

Gerhard Thiel

List of Publications by Year in descending order

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177
papers

5,597
citations

76326

40
h-index

110387

64
g-index

187
all docs

187
docs citations

187
times ranked

4587
citing authors

#	ARTICLE	IF	CITATIONS
1	Reversible inactivation of K ⁺ channels of <i>Vicia</i> stomatal guard cells following the photolysis of caged inositol 1,4,5-trisphosphate. <i>Nature</i> , 1990, 346, 766-769.	27.8	324
2	Membrane transport in stomatal guard cells: The importance of voltage control. <i>Journal of Membrane Biology</i> , 1992, 126, 1-18.	2.1	185
3	Abscisic Acid Triggers the Endocytosis of the Arabidopsis KAT1 K ⁺ Channel and Its Recycling to the Plasma Membrane. <i>Current Biology</i> , 2007, 17, 1396-1402.	3.9	184
4	K ⁺ channels of stomatal guard cells: bimodal control of the K ⁺ inward-rectifier evoked by auxin. <i>Plant Journal</i> , 1994, 5, 55-68.	5.7	163
5	Plant neurobiology: no brain, no gain?. <i>Trends in Plant Science</i> , 2007, 12, 135-136.	8.8	146
6	Endocytosis against high turgor: intact guard cells of <i>Vicia faba</i> constitutively endocytose fluorescently labelled plasma membrane and GFP-tagged K ⁺ -channel KAT1. <i>Plant Journal</i> , 2004, 39, 182-193.	5.7	139
7	Engineering of a light-gated potassium channel. <i>Science</i> , 2015, 348, 707-710.	12.6	133
8	Hormonal Control of Ion Channel Gating. <i>Annual Review of Plant Biology</i> , 1993, 44, 543-567.	14.3	108
9	Tetramerization Dynamics of C-terminal Domain Underlies Isoform-specific cAMP Gating in Hyperpolarization-activated Cyclic Nucleotide-gated Channels. <i>Journal of Biological Chemistry</i> , 2011, 286, 44811-44820.	3.4	101
10	<i>HCN1</i> mutation spectrum: from neonatal epileptic encephalopathy to benign generalized epilepsy and beyond. <i>Brain</i> , 2018, 141, 3160-3178.	7.6	96
11	Electrocoupling of ion transporters in plants. <i>Journal of Membrane Biology</i> , 1993, 136, 327-32.	2.1	90
12	Vacuolar malate uptake is mediated by an anion-selective inward rectifier. <i>Plant Journal</i> , 2003, 35, 116-128.	5.7	90
13	Guard Cells Elongate: Relationship of Volume and Surface Area during Stomatal Movement. <i>Biophysical Journal</i> , 2007, 92, 1072-1080.	0.5	85
14	Phosphatase antagonist okadaic acid inhibits steady-state K ⁺ currents in guard cells of <i>Vicia faba</i> . <i>Plant Journal</i> , 1994, 5, 727-733.	5.7	79
15	Trafficking of the plant potassium inward rectifier KAT1 in guard cell protoplasts of <i>Vicia faba</i> . <i>Plant Journal</i> , 2004, 37, 391-397.	5.7	77
16	Plants Neither Possess nor Require Consciousness. <i>Trends in Plant Science</i> , 2019, 24, 677-687.	8.8	75
17	Small potassium ion channel proteins encoded by chlorella viruses. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 5318-5324.	7.1	69
18	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> , 2014, 111, 14577-14582.	7.1	68

