalytic tyrosine-dependent mechanism. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E3205-E3214. | 7.1 | 24 |
| 80 | Production of jet fuel precursor monoterpenoids from engineered <i>Escherichia coli</i> . <i>Biotechnology and Bioengineering</i> , 2017, 114, 1703-1712. | 3.3 | 81 |
| 81 | On-chip integration of droplet microfluidics and nanostructure-initiator mass spectrometry for enzyme screening. <i>Lab on A Chip</i> , 2017, 17, 323-331. | 6.0 | 44 |
| 82 | The Experiment Data Depot: A Web-Based Software Tool for Biological Experimental Data Storage, Sharing, and Visualization. <i>ACS Synthetic Biology</i> , 2017, 6, 2248-2259. | 3.8 | 45 |
| 83 | The cryo-electron microscopy structure of human transcription factor IIH. <i>Nature</i> , 2017, 549, 414-417. | 27.8 | 89 |
| 84 | Comprehensive <i>in Vitro</i> Analysis of Acyltransferase Domain Exchanges in Modular Polyketide Synthases and Its Application for Short-Chain Ketone Production. <i>ACS Synthetic Biology</i> , 2017, 6, 139-147. | 3.8 | 100 |
| 85 | Polder maps: improving OMIT maps for ligand building and validation. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2017, 73, C48-C48. | 0.1 | 0 |
| 86 | Polder maps: improving OMIT maps by excluding bulk solvent. <i>Acta Crystallographica Section D: Structural Biology</i> , 2017, 73, 148-157. | 2.3 | 500 |
| 87 | Reply to Kiser: Dioxygen binding in NOV1 crystal structures. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E6029-E6030. | 7.1 | 4 |
| 88 | Plant cell wall glycosyltransferases: High-throughput recombinant expression screening and general requirements for these challenging enzymes. <i>PLoS ONE</i> , 2017, 12, e0177591. | 2.5 | 21 |
| 89 | Expression of naturally ionic liquid-tolerant thermophilic cellulases in <i>Aspergillus niger</i> . <i>PLoS ONE</i> , 2017, 12, e0189604. | 2.5 | 13 |
| 90 | X-ray diffraction analysis and <i>in vitro</i> characterization of the UAM2 protein from <i>Oryza sativa</i> . <i>Acta Crystallographica Section F, Structural Biology Communications</i> , 2017, 73, 241-245. | 0.8 | 1 |

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| 91 | Berkeley Screen: a set of 96 solutions for general macromolecular crystallization. <i>Journal of Applied Crystallography</i> , 2017, 50, 1352-1358. | 4.5 | 11 |
| 92 | An editor for the generation and customization of geometry restraints. <i>Acta Crystallographica Section D: Structural Biology</i> , 2017, 73, 123-130. | 2.3 | 27 |
| 93 | Phasing strategies II – molecular replacement. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2017, 73, a391-a391. | 0.1 | 0 |
| 94 | Model-building using cryo-EM and crystallographic maps. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2017, 73, C1327-C1327. | 0.1 | 0 |
| 95 | Video tutorials for the <i>Phenix</i> software suite. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2017, 73, C1134-C1134. | 0.1 | 0 |
| 96 | Structure and mechanism of NOV1, a resveratrol-cleaving dioxygenase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 14324-14329. | 7.1 | 50 |
| 97 | Can I solve my structure by SAD phasing? Planning an experiment, scaling data and evaluating the useful anomalous correlation and anomalous signal. <i>Acta Crystallographica Section D: Structural Biology</i> , 2016, 72, 359-374. | 2.3 | 29 |
| 98 | No observable conformational changes in PSII. <i>Nature</i> , 2016, 533, E1-E2. | 27.8 | 40 |
| 99 | Noninvasive imaging of cellulose microfibril orientation within plant cell walls by polarized Raman microspectroscopy. <i>Biotechnology and Bioengineering</i> , 2016, 113, 82-90. | 3.3 | 21 |
| 100 | Structural and Biochemical Characterization of the Early and Late Enzymes in the Lignin β^2 -Aryl Ether Cleavage Pathway from <i>Sphingobium</i> sp. SYK-6. <i>Journal of Biological Chemistry</i> , 2016, 291, 10228-10238. | 3.4 | 44 |
