Raimund Dutzler

List of Publications by Year
in descending order

51 papers	6,905 citations	126907 33 h-index	182427 51 g-index
68 all docs	68 docs citations	68 times ranked	5435 citing authors

#	Article	IF	Citations
1	X-ray structure of a ClC chloride channel at 3.0â€‰Ã… reveals the molecular basis of anion selectivity. Nature, 2002, 415, 287-294.	27.8	1,529
2	Gating the Selectivity Filter in ClC Chloride Channels. Science, 2003, 300, 108-112.	12.6	747
3	X-ray structure of a prokaryotic pentameric ligand-gated ion channel. Nature, 2008, 452, 375-379.	27.8	634
4	Structure of a potentially open state of a proton-activated pentameric ligand-gated ion channel. Nature, 2009, 457, 115-118.	27.8	504
5	X-ray structure of a calcium-activated TMEM16 lipid scramblase. Nature, 2014, 516, 207-212.	27.8	393
6	Activation mechanism of the calcium-activated chloride channel TMEM16A revealed by cryo-EM. Nature, 2017, 552, 421-425.	27.8	231
7	A Versatile and Efficient High-Throughput Cloning Tool for Structural Biology. Biochemistry, 2011, 50, 3272-3278.	2.5	185
8	Crystal structure of a SLC11 (NRAMP) transporter reveals the basis for transition-metal ion transport. Nature Structural and Molecular Biology, 2014, 21, 990-996.	8.2	171
9	Structure of a volume-regulated anion channel of the LRRC8 family. Nature, 2018, 558, 254-259.	27.8	160
10	Structure of a prokaryotic fumarate transporter reveals the architecture of the SLC26 family. Nature Structural and Molecular Biology, 2015, 22, 803-808.	8.2	159
11	Nucleotide recognition by the cytoplasmic domain of the human chloride transporter ClC-5. Nature Structural and Molecular Biology, 2007, 14, 60-67.	8.2	136
12	Structural basis for anion conduction in the calcium-activated chloride channel TMEM16A. ELife, 2017, 6, .	6.0	127
13	Channel specificity: structural basis for sugar discrimination and differential flux rates in maltoporin 1 1Edited by R. Huber. Journal of Molecular Biology, 1997, 272, 56-63.	4.2	111
14	Cryo-EM structures and functional characterization of the murine lipid scramblase TMEM16F. ELife, 2019, 8, .	6.0	105
15	Synergism Between Halide Binding and Proton Transport in a CLC-type Exchanger. Journal of Molecular Biology, 2006, 362, 691-699.	4.2	103
16	Ligand Activation of the Prokaryotic Pentameric Ligand-Gated Ion Channel ELIC. PLoS Biology, 2011, 9, e1001101.	5.6	98
17	Crystal Structure of the Cytoplasmic Domain of the Chloride Channel ClC-0. Structure, 2006, 14, 299-307.	3.3	97
18	Ion-binding properties of the ClC chloride selectivity filter. EMBO Journal, 2006, 25, 24-33.	7.8	96

