

Robert C Ford

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2853796/publications.pdf>

Version: 2024-02-01

126
papers

5,149
citations

76326

40
h-index

98798

67
g-index

132
all docs

132
docs citations

132
times ranked

4630
citing authors

#	ARTICLE	IF	CITATIONS
1	Structure of the Multidrug Resistance P-glycoprotein to 2.5 nm Resolution Determined by Electron Microscopy and Image Analysis. <i>Journal of Biological Chemistry</i> , 1997, 272, 10685-10694.	3.4	295
2	Three-dimensional Structures of the Mammalian Multidrug Resistance P-glycoprotein Demonstrate Major Conformational Changes in the Transmembrane Domains upon Nucleotide Binding. <i>Journal of Biological Chemistry</i> , 2003, 278, 8294-8299.	3.4	180
3	Structural and functional diversity calls for a new classification of ABC transporters. <i>FEBS Letters</i> , 2020, 594, 3767-3775.	2.8	169
4	Detergent-free purification of ABC (ATP-binding-cassette) transporters. <i>Biochemical Journal</i> , 2014, 461, 269-278.	3.7	166
5	3-D structural and functional characterization of the purified KATPchannel complex Kir6.2-SUR1. <i>EMBO Journal</i> , 2005, 24, 4166-4175.	7.8	156
6	Three-dimensional Structure of P-glycoprotein. <i>Journal of Biological Chemistry</i> , 2005, 280, 2857-2862.	3.4	146
7	Regulatory R region of the CFTR chloride channel is a dynamic integrator of phospho-dependent intra- and intermolecular interactions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, E4427-36.	7.1	142
8	The Structure of the Multidrug Resistance Protein 1 (MRP1/ABCC1). <i>Journal of Biological Chemistry</i> , 2001, 276, 16076-16082.	3.4	141
9	The 3D structure of a periplasm-spanning platform required for assembly of group 1 capsular polysaccharides in <i>Escherichia coli</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 2390-2395.	7.1	139
10	Purification and Crystallization of the Cystic Fibrosis Transmembrane Conductance Regulator (CFTR). <i>Journal of Biological Chemistry</i> , 2004, 279, 39051-39057.	3.4	128
11	Analysis of the PilQ Secretin from <i>Neisseria meningitidis</i> by Transmission Electron Microscopy Reveals a Dodecameric Quaternary Structure. <i>Journal of Bacteriology</i> , 2001, 183, 3825-3832.	2.2	117
12	Purification and 3D Structural Analysis of Oligomeric Human Multidrug Transporter ABCG2. <i>Structure</i> , 2006, 14, 1623-1632.	3.3	117
13	Structure of the <i>Neisseria meningitidis</i> Outer Membrane PilQ Secretin Complex at 12 Å... Resolution. <i>Journal of Biological Chemistry</i> , 2004, 279, 39750-39756.	3.4	116
14	Three-dimensional structure of photosystem II. <i>Nature</i> , 1993, 363, 470-472.	27.8	113
15	Learning the ABCs one at a time: structure and mechanism of ABC transporters. <i>Biochemical Society Transactions</i> , 2019, 47, 23-36.	3.4	110
16	Structure of the multidrug resistance P-glycoprotein. <i>Seminars in Cancer Biology</i> , 1997, 8, 135-142.	9.6	100
17	The ATP-binding cassette family: a structural perspective. <i>Cellular and Molecular Life Sciences</i> , 2009, 66, 3111-3126.	5.4	92
18	The translocation mechanism of P-glycoprotein. <i>FEBS Letters</i> , 2006, 580, 1056-1063.	2.8	88