| 101 | Characterizing Strain Variation in Engineered <i>E. coli</i> Using a Multi-Omics-Based Workflow. <i>Cell Systems</i> , 2016, 2, 335-346. | 6.2 | 73 |
| 102 | Comparative Community Proteomics Demonstrates the Unexpected Importance of Actinobacterial Glycoside Hydrolase Family 12 Protein for Crystalline Cellulose Hydrolysis. <i>MBio</i> , 2016, 7, . | 4.1 | 17 |
| 103 | Structure of photosystem II and substrate binding at room temperature. <i>Nature</i> , 2016, 540, 453-457. | 27.8 | 323 |
| 104 | Can I solve my structure by SAD phasing? Anomalous signal in SAD phasing. <i>Acta Crystallographica Section D: Structural Biology</i> , 2016, 72, 346-358. | 2.3 | 31 |
| 105 | A second-generation expression system for tyrosine-sulfated proteins and its application in crop protection. <i>Integrative Biology (United Kingdom)</i> , 2016, 8, 542-545. | 1.3 | 23 |
| 106 | A Droplet Microfluidic Platform for Automating Genetic Engineering. <i>ACS Synthetic Biology</i> , 2016, 5, 426-433. | 3.8 | 63 |
| 107 | Exploiting the Substrate Promiscuity of Hydroxycinnamoyl-CoA:Shikimate Hydroxycinnamoyl Transferase to Reduce Lignin. <i>Plant and Cell Physiology</i> , 2016, 57, 568-579. | 3.1 | 78 |
| 108 | Structural Basis of Stereospecificity in the Bacterial Enzymatic Cleavage of β^2 -Aryl Ether Bonds in Lignin. <i>Journal of Biological Chemistry</i> , 2016, 291, 5234-5246. | 3.4 | 40 |

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|-----|---|-----|-----------|
| 109 | A new default restraint library for the protein backbone in <i>Phenix</i> : a conformation-dependent geometry goes mainstream. <i>Acta Crystallographica Section D: Structural Biology</i> , 2016, 72, 176-179. | 2.3 | 39 |
| 110 | Improved ligand geometries in crystallographic refinement using <i>AFITT</i> in <i>PHENIX</i> . <i>Acta Crystallographica Section D: Structural Biology</i> , 2016, 72, 1062-1072. | 2.3 | 29 |
| 111 | New bulk-solvent model improves model-to-data fit and facilitates map interpretation. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2016, 72, s22-s22. | 0.1 | 0 |
| 112 | Predicting X-ray diffuse scattering from translation-“libration”-screw structural ensembles. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2015, 71, 1657-1667. | 2.5 | 14 |
| 113 | Analytics for Metabolic Engineering. <i>Frontiers in Bioengineering and Biotechnology</i> , 2015, 3, 135. | 4.1 | 79 |
| 114 | Development of a High Throughput Platform for Screening Glycoside Hydrolases Based on Oxime-NIMS. <i>Frontiers in Bioengineering and Biotechnology</i> , 2015, 3, 153. | 4.1 | 14 |
| 115 | Use of Nanostructure-Initiator Mass Spectrometry to Deduce Selectivity of Reaction in Glycoside Hydrolases. <i>Frontiers in Bioengineering and Biotechnology</i> , 2015, 3, 165. | 4.1 | 6 |
| 116 | Natural Bacterial Communities Serve as Quantitative Geochemical Biosensors. <i>MBio</i> , 2015, 6, e00326-15. | 4.1 | 173 |
| 117 | The Berkeley Center for Structural Biology at the Advanced Light Source. <i>Synchrotron Radiation News</i> , 2015, 28, 22-27. | 0.8 | 2 |
| 118 | NMR Exchange Format: a unified and open standard for representation of NMR restraint data. <i>Nature Structural and Molecular Biology</i> , 2015, 22, 433-434. | 8.2 | 40 |
| 119 | Multifunctional cellulase catalysis targeted by fusion to different carbohydrate-binding modules. <i>Biotechnology for Biofuels</i> , 2015, 8, 220. | 6.2 | 49 |
| 120 | Programming new geometry restraints: parallelity of atomic groups. <i>Journal of Applied Crystallography</i> , 2015, 48, 1130-1141. | 4.5 | 13 |
| 121 | Principal component analysis of proteomics (PCAP) as a tool to direct metabolic engineering. <i>Metabolic Engineering</i> , 2015, 28, 123-133. | 7.0 | 140 |