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19	Osmotically evoked shrinking of guard-cell protoplasts causes vesicular retrieval of plasma membrane into the cytoplasm. <i>Planta</i> , 2000, 210, 423-431.	3.2	65
20	Short-term Effects of Salinity Stress on the Turgor and Elongation of Growing Barley Leaves. <i>Journal of Plant Physiology</i> , 1988, 132, 38-44.	3.5	64
21	Two functionally different vacuoles for static and dynamic purposes in one plant mesophyll leaf cell. <i>Plant Journal</i> , 2004, 37, 294-300.	5.7	61
22	Electron transport across the plasmalemma of <i>Lemna gibba</i> G1. <i>Planta</i> , 1986, 169, 251-259.	3.2	60
23	The Potassium Channel KAT1 Is Activated by Plant and Animal 14-3-3 Proteins. <i>Journal of Biological Chemistry</i> , 2006, 281, 35735-35741.	3.4	59
24	Na ⁺ /H ⁺ antiporters are differentially regulated in response to NaCl stress in leaves and roots of <i>Mesembryanthemum crystallinum</i> . <i>New Phytologist</i> , 2010, 186, 669-680.	7.3	59
25	The action potential in <i>Chara</i> : Ca ²⁺ release from internal stores visualized by Mn ²⁺ -induced quenching of fura ² -dextran. <i>Plant Journal</i> , 1998, 13, 167-175.	5.7	57
26	Unitary exocytotic and endocytotic events in guard-cell protoplasts during osmotically driven volume changes. <i>FEBS Letters</i> , 1999, 460, 495-499.	2.8	57
27	The Proapoptotic Influenza A Virus Protein PB1-F2 Forms a Nonselective Ion Channel. <i>PLoS ONE</i> , 2010, 5, e11112.	2.5	55
28	Operation of K ⁺ -channels in stomatal movement. <i>Trends in Plant Science</i> , 1997, 2, 339-345.	8.8	52
29	Electrically Triggered All-or-None Ca ²⁺ -Liberation during Action Potential in the Giant Alga <i>Chara</i> . <i>Journal of General Physiology</i> , 2001, 118, 11-22.	1.9	52
30	The voltage-sensing domain of a phosphatase gates the pore of a potassium channel. <i>Journal of General Physiology</i> , 2013, 141, 389-395.	1.9	50
31	Cyclic dinucleotides bind the C-linker of HCN4 to control channel cAMP responsiveness. <i>Nature Chemical Biology</i> , 2014, 10, 457-462.	8.0	50
32	<i>Chlorella</i> viruses evoke a rapid release of K ⁺ from host cells during the early phase of infection. <i>Virology</i> , 2008, 372, 340-348.	2.4	48
33	The viral potassium channel Kcv: structural and functional features. <i>FEBS Letters</i> , 2003, 552, 12-16.	2.8	47
34	Molecular Properties of Kcv, a Virus Encoded K ⁺ Channel. <i>Biochemistry</i> , 2007, 46, 1079-1090.	2.5	47
35	A light-gated potassium channel for sustained neuronal inhibition. <i>Nature Methods</i> , 2018, 15, 969-976.	19.0	47
36	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> , 2002, 99, 10215-10220.	7.1	46