#	ARTICLE	IF	CITATIONS
19	Crystallization of the photosystem I reaction centre. <i>EMBO Journal</i> , 1987, 6, 1581-1586.	7.8	83
20	The Human Breast Cancer Resistance Protein (BCRP/ABCG2) Shows Conformational Changes with Mitoxantrone. <i>Structure</i> , 2010, 18, 482-493.	3.3	82
21	Three-Dimensional Structure of the <i>Neisseria meningitidis</i> Secretin PilQ Determined from Negative-Stain Transmission Electron Microscopy. <i>Journal of Bacteriology</i> , 2003, 185, 2611-2617.	2.2	76
22	Assembly of 2-D membrane protein crystals: Dynamics, crystal order, and fidelity of structure analysis by electron microscopy. <i>Journal of Structural Biology</i> , 1992, 109, 219-234.	2.8	74
23	Investigation of the structure of trimeric and monomeric photosystem I reaction centre complexes. <i>EMBO Journal</i> , 1988, 7, 2287-2293.	7.8	73
24	Structure and Assembly of a Trans-Periplasmic Channel for Type IV Pili in <i>Neisseria meningitidis</i> . <i>PLoS Pathogens</i> , 2012, 8, e1002923.	4.7	69
25	The Cystic Fibrosis Transmembrane Conductance Regulator (CFTR). <i>Journal of Biological Chemistry</i> , 2011, 286, 42647-42654.	3.4	64
26	Inelastic Incoherent Neutron Scattering Studies of Water Interacting with Biological Macromolecules. <i>Journal of the American Chemical Society</i> , 2002, 124, 565-569.	13.7	63
27	Biochemical and Structural Analysis of Bacterial O-antigen Chain Length Regulator Proteins Reveals a Conserved Quaternary Structure. <i>Journal of Biological Chemistry</i> , 2009, 284, 7395-7403.	3.4	63
28	Architecture of the cystic fibrosis transmembrane conductance regulator protein and structural changes associated with phosphorylation and nucleotide binding. <i>Journal of Structural Biology</i> , 2009, 167, 242-251.	2.8	63
29	CFTR structure and cystic fibrosis. <i>International Journal of Biochemistry and Cell Biology</i> , 2014, 52, 15-25.	2.8	62
30	Periplasmic Protein-Protein Contacts in the Inner Membrane Protein Wzc Form a Tetrameric Complex Required for the Assembly of <i>Escherichia coli</i> Group 1 Capsules. <i>Journal of Biological Chemistry</i> , 2006, 281, 2144-2150.	3.4	61
31	Interaction with Type IV Pili Induces Structural Changes in the Bacterial Outer Membrane Secretin PilQ. <i>Journal of Biological Chemistry</i> , 2005, 280, 18923-18930.	3.4	58
32	Three-dimensional Structure of Wza, the Protein Required for Translocation of Group 1 Capsular Polysaccharide across the Outer Membrane of <i>Escherichia coli</i> . <i>Journal of Biological Chemistry</i> , 2004, 279, 28227-28232.	3.4	55
33	The Three-dimensional Structure of the Cardiac L-type Voltage-gated Calcium Channel. <i>Journal of Biological Chemistry</i> , 2004, 279, 7159-7168.	3.4	51
34	Cryo-electron microscopy of membrane proteins. <i>Methods</i> , 2018, 147, 176-186.	3.8	50
35	3D Structure of the Skeletal Muscle Dihydropyridine Receptor. <i>Journal of Molecular Biology</i> , 2002, 323, 85-98.	4.2	47
36	Inelastic Incoherent Neutron Scattering Measurements of Intact Cells and Tissues and Detection of Interfacial Water. <i>Journal of the American Chemical Society</i> , 2004, 126, 4682-4688.	13.7	47

