

# Susan K Buchanan

## List of Publications by Year in descending order

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Version: 2024-02-01

70  
papers

6,668  
citations

126907

33  
h-index

98798

67  
g-index

79  
all docs

79  
docs citations

79  
times ranked

6580  
citing authors

#	ARTICLE	IF	CITATIONS
1	Colicin Biology. <i>Microbiology and Molecular Biology Reviews</i> , 2007, 71, 158-229.	6.6	902
2	TonB-Dependent Transporters: Regulation, Structure, and Function. <i>Annual Review of Microbiology</i> , 2010, 64, 43-60.	7.3	811
3	Crystal structure of the outer membrane active transporter FepA from <i>Escherichia coli</i> . <i>Nature Structural Biology</i> , 1999, 6, 56-63.	9.7	531
4	Structural insight into the biogenesis of $\beta$ -barrel membrane proteins. <i>Nature</i> , 2013, 501, 385-390.	27.8	368
5	Structural basis for iron piracy by pathogenic <i>Neisseria</i> . <i>Nature</i> , 2012, 483, 53-58.	27.8	239
6	The Crystal Structure of Iron-free Human Serum Transferrin Provides Insight into Inter-lobe Communication and Receptor Binding. <i>Journal of Biological Chemistry</i> , 2006, 281, 24934-24944.	3.4	226
7	The structural biology of $\beta$ -barrel membrane proteins: a summary of recent reports. <i>Current Opinion in Structural Biology</i> , 2011, 21, 523-531.	5.7	216
8	The structure of the $\beta$ -barrel assembly machinery complex. <i>Science</i> , 2016, 351, 180-186.	12.6	209
9	Outer membrane protein biogenesis in Gram-negative bacteria. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2015, 370, 20150023.	4.0	198
10	Structural Evidence for Iron-free Citrate and Ferric Citrate Binding to the TonB-dependent Outer Membrane Transporter FecA. <i>Journal of Molecular Biology</i> , 2003, 332, 353-368.	4.2	181
11	The $\beta$ -barrel assembly machinery in motion. <i>Nature Reviews Microbiology</i> , 2017, 15, 197-204.	28.6	174
12	Lateral Opening and Exit Pore Formation Are Required for BamA Function. <i>Structure</i> , 2014, 22, 1055-1062.	3.3	166
13	Autotransporter structure reveals intra-barrel cleavage followed by conformational changes. <i>Nature Structural and Molecular Biology</i> , 2007, 14, 1214-1220.	8.2	151
14	Structural engineering of a phage lysin that targets Gram-negative pathogens. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 9857-9862.	7.1	144
15	Structural insight into the role of the Ton complex in energy transduction. <i>Nature</i> , 2016, 538, 60-65.	27.8	142
16	Structure of the OmpA-like domain of RmpM from <i>Neisseria meningitidis</i> . <i>Molecular Microbiology</i> , 2004, 51, 1027-1037.	2.5	118
17	Structural and Functional Characterization of the LPS Transporter LptDE from Gram-Negative Pathogens. <i>Structure</i> , 2016, 24, 965-976.	3.3	110
18	A structural comparison of human serum transferrin and human lactoferrin. <i>BioMetals</i> , 2007, 20, 249-262.	4.1	101

