## **Gerhard Thiel**

#### List of Publications by Citations

Source: https://exaly.com/author-pdf/3513420/gerhard-thiel-publications-by-citations.pdf

Version: 2024-04-09

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

166 papers

4,568 citations

37 h-index 59 g-index

187 ext. papers

5,080 ext. citations

5.5 avg, IF

5.23 L-index

#	Paper	IF	Citations
166	Reversible inactivation of K+ channels of Vicia stomatal guard cells following the photolysis of caged inositol 1,4,5-trisphosphate. <i>Nature</i> , <b>1990</b> , 346, 766-9	50.4	298
165	Abscisic acid triggers the endocytosis of the arabidopsis KAT1 K+ channel and its recycling to the plasma membrane. <i>Current Biology</i> , <b>2007</b> , 17, 1396-402	6.3	161
164	K+ channels of stomatal guard cells: bimodal control of the K+ inward-rectifier evoked by auxin. <i>Plant Journal</i> , <b>1994</b> , 5, 55-68	6.9	146
163	Membrane transport in stomatal guard cells: the importance of voltage control. <i>Journal of Membrane Biology</i> , <b>1992</b> , 126, 1-18	2.3	142
162	Endocytosis against high turgor: intact guard cells of Vicia faba constitutively endocytose fluorescently labelled plasma membrane and GFP-tagged K-channel KAT1. <i>Plant Journal</i> , <b>2004</b> , 39, 182-	<b>9</b> 39	133
161	Plant neurobiology: no brain, no gain?. Trends in Plant Science, 2007, 12, 135-6	13.1	118
160	Optogenetics. Engineering of a light-gated potassium channel. <i>Science</i> , <b>2015</b> , 348, 707-10	33.3	95
159	Tetramerization dynamics of C-terminal domain underlies isoform-specific cAMP gating in hyperpolarization-activated cyclic nucleotide-gated channels. <i>Journal of Biological Chemistry</i> , <b>2011</b> , 286, 44811-20	5.4	88
158	Vacuolar malate uptake is mediated by an anion-selective inward rectifier. <i>Plant Journal</i> , <b>2003</b> , 35, 116-2	2 <b>6</b> .9	85
157	Hormonal Control of Ion Channel Gating. Annual Review of Plant Biology, 1993, 44, 543-567		85
156	Trafficking of the plant potassium inward rectifier KAT1 in guard cell protoplasts of Vicia faba. <i>Plant Journal</i> , <b>2004</b> , 37, 391-7	6.9	74
155	Phosphatase antagonist okadaic acid inhibits steady-state K+ currents in guard cells of Vicia faba. <i>Plant Journal</i> , <b>1994</b> , 5, 727-733	6.9	71
154	Electrocoupling of ion transporters in plants. <i>Journal of Membrane Biology</i> , <b>1993</b> , 136, 327-32	2.3	66
153	Small potassium ion channel proteins encoded by chlorella viruses. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2004</b> , 101, 5318-24	11.5	65
152	Short-term Effects of Salinity Stress on the Turgor and Elongation of Growing Barley Leaves. Journal of Plant Physiology, <b>1988</b> , 132, 38-44	3.6	60
151	Guard cells elongate: relationship of volume and surface area during stomatal movement. Biophysical Journal, <b>2007</b> , 92, 1072-80	2.9	59
150	Osmotically evoked shrinking of guard-cell protoplasts causes vesicular retrieval of plasma membrane into the cytoplasm. <i>Planta</i> , <b>2000</b> , 210, 423-31	4.7	59