#	ARTICLE	IF	CITATIONS
37	Dual Conserved Periplasmic Loops Possess Essential Charge Characteristics That Support a Catch-and-Release Mechanism of O-antigen Polymerization by Wzy in <i>Pseudomonas aeruginosa</i> PAO1. <i>Journal of Biological Chemistry</i> , 2011, 286, 20600-20605.	3.4	47
38	The cystic fibrosis transmembrane conductance regulator (CFTR) and its stability. <i>Cellular and Molecular Life Sciences</i> , 2017, 74, 23-38.	5.4	47
39	Cystic Fibrosis Transmembrane Conductance Regulator (ABCC7) Structure. <i>Cold Spring Harbor Perspectives in Medicine</i> , 2013, 3, a009514-a009514.	6.2	45
40	The MUC5B mucin polymer is dominated by repeating structural motifs and its topology is regulated by calcium and pH. <i>Scientific Reports</i> , 2019, 9, 17350.	3.3	45
41	Photosystem II 3-D structure and the role of the extrinsic subunits in photosynthetic oxygen evolution. <i>Micron</i> , 1995, 26, 133-140.	2.2	44
42	A cationic lumen in the Wzx flippase mediates anionic O ₆ -antigen subunit translocation in <i>Pseudomonas aeruginosa</i> PAO1. <i>Molecular Microbiology</i> , 2012, 84, 1165-1176.	2.5	42
43	Two Small Molecules Restore Stability to a Subpopulation of the Cystic Fibrosis Transmembrane Conductance Regulator with the Predominant Disease-causing Mutation. <i>Journal of Biological Chemistry</i> , 2017, 292, 3706-3719.	3.4	41
44	Molecular Shape, Architecture, and Size of P2X4 Receptors Determined Using Fluorescence Resonance Energy Transfer and Electron Microscopy. <i>Journal of Biological Chemistry</i> , 2008, 283, 26241-26251.	3.4	40
45	The severity of hereditary porphyria is modulated by the porphyrin exporter and Lan antigen ABCB6. <i>Nature Communications</i> , 2016, 7, 12353.	12.8	37
46	Three-dimensional Structure of Transporter Associated with Antigen Processing (TAP) Obtained by Single Particle Image Analysis. <i>Journal of Biological Chemistry</i> , 2001, 276, 46054-46063.	3.4	35
47	Functional and Structural Study of the Dimeric Inner Membrane Protein SbmA. <i>Journal of Bacteriology</i> , 2013, 195, 5352-5361.	2.2	35
48	Topology of the outer-membrane secretin PilQ from <i>Neisseria meningitidis</i> . <i>Microbiology (United Kingdom)</i> , 2007, 161, 183-192.	1.8	32
49	Detection of Phospho-Sites Generated by Protein Kinase CK2 in CFTR: Mechanistic Aspects of Thr1471 Phosphorylation. <i>PLoS ONE</i> , 2013, 8, e74232.	2.5	32
50	Full-length, Oligomeric Structure of Wzz Determined by Cryoelectron Microscopy Reveals Insights into Membrane-Bound States. <i>Structure</i> , 2017, 25, 806-815.e3.	3.3	31
51	Three-dimensional structure of the human breast cancer resistance protein (BCRP/ABCG2) in an inward-facing conformation. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2015, 71, 1725-1735.	2.5	30
52	Localization of the oxygen-evolving complex of photosystem II by fourier difference analysis. <i>Micron</i> , 1994, 25, 447-451.	2.2	29
53	Functional and Structural Characterization of Polysaccharide Co-polymerase Proteins Required for Polymer Export in ATP-binding Cassette Transporter-dependent Capsule Biosynthesis Pathways. <i>Journal of Biological Chemistry</i> , 2011, 286, 16658-16668.	3.4	29
54	Investigation of highly stable Photosystem I chlorophyll-protein complexes from the thermophilic cyanobacterium <i>Phormidium laminosum</i> . <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1987, 893, 115-125.	1.0	28