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19	Cryo-EM structures and functional characterization of murine Slc26a9 reveal mechanism of uncoupled chloride transport. ELife, 2019, 8, .	6.0	94
20	Structural basis of open channel block in a prokaryotic pentameric ligand-gated ion channel. Nature Structural and Molecular Biology, 2010, 17, 1330-1336.	8.2	91
21	Stepwise activation mechanism of the scramblase nhTMEM16 revealed by cryo-EM. ELife, 2019, 8, .	6.0	82
22	Independent activation of ion conduction pores in the double-barreled calcium-activated chloride channel TMEM16A. Journal of General Physiology, 2016, 148, 375-392.	1.9	75
23	The ClC family of chloride channels and transporters. Current Opinion in Structural Biology, 2006, 16, 439-446.	5.7	73
24	The Structure of the Cytoplasmic Domain of the Chloride Channel ClC-Ka Reveals a Conserved Interaction Interface. Structure, 2007, 15, 715-725.	3.3	72
25	Structural and mechanistic basis of proton-coupled metal ion transport in the SLC11/NRAMP family. Nature Communications, 2017, 8, 14033.	12.8	68
26	A prokaryotic perspective on pentameric ligand-gated ion channel structure. Current Opinion in Structural Biology, 2009, 19, 418-424.	5.7	61
27	Structural basis for phospholipid scrambling in the TMEM16 family. Current Opinion in Structural Biology, 2016, 39, 61-70.	5.7	61
28	Structural basis for ion conduction and gating in ClC chloride channels. FEBS Letters, 2004, 564, 229-233.	2.8	54
29	Translocation Mechanism of Long Sugar Chains across the Maltoporin Membrane Channel. Structure, 2002, 10, 1273-1284.	3.3	51
30	X-ray Structure of the C-Terminal Domain of a Prokaryotic Cation-Chloride Cotransporter. Structure, 2009, 17, 538-546.	3.3	49
31	A structural perspective on ClC channel and transporter function. FEBS Letters, 2007, 581, 2839-2844.	2.8	44
32	Inhibition of the Prokaryotic Pentameric Ligand-Gated Ion Channel ELIC by Divalent Cations. PLoS Biology, 2012, 10, e1001429.	5.6	44
33	Signal Transduction at the Domain Interface of Prokaryotic Pentameric Ligand-Gated Ion Channels. PLoS Biology, 2016, 14, e1002393.	5.6	41
34	Generation and Characterization of Anti-VGLUT Nanobodies Acting as Inhibitors of Transport. Biochemistry, 2017, 56, 3962-3971.	2.5	40
35	The structural basis of ClC chloride channel function. Trends in Neurosciences, 2004, 27, 315-320.	8.6	35
36	Calcium-dependent electrostatic control of anion access to the pore of the calcium-activated chloride channel TMEM16A. ELife, 2018, 7, .	6.0	35

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37	Gating the pore of the calcium-activated chloride channel TMEM16A. Nature Communications, 2021, 12, 785.	12.8	33
38	Alternative chloride transport pathways as pharmacological targets for the treatment of cystic fibrosis. Journal of Cystic Fibrosis, 2020, 19, S37-S41.	0.7	29
39	Cryo-EM structures and functional properties of CALHM channels of the human placenta. ELife, 2020, 9, .	6.0	26
40	Mechanism of pore opening in the calcium-activated chloride channel TMEM16A. Nature Communications, 2021, 12, 786.	12.8	22
41	Cryo-EM structures of the caspase-activated protein XKR9 involved in apoptotic lipid scrambling. ELife, 2021, 10, .	6.0	22
42	Functional characterization of a ClC transporter by solid-supported membrane electrophysiology. Journal of General Physiology, 2013, 141, 479-491.	1.9	19
43	The Cytoplasmic Domain of the Chloride Channel ClC-0: Structural and Dynamic Characterization of Flexible Regions. Journal of Molecular Biology, 2007, 369, 1163-1169.	4.2	17
44	Allosteric modulation of LRRC8 channels by targeting their cytoplasmic domains. Nature Communications, 2021, 12, 5435.	12.8	15
45	Mechanistic basis of the inhibition of SLC11/NRAMP-mediated metal ion transport by bis-isothiourea substituted compounds. ELife, 2019, 8, .	6.0	15
46	Cryo-EM structures of the TTYH family reveal a novel architecture for lipid interactions. Nature Communications, 2021, 12, 4893.	12.8	11
47	Inhibition mechanism of the chloride channel TMEM16A by the pore blocker 1PBC. Nature Communications, 2022, 13, 2798.	12.8	10
48	Structural and functional properties of a magnesium transporter of the SLC11/NRAMP family. ELife, 2022, 11, .	6.0	8
49	Regulators of cell volume: The structural and functional properties of anion channels of the LRRC8 family. Current Opinion in Structural Biology, 2022, 74, 102382.	5.7	8
50	Channels and Transporters. Chimia, 2010, 64, 662.	0.6	4
51	Independent Activation of Ion Conduction Pores in the Double-Barreled Ca 2+ -Activated Cl - Channel TMEM16A. Biophysical Journal, 2017, 112, 421a-422a.	0.5	0