# (2006-2014)

149	Structural basis for the mutual antagonism of cAMP and TRIP8b in regulating HCN channel function. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 1457	7-82	57
148	Electron transport across the plasmalemma of Lemna gibba G1. <i>Planta</i> , <b>1986</b> , 169, 251-9	.7	57
147	Na+/H+ antiporters are differentially regulated in response to NaCl stress in leaves and roots of Mesembryanthemum crystallinum. <i>New Phytologist</i> , <b>2010</b> , 186, 669-80	.8	56
146	The potassium channel KAT1 is activated by plant and animal 14-3-3 proteins. <i>Journal of Biological Chemistry</i> , <b>2006</b> , 281, 35735-41	-4	53
145	Two functionally different vacuoles for static and dynamic purposes in one plant mesophyll leaf cell. <i>Plant Journal</i> , <b>2004</b> , 37, 294-300	.9	53
144	Unitary exocytotic and endocytotic events in guard-cell protoplasts during osmotically driven volume changes. <i>FEBS Letters</i> , <b>1999</b> , 460, 495-9	.8	53
143	The action potential in Chara: Ca2+ release from internal stores visualized by Mn2+-induced quenching of fura-dextran. <i>Plant Journal</i> , <b>1998</b> , 13, 167-175	.9	52
142	Electrically triggered all-or-none Ca(2)+-liberation during action potential in the giant alga Chara.  Journal of General Physiology, <b>2001</b> , 118, 11-22	-4	51
141	HCN1 mutation spectrum: from neonatal epileptic encephalopathy to benign generalized epilepsy and beyond. <i>Brain</i> , <b>2018</b> , 141, 3160-3178	1.2	48
140	Plants Neither Possess nor Require Consciousness. <i>Trends in Plant Science</i> , <b>2019</b> , 24, 677-687	3.1	47
139	Operation of K+-channels in stomatal movement. <i>Trends in Plant Science</i> , <b>1997</b> , 2, 339-345	3.1	47
138	Molecular properties of Kcv, a virus encoded K+ channel. <i>Biochemistry</i> , <b>2007</b> , 46, 1079-90 3.	.2	43
137	The proapoptotic influenza A virus protein PB1-F2 forms a nonselective ion channel. <i>PLoS ONE</i> , <b>2010</b> , 5, e11112	·7	42
136	Chlorella viruses evoke a rapid release of K+ from host cells during the early phase of infection.  Virology, 2008, 372, 340-8	.6	42
135	The viral potassium channel Kcv: structural and functional features. <i>FEBS Letters</i> , <b>2003</b> , 552, 12-6	.8	42
134	The number of K(+) channels in the plasma membrane of guard cell protoplasts changes in parallel with the surface area. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 10215-20	1.5	42
133	The voltage-sensing domain of a phosphatase gates the pore of a potassium channel. <i>Journal of General Physiology</i> , <b>2013</b> , 141, 389-95	-4	41
132	Chlorella virus MT325 encodes water and potassium channels that interact synergistically.  Proceedings of the National Academy of Sciences of the United States of America, <b>2006</b> , 103, 5355-60	1.5	41

131	Cyclic dinucleotides bind the C-linker of HCN4 to control channel cAMP responsiveness. <i>Nature Chemical Biology</i> , <b>2014</b> , 10, 457-62	11.7	40
130	Molecular dynamics simulation of the cytosolic mouth in Kcv-type potassium channels. <i>Biochemistry</i> , <b>2007</b> , 46, 4826-39	3.2	39
129	Ca(2)+-stimulated exocytosis in maize coleoptile cells. <i>Plant Cell</i> , <b>2000</b> , 12, 1127-36	11.6	37
128	The Mechanism of Ion Permeation through K+ Channels of Stomatal Guard Cells: Voltage-Dependent Block by Na+. <i>Journal of Plant Physiology</i> , <b>1991</b> , 138, 326-334	3.6	37
127	Selection of inhibitor-resistant viral potassium channels identifies a selectivity filter site that affects barium and amantadine block. <i>PLoS ONE</i> , <b>2009</b> , 4, e7496	3.7	37
126	Fast and slow gating are inherent properties of the pore module of the K+ channel Kcv. <i>Journal of General Physiology</i> , <b>2009</b> , 134, 219-29	3.4	36
125	Chlorella virus ATCV-1 encodes a functional potassium channel of 82 amino acids. <i>Biochemical Journal</i> , <b>2009</b> , 420, 295-303	3.8	36
124	Potassium ion channels of Chlorella viruses cause rapid depolarization of host cells during infection. <i>Journal of Virology</i> , <b>2006</b> , 80, 2437-44	6.6	36
123	Long distance interactions within the potassium channel pore are revealed by molecular diversity of viral proteins. <i>Journal of Biological Chemistry</i> , <b>2004</b> , 279, 28443-9	5.4	36
122	Ion channel activity of HIV-1 Vpu is dispensable for counteraction of CD317. Virology, 2011, 416, 75-85	3.6	35
121	Transmembrane domain length of viral K+ channels is a signal for mitochondria targeting.  Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 12313-8	11.5	35
120	The short N-terminus is required for functional expression of the virus-encoded miniature K(+) channel Kcv. <i>FEBS Letters</i> , <b>2002</b> , 530, 65-9	3.8	35
119	Calcium release from InsP3-sensitive internal stores initiates action potential in Chara. <i>FEBS Letters</i> , <b>1999</b> , 453, 72-6	3.8	35
118	Model development for the viral Kcv potassium channel. <i>Biophysical Journal</i> , <b>2009</b> , 96, 485-98	2.9	34
117	Effects of Salinity on the Extensibility and Ca Availability in the Expanding Region of Growing Barley Leaves. <i>Botanica Acta</i> , <b>1988</b> , 101, 355-361		34
116	Initial Events Associated with Virus PBCV-1 Infection of Chlorella NC64A. <i>Progress in Botany Fortschritte Der Botanik</i> , <b>2010</b> , 71, 169-183	0.6	34
115	Auxin augments conductance of K+ inward rectifier in maize coleoptile protoplasts. <i>Planta</i> , <b>1999</b> , 208, 38-45	4.7	32
114	Minimal art: or why small viral K(+) channels are good tools for understanding basic structure and function relations. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , <b>2011</b> , 1808, 580-8	3.8	31