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37	Potassium Ion Channels of Chlorella Viruses Cause Rapid Depolarization of Host Cells during Infection. <i>Journal of Virology</i> , 2006, 80, 2437-2444.	3.4	45
38	The HCN domain couples voltage gating and cAMP response in hyperpolarization-activated cyclic nucleotide-gated channels. <i>ELife</i> , 2019, 8, .	6.0	45
39	Calcium release from InsP3-sensitive internal stores initiates action potential in Chara. <i>FEBS Letters</i> , 1999, 453, 72-76.	2.8	44
40	Chlorella virus MT325 encodes water and potassium channels that interact synergistically. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 5355-5360.	7.1	43
41	A synthetic peptide that prevents cAMP regulation in mammalian hyperpolarization-activated cyclic nucleotide-gated (HCN) channels. <i>ELife</i> , 2018, 7, .	6.0	43
42	The Mechanism of Ion Permeation through K ⁺ Channels of Stomatal Guard Cells: Voltage-Dependent Block by Na ⁺ . <i>Journal of Plant Physiology</i> , 1991, 138, 326-334.	3.5	42
43	Microscopic elements of electrical excitation in Chara: Transient activity of Cl ⁻ channels in the plasma membrane. <i>Journal of Membrane Biology</i> , 1993, 134, 53-66.	2.1	42
44	Selection of Inhibitor-Resistant Viral Potassium Channels Identifies a Selectivity Filter Site that Affects Barium and Amantadine Block. <i>PLoS ONE</i> , 2009, 4, e7496.	2.5	42
45	Transmembrane domain length of viral K ⁺ channels is a signal for mitochondria targeting. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 12313-12318.	7.1	41
46	Gating movements and ion permeation in HCN4 pacemaker channels. <i>Molecular Cell</i> , 2021, 81, 2929-2943.e6.	9.7	41
47	Effects of Salinity on the Extensibility and Ca Availability in the Expanding Region of Growing Barley Leaves. <i>Botanica Acta</i> , 1988, 101, 355-361.	1.6	40
48	Ca ²⁺ -Stimulated Exocytosis in Maize Coleoptile Cells. <i>Plant Cell</i> , 2000, 12, 1127-1136.	6.6	40
49	Molecular Dynamics Simulation of the Cytosolic Mouth in Kcv-Type Potassium Channels. <i>Biochemistry</i> , 2007, 46, 4826-4839.	2.5	40
50	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> , 1994, 141, 297-309.	2.1	39
51	The short N-terminus is required for functional expression of the virus-encoded miniature K ⁺ channel Kcv. <i>FEBS Letters</i> , 2002, 530, 65-69.	2.8	39
52	A Plant Homolog of Animal Chloride Intracellular Channels (CLICs) Generates an Ion Conductance in Heterologous Systems. <i>Journal of Biological Chemistry</i> , 2007, 282, 8786-8792.	3.4	39
53	High bandwidth approaches in nanopore and ion channel recordings—tutorial review. <i>Analytica Chimica Acta</i> , 2019, 1061, 13-27.	5.4	39
54	Long Distance Interactions within the Potassium Channel Pore Are Revealed by Molecular Diversity of Viral Proteins. <i>Journal of Biological Chemistry</i> , 2004, 279, 28443-28449.	3.4	38

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55	Chlorella virus ATCV-1 encodes a functional potassium channel of 82 amino acids. <i>Biochemical Journal</i> , 2009, 420, 295-305.	3.7	38
56	Initial Events Associated with Virus PBCV-1 Infection of Chlorella NC64A. <i>Progress in Botany Fortschritte Der Botanik</i> , 2010, 71, 169-183.	0.3	38
57	Fast and slow gating are inherent properties of the pore module of the K ⁺ channel Kcv. <i>Journal of General Physiology</i> , 2009, 134, 219-229.	1.9	37
58	Auxin augments conductance of K ⁺ inward rectifier in maize coleoptile protoplasts. <i>Planta</i> , 1999, 208, 38-45.	3.2	36
59	Raising the cytosolic Ca ²⁺ concentration increases the membrane capacitance of maize coleoptile protoplasts: Evidence for Ca ²⁺ -stimulated exocytosis. <i>Planta</i> , 1994, 195, 305.	3.2	35
60	Model Development for the Viral Kcv Potassium Channel. <i>Biophysical Journal</i> , 2009, 96, 485-498.	0.5	35
61	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> , 2011, 1808, 580-588.	2.6	35
62	Ion channel activity of HIV-1 Vpu is dispensable for counteraction of CD317. <i>Virology</i> , 2011, 416, 75-85.	2.4	35
63	Fusicoccin Activates KAT1 Channels by Stabilizing their Interaction with 14-3-3- Proteins. <i>Plant Cell</i> , 2017, 29, tpc.00375.2017.	6.6	34
64	Reconstitution and functional characterization of ion channels from nanodiscs in lipid bilayers. <i>Journal of General Physiology</i> , 2018, 150, 637-646.	1.9	34
65	Possible function for virus encoded K ⁺ channel Kcv in the replication of chlorella virus PBCV-1. <i>FEBS Letters</i> , 2003, 552, 7-11.	2.8	31
66	Chlorovirus-Mediated Membrane Depolarization of <i>Chlorella</i> Alters Secondary Active Transport of Solutes. <i>Journal of Virology</i> , 2008, 82, 12181-12190.	3.4	29
67	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> , 2017, 8, 882.	4.8	29
68	Proteomic analysis of <i>Mesembryanthemum crystallinum</i> leaf microsomal fractions finds an imbalance in V-ATPase stoichiometry during the salt-induced transition from C3 to CAM. <i>Biochemical Journal</i> , 2013, 450, 407-415.	3.7	28
69	Viral potassium channels as a robust model system for studies of membrane-protein interaction. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2014, 1838, 1096-1103.	2.6	28
70	Chlorella viruses prevent multiple infections by depolarizing the host membrane. <i>Journal of General Virology</i> , 2009, 90, 2033-2039.	2.9	27
71	Structural basis for ion selectivity in TMEM175 K ⁺ channels. <i>ELife</i> , 2020, 9, .	6.0	27
72	Unitary exocytotic and endocytotic events in Zea mays L. coleoptile protoplasts. <i>Plant Journal</i> , 2002, 13, 117-120.	5.7	25