| 122 | Metabolic engineering for the high-yield production of isoprenoid-based C5 alcohols in <i>E. coli</i> . <i>Scientific Reports</i> , 2015, 5, 11128. | 3.3 | 125 |
| 123 | Identification and Characterization of a Golgi-Localized UDP-Xylose Transporter Family from <i>Arabidopsis</i> . <i>Plant Cell</i> , 2015, 27, 1218-1227. | 6.6 | 61 |
| 124 | FEM: feature-enhanced map. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2015, 71, 646-666. | 2.5 | 157 |
| 125 | A Versatile Microfluidic Device for Automating Synthetic Biology. <i>ACS Synthetic Biology</i> , 2015, 4, 1151-1164. | 3.8 | 81 |
| 126 | Outcome of the First wwPDB Hybrid/Integrative Methods Task Force Workshop. <i>Structure</i> , 2015, 23, 1156-1167. | 3.3 | 159 |

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|-----|---|------|-----------|
| 127 | Indexing amyloid peptide diffraction from serial femtosecond crystallography: new algorithms for sparse patterns. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2015, 71, 357-366. | 2.5 | 18 |
| 128 | Using support vector machines to improve elemental ion identification in macromolecular crystal structures. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2015, 71, 1147-1158. | 2.5 | 4 |
| 129 | Standard Flow Liquid Chromatography for Shotgun Proteomics in Bioenergy Research. <i>Frontiers in Bioengineering and Biotechnology</i> , 2015, 3, 44. | 4.1 | 44 |
| 130 | EMRinger: side chain-directed model and map validation for 3D cryo-electron microscopy. <i>Nature Methods</i> , 2015, 12, 943-946. | 19.0 | 799 |
| 131 | Macromolecular X-ray structure determination using weak, single-wavelength anomalous data. <i>Nature Methods</i> , 2015, 12, 127-130. | 19.0 | 31 |
| 132 | A droplet-to-digital (D2D) microfluidic device for single cell assays. <i>Lab on A Chip</i> , 2015, 15, 225-236. | 6.0 | 70 |
| 133 | From deep TLS validation to ensembles of atomic models built from elemental motions. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2015, 71, 1668-1683. | 2.5 | 14 |
| 134 | Macromolecular crystallographic structure refinement. <i>Arbor</i> , 2015, 191, a219. | 0.3 | 3 |
| 135 | Cellulosic Biomass Pretreatment and Sugar Yields as a Function of Biomass Particle Size. <i>PLoS ONE</i> , 2014, 9, e100836. | 2.5 | 19 |
| 136 | Development of a Native <i>Escherichia coli</i> Induction System for Ionic Liquid Tolerance. <i>PLoS ONE</i> , 2014, 9, e101115. | 2.5 | 31 |
| 137 | Understanding the Role of Histidine in the GHSxG Acyltransferase Active Site Motif: Evidence for Histidine Stabilization of the Malonyl-Enzyme Intermediate. <i>PLoS ONE</i> , 2014, 9, e109421. | 2.5 | 10 |
| 138 | Pressure stabilizer for reproducible picoinjection in droplet microfluidic systems. <i>Lab on A Chip</i> , 2014, 14, 4533-4539. | 6.0 | 34 |
| 139 | A Peptide-Based Method for ¹³ C Metabolic Flux Analysis in Microbial Communities. <i>PLoS Computational Biology</i> , 2014, 10, e1003827. | 3.2 | 56 |
| 140 | An atomic model of brome mosaic virus using direct electron detection and real-space optimization. <i>Nature Communications</i> , 2014, 5, 4808. | 12.8 | 105 |
| 141 | Structural and Biochemical Studies of Actin in Complex with Synthetic Macrolide Tail Analogues. <i>ChemMedChem</i> , 2014, 9, 2286-2293. | 3.2 | 20 |
| 142 | Conformation-dependent backbone geometry restraints set a new standard for protein crystallographic refinement. <i>FEBS Journal</i> , 2014, 281, 4061-4071. | 4.7 | 36 |
| 143 | Conformational dynamics of a crystalline protein from microsecond-scale molecular dynamics simulations and diffuse X-ray scattering. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 17887-17892. | 7.1 | 55 |
| 144 | Error Rate Comparison during Polymerase Chain Reaction by DNA Polymerase. <i>Molecular Biology International</i> , 2014, 2014, 1-8. | 1.7 | 160 |

| # | ARTICLE | IF | CITATIONS |
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