### (2019-2007)

113	A plant homolog of animal chloride intracellular channels (CLICs) generates an ion conductance in heterologous systems. <i>Journal of Biological Chemistry</i> , <b>2007</b> , 282, 8786-92	5.4	31	
112	Possible function for virus encoded K+ channel Kcv in the replication of chlorella virus PBCV-1. <i>FEBS Letters</i> , <b>2003</b> , 552, 7-11	3.8	29	
111	A synthetic peptide that prevents cAMP regulation in mammalian hyperpolarization-activated cyclic nucleotide-gated (HCN) channels. <i>ELife</i> , <b>2018</b> , 7,	8.9	29	
110	Cl- and K+ channel currents during the action potential in Chara. Simultaneous recording of membrane voltage and patch currents. <i>Journal of Membrane Biology</i> , <b>1994</b> , 141, 297-309	2.3	27	
109	Microscopic elements of electrical excitation in Chara: transient activity of Cl- channels in the plasma membrane. <i>Journal of Membrane Biology</i> , <b>1993</b> , 134, 53-66	2.3	27	
108	A light-gated potassium channel for sustained neuronal inhibition. <i>Nature Methods</i> , <b>2018</b> , 15, 969-976	21.6	27	
107	High bandwidth approaches in nanopore and ion channel recordings⊞A tutorial review. <i>Analytica Chimica Acta</i> , <b>2019</b> , 1061, 13-27	6.6	25	
106	Chlorovirus-mediated membrane depolarization of Chlorella alters secondary active transport of solutes. <i>Journal of Virology</i> , <b>2008</b> , 82, 12181-90	6.6	25	
105	Fusicoccin Activates KAT1 Channels by Stabilizing Their Interaction with 14-3-3 Proteins. <i>Plant Cell</i> , <b>2017</b> , 29, 2570-2580	11.6	24	
104	Reconstitution and functional characterization of ion channels from nanodiscs in lipid bilayers. <i>Journal of General Physiology</i> , <b>2018</b> , 150, 637-646	3.4	24	
103	Chlorella viruses prevent multiple infections by depolarizing the host membrane. <i>Journal of General Virology</i> , <b>2009</b> , 90, 2033-2039	4.9	24	
102	Raising the cytosolic Ca2+ concentration increases the membrane capacitance of maize coleoptile protoplasts: Evidence for Ca2+-stimulated exocytosis. <i>Planta</i> , <b>1994</b> , 195, 305	4.7	23	
101	Viral potassium channels as a robust model system for studies of membrane-protein interaction. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , <b>2014</b> , 1838, 1096-103	3.8	22	
100	Decrease of Markers Related to Bone Erosion in Serum of Patients with Musculoskeletal Disorders after Serial Low-Dose Radon Spa Therapy. <i>Frontiers in Immunology</i> , <b>2017</b> , 8, 882	8.4	21	
99	Proteomic analysis of Mesembryanthemum crystallinum leaf microsomal fractions finds an imbalance in V-ATPase stoichiometry during the salt-induced transition from C3 to CAM. <i>Biochemical Journal</i> , <b>2013</b> , 450, 407-15	3.8	21	
98	Transmembrane Ferricyanide Reduction and Membrane Properties in the Euryhaline CharophyteLamprothamnium papulosum. <i>Journal of Experimental Botany</i> , <b>1988</b> , 39, 641-654	7	21	
97	Structural organization of DNA in chlorella viruses. <i>PLoS ONE</i> , <b>2012</b> , 7, e30133	3.7	21	
96	The HCN domain couples voltage gating and cAMP response in hyperpolarization-activated cyclic nucleotide-gated channels. <i>ELife</i> , <b>2019</b> , 8,	8.9	21	