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73	Mutation in S6 domain of HCN4 channel in patient with suspected Brugada syndrome modifies channel function. <i>Pflügers Archiv European Journal of Physiology</i> , 2016, 468, 1663-1671.	2.8	25
74	Mechanical transduction of cytoplasmic-to-transmembrane-domain movements in a hyperpolarization-activated cyclic nucleotide-gated cation channel. <i>Journal of Biological Chemistry</i> , 2018, 293, 12908-12918.	3.4	25
75	Ionizing Radiation Induces Morphological Changes and Immunological Modulation of Jurkat Cells. <i>Frontiers in Immunology</i> , 2018, 9, 922.	4.8	25
76	Structural Organization of DNA in Chlorella Viruses. <i>PLoS ONE</i> , 2012, 7, e30133.	2.5	24
77	Transmembrane Ferricyanide Reduction and Membrane Properties in the Euryhaline Charophyte <i>Lamprothamnium papulosum</i> . <i>Journal of Experimental Botany</i> , 1988, 39, 641-654.	4.8	23
78	Pseudo painting/air bubble technique for planar lipid bilayers. <i>Journal of Neuroscience Methods</i> , 2014, 233, 13-17.	2.5	23
79	Ca-sensitive and Ca ²⁺ -insensitive exocytosis in maize coleoptile protoplasts. <i>Pflügers Archiv European Journal of Physiology</i> , 2000, 439, r152-r153.	2.8	22
80	Ca ²⁺ -Stimulated Exocytosis in Maize Coleoptile Cells. <i>Plant Cell</i> , 2000, 12, 1127.	6.6	22
81	Functional HAK/KUP/KT-like potassium transporter encoded by chlorella viruses. <i>Plant Journal</i> , 2011, 68, 977-986.	5.7	22
82	Lipid determinants of endocytosis and exocytosis in budding yeast. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2019, 1864, 1005-1016.	2.4	22
83	Salt bridges in the miniature viral channel Kcv are important for function. <i>European Biophysics Journal</i> , 2010, 39, 1057-1068.	2.2	21
84	A virus-encoded potassium ion channel is a structural protein in the chlorovirus <i>Paramecium bursaria chlorella virus 1</i> virion. <i>Journal of General Virology</i> , 2013, 94, 2549-2556.	2.9	21
85	Structure-Function Relation of Phospholamban: Modulation of Channel Activity as a Potential Regulator of SERCA Activity. <i>PLoS ONE</i> , 2013, 8, e52744.	2.5	20
86	Genetic diversity in chlorella viruses flanking kcv, a gene that encodes a potassium ion channel protein. <i>Virology</i> , 2004, 326, 150-159.	2.4	19
87	KAT1 inactivates at sub-millimolar concentrations of external potassium. <i>Journal of Experimental Botany</i> , 2005, 56, 3103-3110.	4.8	19
88	Membrane Anchoring and Interaction between Transmembrane Domains are Crucial for K ⁺ Channel Function. <i>Journal of Biological Chemistry</i> , 2011, 286, 11299-11306.	3.4	19
89	Potassium Ion Channels: Could They Have Evolved from Viruses?. <i>Plant Physiology</i> , 2013, 162, 1215-1224.	4.8	19
90	A reduced mechanical model for cAMP-modulated gating in HCN channels. <i>Scientific Reports</i> , 2017, 7, 40168.	3.3	19