#	ARTICLE	IF	CITATIONS
55	Structure of a human multidrug transporter in an inward-facing conformation. <i>Journal of Structural Biology</i> , 2010, 170, 540-547.	2.8	28
56	Improving the stability and function of purified ABCB1 and ABCA4: The influence of membrane lipids. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2014, 1838, 134-147.	2.6	28
57	Novel features in the structure of P-glycoprotein (ABCB1) in the post-hydrolytic state as determined at 7.9Å resolution. <i>BMC Structural Biology</i> , 2018, 18, 17.	2.3	28
58	Do main location within the cystic fibrosis transmembrane conductance regulator protein investigated by electron microscopy and gold labelling. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2011, 1808, 399-404.	2.6	27
59	Three-dimensional Structure of Higher Plant Photosystem I Determined by Electron Crystallography. <i>Journal of Biological Chemistry</i> , 1998, 273, 29592-29599.	3.4	26
60	Structural studies on improved crystals of the photosystem I reaction centre from <i>Phormidium laminosum</i> . <i>FEBS Letters</i> , 1988, 238, 385-389.	2.8	24
61	Linker Domains: Why ABC Transporters Live in Fragments no Longer™. <i>Trends in Biochemical Sciences</i> , 2020, 45, 137-148.	7.5	24
62	Analysis of the structure of photosystem I in cyanobacterial thylakoid membranes. <i>FEBS Letters</i> , 1992, 296, 29-32.	2.8	23
63	An alternative model for photosystem II/light harvesting complex II in grana membranes based on cryo-electron microscopy studies. <i>FEBS Journal</i> , 2002, 269, 326-336.	0.2	22
64	Recent progress on our understanding of water around biomolecules. <i>Journal of Molecular Liquids</i> , 2005, 117, 107-116.	4.9	22
65	Structure of photosystem II in spinach thylakoid membranes: comparison of detergent-solubilized and native complexes by electron microscopy. <i>Biochemical Journal</i> , 1996, 315, 543-547.	3.7	21
66	Characterization of a CorA Mg ²⁺ transport channel from <i>Methanococcus jannaschii</i> using a Thermofluor-based stability assay. <i>Molecular Membrane Biology</i> , 2008, 25, 653-661.	2.0	21
67	Two-dimensional Crystals of Photosystem I in Higher Plant Grana Margins. <i>Journal of Biological Chemistry</i> , 1997, 272, 19497-19501.	3.4	19
68	The Location of the Mobile Electron Carrier Ferredoxin in Vascular Plant Photosystem I. <i>Journal of Biological Chemistry</i> , 2000, 275, 36250-36255.	3.4	19
69	Structural insights into P-glycoprotein (ABCB1) by small angle X-ray scattering and electron crystallography. <i>FEBS Letters</i> , 2008, 582, 2950-2956.	2.8	19
70	Companion diagnostics and molecular imaging-enhanced approaches for oncology clinical trials. <i>Drug Design, Development and Therapy</i> , 2015, 9, 5215.	4.3	19
71	Purification of the Cystic Fibrosis Transmembrane Conductance Regulator Protein Expressed in <i>Saccharomyces cerevisiae</i> . <i>Journal of Visualized Experiments</i> , 2014, , .	0.3	18
72	ATP binding cassette importers in eukaryotic organisms. <i>Biological Reviews</i> , 2021, 96, 1318-1330.	10.4	17