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19	Signaling mechanisms for activation of extracytoplasmic function (ECF) sigma factors. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2008, 1778, 1930-1945.	2.6	98
20	Two-Partner Secretion: Combining Efficiency and Simplicity in the Secretion of Large Proteins for Bacteria-Host and Bacteria-Bacteria Interactions. <i>Frontiers in Cellular and Infection Microbiology</i> , 2017, 7, 148.	3.9	92
21	Structure of colicin I receptor bound to the R-domain of colicin Ia: implications for protein import. <i>EMBO Journal</i> , 2007, 26, 2594-2604.	7.8	91
22	Recognition of iron-free siderophores by TonB-dependent iron transporters. <i>Molecular Microbiology</i> , 2004, 54, 14-22.	2.5	88
23	The Crystal Structure of BamB Suggests Interactions with BamA and Its Role within the BAM Complex. <i>Journal of Molecular Biology</i> , 2011, 407, 248-260.	4.2	82
24	Crystal Structures of the Outer Membrane Domain of Intimin and Invasin from Enterohemorrhagic <i>E. coli</i> and Enteropathogenic <i>Y. pseudotuberculosis</i> . <i>Structure</i> , 2012, 20, 1233-1243.	3.3	82
25	The $\beta$ -barrel membrane protein insertase machinery from Gram-negative bacteria. <i>Current Opinion in Structural Biology</i> , 2015, 31, 35-42.	5.7	80
26	Protein secretion and outer membrane assembly in <i>Alphaproteobacteria</i> . <i>FEMS Microbiology Reviews</i> , 2008, 32, 995-1009.	8.6	76
27	The transferrin-iron import system from pathogenic <i>Escherichia coli</i> species. <i>Molecular Microbiology</i> , 2012, 86, 246-257.	2.5	63
28	A Modular BAM Complex in the Outer Membrane of the $\beta$ -Proteobacterium <i>Caulobacter crescentus</i> . <i>PLoS ONE</i> , 2010, 5, e8619.	2.5	62
29	Cryo-EM structure of the bacterial Ton motor subcomplex ExbA-ExbD provides information on structure and stoichiometry. <i>Communications Biology</i> , 2019, 2, 358.	4.4	60
30	Hitting with a BAM: Selective Killing by Lectin-Like Bacteriocins. <i>MBio</i> , 2018, 9, .	4.1	48
31	Structural insight into mitochondrial $\beta$ -barrel outer membrane protein biogenesis. <i>Nature Communications</i> , 2020, 11, 3290.	12.8	48
32	Molecular Basis for the Activation of a Catalytic Asparagine Residue in a Self-Cleaving Bacterial Autotransporter. <i>Journal of Molecular Biology</i> , 2012, 415, 128-142.	4.2	40
33	Insertion of proteins and lipopolysaccharide into the bacterial outer membrane. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2017, 372, 20160224.	4.0	40
34	Molecular Insight into Substrate Recognition and Catalysis of Baeyer-Villiger Monooxygenase MtmOIV, the Key Frame-Modifying Enzyme in the Biosynthesis of Anticancer Agent Mithramycin. <i>ACS Chemical Biology</i> , 2013, 8, 2466-2477.	3.4	36
35	Structural and functional insights into the role of BamD and BamE within the $\beta$ -barrel assembly machinery in <i>Neisseria gonorrhoeae</i> . <i>Journal of Biological Chemistry</i> , 2018, 293, 1106-1119.	3.4	36
36	Structure and Stoichiometry of the Ton Molecular Motor. <i>International Journal of Molecular Sciences</i> , 2020, 21, 375.	4.1	36

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37	In-depth interrogation of protein thermal unfolding data with MoltenProt. <i>Protein Science</i> , 2021, 30, 201-217.	7.6	36
38	Structural insight into the lactoferrin receptors from pathogenic <i>Neisseria</i> . <i>Journal of Structural Biology</i> , 2013, 184, 83-92.	2.8	35
39	Heat Modifiability of Outer Membrane Proteins from Gram-Negative Bacteria. <i>Methods in Molecular Biology</i> , 2015, 1329, 51-56.	0.9	35
40	Reconstitution of bacterial outer membrane TonB-dependent transporters in planar lipid bilayer membranes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 21990-21995.	7.1	30
41	Fitting the Pieces of the $\beta^2$ -Barrel Assembly Machinery Complex. <i>Biochemistry</i> , 2015, 54, 6303-6311.	2.5	30
42	Evidence of Distinct Channel Conformations and Substrate Binding Affinities for the Mitochondrial Outer Membrane Protein Translocase Pore Tom40. <i>Journal of Biological Chemistry</i> , 2015, 290, 26204-26217.	3.4	30
43	The Role of Voltage-Dependent Anion Channel in Mitochondrial Dysfunction and Human Disease. <i>Cells</i> , 2021, 10, 1737.	4.1	26
44	A Natural Chimeric <i>Pseudomonas</i> Bacteriocin with Novel Pore-Forming Activity Parasitizes the Ferrichrome Transporter. <i>MBio</i> , 2017, 8, .	4.1	24
45	An Engineered Palette of Metal Ion Quenchable Fluorescent Proteins. <i>PLoS ONE</i> , 2014, 9, e95808.	2.5	23
46	Ton motor complexes. <i>Current Opinion in Structural Biology</i> , 2021, 67, 95-100.	5.7	22
47	Building Better Barrels – $\beta^2$ -barrel Biogenesis and Insertion in Bacteria and Mitochondria. <i>Journal of Molecular Biology</i> , 2021, 433, 166894.	4.2	22
48	Beyond the Crystal Structure: Insight into the Function and Vaccine Potential of TbpA Expressed by <i>Neisseria gonorrhoeae</i> . <i>Infection and Immunity</i> , 2015, 83, 4438-4449.	2.2	21
49	Structural insights into the transport of small molecules across membranes. <i>Current Opinion in Structural Biology</i> , 2014, 27, 8-15.	5.7	20
50	The Ton Motor. <i>Frontiers in Microbiology</i> , 2022, 13, 852955.	3.5	20
51	Overexpression and refolding of an 80-kDa iron transporter from the outer membrane of <i>Escherichia coli</i> . <i>Biochemical Society Transactions</i> , 1999, 27, 903-908.	3.4	19
52	Structural Insights into Substrate Recognition and Catalysis in Outer Membrane Protein B (OmpB) by Protein-lysine Methyltransferases from <i>Rickettsia</i> . <i>Journal of Biological Chemistry</i> , 2016, 291, 19962-19974.	3.4	18
53	Structure of the NPR:EINNtr Complex: Mechanism for Specificity in Paralogous Phosphotransferase Systems. <i>Structure</i> , 2016, 24, 2127-2137.	3.3	16
54	A Biochemical and Structural Understanding of TOM Complex Interactions and Implications for Human Health and Disease. <i>Cells</i> , 2021, 10, 1164.	4.1	14