95	Functional HAK/KUP/KT-like potassium transporter encoded by chlorella viruses. <i>Plant Journal</i> , <b>2011</b> , 68, 977-86	6.9	20
94	Salt bridges in the miniature viral channel Kcv are important for function. <i>European Biophysics Journal</i> , <b>2010</b> , 39, 1057-68	1.9	20
93	Ca 2+ -Stimulated Exocytosis in Maize Coleoptile Cells. <i>Plant Cell</i> , <b>2000</b> , 12, 1127	11.6	20
92	A virus-encoded potassium ion channel is a structural protein in the chlorovirus Paramecium bursaria chlorella virus 1 virion. <i>Journal of General Virology</i> , <b>2013</b> , 94, 2549-2556	4.9	19
91	Genetic diversity in chlorella viruses flanking kcv, a gene that encodes a potassium ion channel protein. <i>Virology</i> , <b>2004</b> , 326, 150-9	3.6	19
90	KAT1 inactivates at sub-millimolar concentrations of external potassium. <i>Journal of Experimental Botany</i> , <b>2005</b> , 56, 3103-10	7	18
89	Ca-sensitive and Ca-insensitive exocytosis in maize coleoptile protoplasts. <i>Pflugers Archiv European Journal of Physiology</i> , <b>2000</b> , 439, r152-r153	4.6	18
88	Pseudo painting/air bubble technique for planar lipid bilayers. <i>Journal of Neuroscience Methods</i> , <b>2014</b> , 233, 13-7	3	17
87	Structure-function relation of phospholamban: modulation of channel activity as a potential regulator of SERCA activity. <i>PLoS ONE</i> , <b>2013</b> , 8, e52744	3.7	17
86	Rhythmic kinetics of single fusion and fission in a plant cell protoplast. <i>Annals of the New York Academy of Sciences</i> , <b>2009</b> , 1152, 1-6	6.5	17
85	Identification of Intrahelical Bifurcated H-Bonds as a New Type of Gate in K Channels. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 7494-7503	16.4	16
84	Mutation in S6 domain of HCN4 channel in patient with suspected Brugada syndrome modifies channel function. <i>Pflugers Archiv European Journal of Physiology</i> , <b>2016</b> , 468, 1663-71	4.6	16
83	Phospholamban generates cation selective ion channels. <i>Physical Chemistry Chemical Physics</i> , <b>2011</b> , 13, 12935-9	3.6	16
82	Membrane anchoring and interaction between transmembrane domains are crucial for K+ channel function. <i>Journal of Biological Chemistry</i> , <b>2011</b> , 286, 11299-306	5.4	16
81	Unitary exocytotic and endocytotic events in Zea mays L. coleoptile protoplasts. <i>Plant Journal</i> , <b>2002</b> , 13, 117-120	6.9	16
80	Characean Algae: Still a Valid Model System to Examine Fundamental Principles in Plants. <i>Progress in Botany Fortschritte Der Botanik</i> , <b>2007</b> , 193-220	0.6	16
79	Ionizing Radiation Induces Morphological Changes and Immunological Modulation of Jurkat Cells. <i>Frontiers in Immunology</i> , <b>2018</b> , 9, 922	8.4	15
78	Potassium ion channels: could they have evolved from viruses?. <i>Plant Physiology</i> , <b>2013</b> , 162, 1215-24	6.6	15