#	ARTICLE	IF	CITATIONS
73	Electron crystallography of biomolecules: mysterious membranes and missing cones. Trends in Biochemical Sciences, 2008, 33, 38-43.	7.5	16
74	A survey of detergents for the purification of stable, active human cystic fibrosis transmembrane conductance regulator (CFTR). Biochimica Et Biophysica Acta - Biomembranes, 2014, 1838, 2825-2837.	2.6	16
75	Nano-encapsulated Escherichia coli Divisome Anchor ZipA, and in Complex with FtsZ. Scientific Reports, 2019, 9, 18712.	3.3	16
76	Structural investigations of membrane proteins: the versatility of electron microscopy. Biochemical Society Transactions, 1992, 20, 591-597.	3.4	15
77	Photosystem II: Mapping the locations of the oxygen evolution-enhancing subunits by electron microscopy. Micron, 1996, 27, 121-127.	2.2	15
78	Structure-function relationships of the outer membrane translocon Wza investigated by cryo-electron microscopy and mutagenesis. Journal of Structural Biology, 2009, 166, 172-182.	2.8	15
79	Investigation of the effects of the CFTR potentiator ivacaftor on human P-glycoprotein (ABCB1). Scientific Reports, 2017, 7, 17481.	3.3	15
80	A current assessment of photosystem II structure. Bioscience Reports, 1996, 16, 159-187.	2.4	14
81	The structural basis of cystic fibrosis. Biochemical Society Transactions, 2018, 46, 1093-1098.	3.4	14
82	What monomeric nucleotide binding domains can teach us about dimeric ABC proteins. FEBS Letters, 2020, 594, 3857-3875.	2.8	14
83	Expression and Purification of the Cystic Fibrosis Transmembrane Conductance Regulator Protein in Saccharomyces cerevisiae. Journal of Visualized Experiments, 2012, , .	0.3	13
84	Structural analysis of photosystem II in far-red-light-adapted thylakoid membranes. FEBS Journal, 2000, 267, 207-215.	0.2	12
85	The Cryo-EM structure of the CorA channel from Methanocaldococcus jannaschii in low magnesium conditions. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 2206-2215.	2.6	12
86	Structure of wild type and mutant F508del CFTR: A small-angle X-ray scattering study of the protein-detergent complexes. Journal of Structural Biology, 2016, 194, 102-111.	2.8	12
87	A polar SxxS motif drives assembly of the transmembrane domains of Toll-like receptor 4. Biochimica Et Biophysica Acta - Biomembranes, 2017, 1859, 2086-2095.	2.6	12
88	CFTR structure, stability, function and regulation. Biological Chemistry, 2019, 400, 1359-1370.	2.5	12
89	Structure of ABCB1/P-Glycoprotein in the Presence of the CFTR Potentiator Ivacaftor. Membranes, 2021, 11, 923.	3.0	12
90	Formaldehyde dehydrogenase preparations from Methylococcus capsulatus (Bath) comprise methanol dehydrogenase and methylene tetrahydromethanopterin dehydrogenase. Microbiology (United Kingdom), 1974, 79, 110-115.	1.0	5

#	ARTICLE	IF	CITATIONS
91	Projection structure of photosystem II In vivo determined by cryo-electron crystallography. <i>Micron</i> , 1997, 28, 439-446.	2.2	10
92	The Location of Plastocyanin in Vascular Plant Photosystem I. <i>Journal of Biological Chemistry</i> , 2002, 277, 25692-25696.	3.4	10
93	Inelastic Neutron Scattering Studies of the Interaction between Water and Some Amino Acids. <i>Journal of Physical Chemistry B</i> , 2005, 109, 17784-17786.	2.6	10
94	Deactivation of the Photosystem II oxidation (S) states by 2-(3-chloro-4-trifluoromethyl)anilino-3,5-dinitrothiophene (ANT2p) and the putative role of carotenoid. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1986, 852, 183-190.	1.0	9
95	Projection structure of reconstituted Opc outer membrane protein from <i>Neisseria meningitidis</i> . <i>Molecular Microbiology</i> , 1999, 32, 217-219.	2.5	9
96	Neutron spectroscopic and Raman studies of interaction between water and proline. <i>Chemical Physics</i> , 2008, 345, 196-199.	1.9	9
97	Comparison of photosystem II 3D structure as determined by electron crystallography of frozen-hydrated and negatively stained specimens. <i>Micron</i> , 1998, 29, 341-348.	2.2	8
98	Cryo-electron crystallography of small and mosaic 2-D crystals: an assessment of a procedure for high-resolution data retrieval. <i>Ultramicroscopy</i> , 1999, 77, 113-128.	1.9	8
99	CFTR Three-Dimensional Structure. <i>Methods in Molecular Biology</i> , 2011, 741, 329-346.	0.9	8
100	In vivo crystals reveal critical features of the interaction between cystic fibrosis transmembrane conductance regulator (CFTR) and the PDZ2 domain of Na ⁺ /H ⁺ exchange cofactor NHERF1. <i>Journal of Biological Chemistry</i> , 2020, 295, 4464-4476.	3.4	8
101	Molecular Dynamics Flexible Fitting Simulations Identify New Models of the Closed State of the Cystic Fibrosis Transmembrane Conductance Regulator Protein. <i>Journal of Chemical Information and Modeling</i> , 2017, 57, 1932-1946.	5.4	7
102	Exploitation of a novel biosensor based on the full-length human F508del-CFTR with computational studies, biochemical and biological assays for the characterization of a new Lumacaftor/Tezacaftor analogue. <i>Sensors and Actuators B: Chemical</i> , 2019, 301, 127131.	7.8	7
103	Rebinding of the extrinsic proteins of Photosystem II studied by electron microscopy and single particle alignment: an assessment with small two-dimensional ordered arrays of Photosystem II. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1997, 1319, 119-132.	1.0	6
104	Recent Strategic Advances in CFTR Drug Discovery: An Overview. <i>International Journal of Molecular Sciences</i> , 2020, 21, 2407.	4.1	6
105	Kite-Shaped Molecules Block SARS-CoV-2 Cell Entry at a Post-Attachment Step. <i>Viruses</i> , 2021, 13, 2306.	3.3	5
106	Does photoinhibition and/or phosphorylation of photosystem II influence its in vivo oligomeric state?. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1999, 1413, 21-30.	1.0	4
107	Expression, purification, electron microscopy, N-glycosylation mutagenesis and molecular modeling of human P2X4 and <i>Dictyostelium discoideum</i> P2XA. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2011, 1808, 2859-2866.	2.6	4
108	Evaluation of 1D, 2D and 3D nodule size estimation by radiologists for spherical and non-spherical nodules through CT thoracic phantom imaging. , 2011, , .		4