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55	Structural insight into toxin secretion by contact-dependent growth inhibition transporters. <i>ELife</i> , 2020, 9, .	6.0	14
56	The ColM Family, Polymorphic Toxins Breaching the Bacterial Cell Wall. <i>MBio</i> , 2018, 9, .	4.1	13
57	Structure of voltage-dependent anion channel-tethered bilayer lipid membranes determined using neutron reflectivity. <i>Acta Crystallographica Section D: Structural Biology</i> , 2018, 74, 1219-1232.	2.3	9
58	Bacterial metal detectors. <i>Molecular Microbiology</i> , 2005, 58, 1205-1209.	2.5	7
59	Structural snapshots of the $\beta$ -barrel assembly machinery. <i>FEBS Journal</i> , 2017, 284, 1778-1786.	4.7	7
60	Protein import and export across the bacterial outer membrane. <i>Current Opinion in Structural Biology</i> , 2021, 69, 55-62.	5.7	6
61	Solute and Ion Transport: Outer Membrane Pores and Receptors. <i>EcoSal Plus</i> , 2010, 4, .	5.4	5
62	From Constructs to Crystals &#8211; Towards Structure Determination of &#946;-barrel Outer Membrane Proteins. <i>Journal of Visualized Experiments</i> , 2016, , .	0.3	5
63	Crystallization of Integral Membrane Proteins. <i>Current Protocols in Protein Science</i> , 2007, 47, Unit 17.9.	2.8	4
64	Specific targeting and killing of Gram-negative pathogens with an engineered phage lytic enzyme. <i>Virulence</i> , 2013, 4, 90-91.	4.4	4
65	Methods to Characterize Folding and Function of BamA Cross-Link Mutants. <i>Methods in Molecular Biology</i> , 2015, 1329, 137-147.	0.9	3
66	Mechanistic insights into fungal mitochondrial outer membrane protein biogenesis. <i>Current Opinion in Structural Biology</i> , 2022, 74, 102383.	5.7	2
67	Cloning and Multi-Subunit Expression of Mitochondrial Membrane Protein Complexes in <i>Saccharomyces cerevisiae</i> . <i>Methods in Molecular Biology</i> , 2020, 2127, 1-11.	0.9	1
68	FhaC takes a bow to FHA in the two-partner do-si-do. <i>Molecular Microbiology</i> , 2014, 92, 1155-1158.	2.5	0
69	Summary and Future Directions. <i>Methods in Molecular Biology</i> , 2015, 1329, 279-280.	0.9	0
70	Evidence of Distinct Channel Conformations for the Mitochondrial Outer Membrane Translocase Tom40. <i>FASEB Journal</i> , 2015, 29, 777.7.	0.5	0