# (2018-2001)

77	Cytochalasin D attenuates the desensitisation of pressure-stimulated vesicle fusion in guard cell protoplasts. <i>European Journal of Cell Biology</i> , <b>2001</b> , 80, 521-6	6.1	15
76	A reduced mechanical model for cAMP-modulated gating in HCN channels. <i>Scientific Reports</i> , <b>2017</b> , 7, 40168	4.9	14
75	Mechanical transduction of cytoplasmic-to-transmembrane-domain movements in a hyperpolarization-activated cyclic nucleotide-gated cation channel. <i>Journal of Biological Chemistry</i> , <b>2018</b> , 293, 12908-12918	5.4	14
74	Fluorescent detection of fluid phase endocytosis allows for in vivo estimation of endocytic vesicle sizes in plant cells with sub-diffraction accuracy. <i>Traffic</i> , <b>2010</b> , 11, 548-59	5.7	14
73	Effect of cytosolic pH on inward currents reveals structural characteristics of the proton transport cycle in the influenza A protein M2 in cell-free membrane patches of Xenopus oocytes. <i>PLoS ONE</i> , <b>2014</b> , 9, e107406	3.7	14
72	Reply to Trewavas et al. and Calvo and Trewavas. <i>Trends in Plant Science</i> , <b>2020</b> , 25, 218-220	13.1	14
71	Noninvasive Measurement of Electrical Events Associated with a Single Chlorovirus Infection of a Microalgal Cell. <i>ACS Nano</i> , <b>2016</b> , 10, 5123-30	16.7	14
7º	The small neurotoxin apamin blocks not only small conductance Ca activated K channels (SK type) but also the voltage dependent Kv1.3 channel. <i>European Biophysics Journal</i> , <b>2017</b> , 46, 517-523	1.9	13
69	High-resolution membrane capacitance measurements for studying endocytosis and exocytosis in yeast. <i>Traffic</i> , <b>2015</b> , 16, 760-72	5.7	13
68	Dynamic attachment of Chlorovirus PBCV-1 to Chlorella variabilis. <i>Virology</i> , <b>2014</b> , 466-467, 95-102	3.6	13
67	Viruses infecting marine picoplancton encode functional potassium ion channels. <i>Virology</i> , <b>2014</b> , 466-467, 103-11	3.6	13
66	Phycodnavirus potassium ion channel proteins question the virus molecular piracy hypothesis. <i>PLoS ONE</i> , <b>2012</b> , 7, e38826	3.7	13
65	Na+/H+-transporter, H+-pumps and an aquaporin in light and heavy tonoplast membranes from organic acid and NaCl accumulating vacuoles of the annual facultative CAM plant and halophyte Mesembryanthemum crystallinum L. <i>Planta</i> , <b>2006</b> , 224, 944-51	4.7	13
64	A functional calcium-transporting ATPase encoded by chlorella viruses. <i>Journal of General Virology</i> , <b>2010</b> , 91, 2620-9	4.9	12
63	The absence of an early calcium response to heavy-ion radiation in Mammalian cells. <i>Radiation Research</i> , <b>2008</b> , 170, 316-26	3.1	12
62	Elongation of outer transmembrane domain alters function of miniature K+ channel Kcv. <i>Journal of Membrane Biology</i> , <b>2006</b> , 210, 21-9	2.3	12
61	Intracellular axial current in Chara corallina reflects the altered kinetics of ions in cytoplasm under the influence of light. <i>Biophysical Journal</i> , <b>2005</b> , 88, 690-7	2.9	12
60	Genes for Membrane Transport Proteins: Not So Rare in Viruses. <i>Viruses</i> , <b>2018</b> , 10,	6.2	12