#	ARTICLE	IF	CITATIONS
109	Structure of the cystic fibrosis transmembrane conductance regulator in the inward-facing conformation revealed by single particle electron microscopy. <i>AIMS Biophysics</i> , 2015, 2, 131-152.	0.6	4
110	Characterisation of the salmon cystic fibrosis transmembrane conductance regulator protein for structural studies. <i>AIMS Molecular Science</i> , 2014, 1, 141-161.	0.5	4
111	Detergent sensitivity of the tonoplast H ⁺ -ATPase and its purification form <i>Beta vulgaris</i> . <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 1992, 1136, 319-326.	4.1	3
112	Cyanobacterial photosystem I structure. <i>Biochemical Society Transactions</i> , 1993, 21, 19-21.	3.4	3
113	Structural changes in photosystem II after treatment with the zero-length bifunctional cross-linker 1-ethyl-3-(3-dimethylaminopropyl)carbodi-imide: an electron microscopic study. <i>Biochemical Journal</i> , 1996, 319, 585-589.	3.7	3
114	A novel approach for the crystallization of soluble proteins using non-ionic surfactants. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 1998, 54, 154-157.	2.5	3
115	Neutron scattering measurements of intact cells show changes after heat shock consistent with an increase in molecular crowding. <i>Journal of Molecular Recognition</i> , 2004, 17, 505-511.	2.1	3
116	Vibrational Spectroscopic Studies of the Interaction of Water with Serine. <i>Journal of Physical Chemistry A</i> , 2006, 110, 5000-5003.	2.5	2
117	Characterizing diverse orthologues of the cystic fibrosis transmembrane conductance regulator protein for structural studies. <i>Biochemical Society Transactions</i> , 2015, 43, 894-900.	3.4	2
118	Photosynthetic membrane proteins. <i>Current Opinion in Structural Biology</i> , 1992, 2, 527-533.	5.7	1
119	The Human Breast Cancer Resistance Protein (BCRP/ABCG2) Shows Conformational Changes with Mitoxantrone. <i>Structure</i> , 2010, 18, 1688-1689.	3.3	1
120	ABCC7/CFTR. , 2016, , 319-340.		1
121	Changes in Ultrastructure and Dynamics of Thylakoid Membranes. , 1995, , 2201-2204.		1
122	Cryo-Electron Microscopy of Photosystem II: Towards a High-Resolution Structure. , 1995, , 2273-2276.		1
123	Photosystem II: Three-Dimensional (3D) Structure and Oxygen Evolution. , 1995, , 2277-2280.		0
124	EDC Crosslinking Studies of PS II in Grana Membranes. , 1995, , 2241-2244.		0
125	Localization of the Extrinsic Proteins of Photosystem II by Electron Microscopy. , 1995, , 2309-2312.		0
126	Photosystem II 3D Architecture. , 1995, , 2153-2158.		0