59	Low-dose photon irradiation alters cell differentiation via activation of hIK channels. <i>Pflugers Archiv European Journal of Physiology</i> , <b>2015</b> , 467, 1835-49	4.6	11
58	X-ray irradiation activates K+ channels via H2O2 signaling. <i>Scientific Reports</i> , <b>2015</b> , 5, 13861	4.9	11
57	Mutation in pore domain uncovers cation- and voltage-sensitive recovery from inactivation in KAT1 channel. <i>Biophysical Journal</i> , <b>2000</b> , 78, 1862-71	2.9	11
56	Lipid determinants of endocytosis and exocytosis in budding yeast. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , <b>2019</b> , 1864, 1005-1016	5	10
55	The sorting of a small potassium channel in mammalian cells can be shifted between mitochondria and plasma membrane. <i>Cell Calcium</i> , <b>2015</b> , 58, 114-21	4	10
54	Structural basis for ion selectivity in TMEM175 K channels. <i>ELife</i> , <b>2020</b> , 9,	8.9	10
53	Influence of genetic modifiers on sudden cardiac death cases. <i>International Journal of Legal Medicine</i> , <b>2018</b> , 132, 379-385	3.1	10
52	Cotranslational Intersection between the SRP and GET Targeting Pathways to the Endoplasmic Reticulum of Saccharomyces cerevisiae. <i>Molecular and Cellular Biology</i> , <b>2016</b> , 36, 2374-83	4.8	9
51	p-CMBS Modifies Extrafacial Sulfhydryl Groups at the Chara Plasma Membrane: Activation of Ca2+Influx and Inhibition of Two Different K+ Currents. <i>Botanica Acta</i> , <b>1991</b> , 104, 345-354		9
50	Extended beta distributions open the access to fast gating in bilayer experiments-assigning the voltage-dependent gating to the selectivity filter. <i>FEBS Letters</i> , <b>2017</b> , 591, 3850-3860	3.8	8
49	A minimalist model for ion partitioning and competition in a K+ channel selectivity filter. <i>Journal of General Physiology</i> , <b>2011</b> , 138, 371-3	3.4	8
48	Ca2+ Mobilization from Internal Stores in Electrical Membrane Excitation in Chara. <i>Progress in Botany Fortschritte Der Botanik</i> , <b>2003</b> , 217-233	0.6	8
47	Gating movements and ion permeation in HCN4 pacemaker channels. <i>Molecular Cell</i> , <b>2021</b> , 81, 2929-294	13 <del>,</del> e6	8
46	Membrane capacitance recordings resolve dynamics and complexity of receptor-mediated endocytosis in Wnt signalling. <i>Scientific Reports</i> , <b>2019</b> , 9, 12999	4.9	7
45	Vesicle fusion and fission in plants and yeast. <i>Cell Calcium</i> , <b>2017</b> , 67, 40-45	4	7
44	Relevance of lysine snorkeling in the outer transmembrane domain of small viral potassium ion channels. <i>Biochemistry</i> , <b>2012</b> , 51, 5571-9	3.2	7
43	Ca2+ block and flickering both contribute to the negative slope of the IV curve in BK channels. <i>Journal of General Physiology</i> , <b>2013</b> , 141, 499-505	3.4	7
42	Dynamics of chloride and potassium currents during the action potential in Chara studied with action potential clamp. <i>European Biophysics Journal</i> , <b>1995</b> , 24, 85	1.9	7

### (2015-1993)

41	Characterization of ion channels from Acetabularia plasma membrane in planar lipid bilayers. Journal of Membrane Biology, <b>1993</b> , 133, 145-60	2.3	7
40	Viral membrane proteins. <i>European Biophysics Journal</i> , <b>2010</b> , 39, 1041-2	1.9	6
39	Heterologous expression and purification of an active human TRPV3 ion channel. <i>FEBS Journal</i> , <b>2013</b> , 280, 6010-21	5.7	5
38	Electrokinetics of miniature K+ channel: open-state V sensitivity and inhibition by K+ driving force. <i>Journal of Membrane Biology</i> , <b>2006</b> , 214, 9-17	2.3	5
37	cyclic AMP Regulation and Its Command in the Pacemaker Channel HCN4. <i>Frontiers in Physiology</i> , <b>2020</b> , 11, 771	4.6	5
36	Ion Channel Activity of Vpu Proteins Is Conserved throughout Evolution of HIV-1 and SIV. <i>Viruses</i> , <b>2016</b> , 8,	6.2	5
35	Distinct lipid bilayer compositions have general and protein-specific effects on K+ channel function. Journal of General Physiology, <b>2021</b> , 153,	3.4	5
34	A small viral potassium ion channel with an inherent inward rectification. <i>Channels</i> , <b>2019</b> , 13, 124-135	3	4
33	Large dsDNA chloroviruses encode diverse membrane transport proteins. <i>Virology</i> , <b>2015</b> , 479-480, 38-4	153.6	4
32	Synthesis of vesicle cargo determines amplitude of Ca(2+)-sensitive exocytosis. <i>Cell Calcium</i> , <b>2012</b> , 52, 283-8	4	4
31	Ferri- and Ferrocyanide Salts Change the Current/Voltage Relations of Chara corallina: No Correlation with the Transmembrane Redox System. <i>Journal of Experimental Botany</i> , <b>1990</b> , 41, 1559-15	65	4
30	Electrophysiology of Stomata <b>1994</b> , 59-78		4
29	Coupling of a viral K-channel with a glutamate-binding-domain highlights the modular design of ionotropic glutamate-receptors. <i>Communications Biology</i> , <b>2019</b> , 2, 75	6.7	4
28	K+ outward rectifying channels as targets of phosphatase inhibitor deltamethrin inVicia faba guard cells. <i>Journal of Plant Physiology</i> , <b>2002</b> , 159, 1097-1103	3.6	3
27	Redox-state of intactNitella cells: dependency on intracellular pH and photosynthesis. <i>Protoplasma</i> , <b>1994</b> , 179, 26-33	3.4	3
26	Cell-free electrophysiology of human VDACs incorporated into nanodiscs: An improved method. <i>Biophysical Reports</i> , <b>2021</b> , 1, None		3
25	Photolithographic Fabrication of Micro Apertures in Dry Film Polymer Sheets for Channel Recordings in Planar Lipid Bilayers. <i>Journal of Membrane Biology</i> , <b>2019</b> , 252, 173-182	2.3	2
24	Engineering a Ca+++-sensitive (bio)sensor from the pore-module of a potassium channel. <i>Sensors</i> , <b>2015</b> , 15, 4913-24	3.8	2

23	Genetic Diversity of Potassium Ion Channel Proteins Encoded by Chloroviruses That Infect. <i>Viruses</i> , <b>2020</b> , 12,	6.2	2
22	Characterization of a novel KCNJ2 sequence variant detected in Andersen-Tawil syndrome patients. <i>BMC Medical Genetics</i> , <b>2017</b> , 18, 113	2.1	2
21	Clustering of giant virus-DNA based on variations in local entropy. Viruses, 2014, 6, 2259-67	6.2	2
20	Creation of a reactive oxygen species-insensitive Kcv channel. <i>Biochemistry</i> , <b>2013</b> , 52, 3130-7	3.2	2
19	Extracellular hexacyanoferrate III inhibits cytoplasmic streaming in the alga Lamprothamnium papulosum. <i>New Phytologist</i> , <b>1990</b> , 115, 587-594	9.8	2
18	Structural basis for ion selectivity in TMEM175 K+ channels		2
17	A Functional K Channel from Tetraselmis Virus 1, a Member of the. Viruses, 2020, 12,	6.2	2
16	Yeast-Based Screening System for the Selection of Functional Light-Driven K Channels. <i>Methods in Molecular Biology</i> , <b>2017</b> , 1596, 271-285	1.4	1
15	Conversion of an instantaneous activating K channel into a slow activating inward rectifier. <i>FEBS Letters</i> , <b>2017</b> , 591, 295-303	3.8	1
14	Selectivity of the phospholamban ion channel investigated by single channel measurements. <i>Journal of Electroanalytical Chemistry</i> , <b>2018</b> , 812, 244-248	4.1	1
13	Experimental challenges in ion channel research: uncovering basic principles of permeation and gating in potassium channels. <i>Advances in Physics: X</i> , <b>2022</b> , 7,	5.1	1
12	Asymmetric Interplay Between K and Blocker and Atomistic Parameters From Physiological Experiments Quantify K Channel Blocker Release. <i>Frontiers in Physiology</i> , <b>2021</b> , 12, 737834	4.6	1
11	Magnetic Measurements in Plant Electrophysiology <b>2006</b> , 187-218		1
10	Characterization of an N-terminal Na1.5 channel variant - a potential risk factor for arrhythmias and sudden death?. <i>BMC Medical Genetics</i> , <b>2020</b> , 21, 227	2.1	1
9	The mutation L69P in the PAS domain of the hERG potassium channel results in LQTS by trafficking deficiency. <i>Channels</i> , <b>2020</b> , 14, 163-174	3	0
8	Exocytosis in plants <b>1998</b> , 111-125		O
7	Combining in vitro translation with nanodisc technology and functional reconstitution of channels in planar lipid bilayers. <i>Methods in Enzymology</i> , <b>2021</b> , 652, 293-318	1.7	0
6	Role of ion distribution and energy barriers for concerted motion of subunits in selectivity filter gating of a K channel <i>Journal of Molecular Biology</i> , <b>2022</b> , 167522	6.5	O

#### LIST OF PUBLICATIONS

5 Ion channels as functional components in sensors of biomedical information **2005**, 463-478

- Ca2+-sensitive and Ca2+-insensitive exocytosis in maize coleoptile protoplasts. *Pflugers Archiv European Journal of Physiology*, **2000**, 439, R152-R153

  Structure and Function of a Viral Encoded K+ Channel **2005**, 21-32

  Inferring functional units in ion channel pores via relative entropy. *European Biophysics Journal*, 2021, 50, 37-57
- Vesicle Traffic and Plasma Membrane Transport **2018**, 313-327