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91	Characean Algae: Still a Valid Model System to Examine Fundamental Principles in Plants. Progress in Botany Fortschritte Der Botanik, 2007, , 193-220.	0.3	19
92	Intracellular Axial Current in Chara corallina Reflects the Altered Kinetics of Ions in Cytoplasm under the Influence of Light. Biophysical Journal, 2005, 88, 690-697.	0.5	18
93	Rhythmic Kinetics of Single Fusion and Fission in a Plant Cell Protoplast. Annals of the New York Academy of Sciences, 2009, 1152, 1-6.	3.8	18
94	A functional calcium-transporting ATPase encoded by chlorella viruses. Journal of General Virology, 2010, 91, 2620-2629.	2.9	18
95	Phospholamban generates cation selective ion channels. Physical Chemistry Chemical Physics, 2011, 13, 12935.	2.8	18
96	Exocytosis in plants. , 1998, , 111-125.		17
97	Identification of Intrahelical Bifurcated H-Bonds as a New Type of Gate in K ⁺ Channels. Journal of the American Chemical Society, 2017, 139, 7494-7503.	13.7	17
98	Genes for Membrane Transport Proteins: Not So Rare in Viruses. Viruses, 2018, 10, 456.	3.3	17
99	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. PLoS ONE, 2014, 9, e107406.	2.5	17
100	Dynamics of chloride and potassium currents during the action potential in Chara studied with action potential clamp. European Biophysics Journal, 1995, 24, 85.	2.2	16
101	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.. Planta, 2006, 224, 944-951.	3.2	16
102	Dynamic attachment of Chlorovirus PBCV-1 to Chlorella variabilis. Virology, 2014, 466-467, 95-102.	2.4	16
103	High-Resolution Membrane Capacitance Measurements for Studying Endocytosis and Exocytosis in Yeast. Traffic, 2015, 16, 760-772.	2.7	16
104	Low-dose photon irradiation alters cell differentiation via activation of hHK channels. Pflügers Archiv European Journal of Physiology, 2015, 467, 1835-1849.	2.8	16
105	Noninvasive Measurement of Electrical Events Associated with a Single Chlorovirus Infection of a Microalgal Cell. ACS Nano, 2016, 10, 5123-5130.	14.6	16
106	Cytochalasin D attenuates the desensitisation of pressure-stimulated vesicle fusion in guard cell protoplasts. European Journal of Cell Biology, 2001, 80, 521-526.	3.6	15
107	Fluorescent Detection of Fluid Phase Endocytosis Allows for In Vivo Estimation of Endocytic Vesicle Sizes in Plant Cells with Sub-Diffraction Accuracy. Traffic, 2010, 11, 548-559.	2.7	15
108	Phycodnavirus Potassium Ion Channel Proteins Question the Virus Molecular Piracy Hypothesis. PLoS ONE, 2012, 7, e38826.	2.5	15

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109	Viruses infecting marine picoplankton encode functional potassium ion channels. <i>Virology</i> , 2014, 466-467, 103-111.	2.4	15
110	X-ray irradiation activates K ⁺ channels via H ₂ O ₂ signaling. <i>Scientific Reports</i> , 2015, 5, 13861.	3.3	15
111	Cotranslational Intersection between the SRP and GET Targeting Pathways to the Endoplasmic Reticulum of <i>Saccharomyces cerevisiae</i> . <i>Molecular and Cellular Biology</i> , 2016, 36, 2374-2383.	2.3	15
112	The small neurotoxin apamin blocks not only small conductance Ca ²⁺ activated K ⁺ channels (SK type) but also the voltage dependent Kv1.3 channel. <i>European Biophysics Journal</i> , 2017, 46, 517-523.	2.2	15
113	Reply to Trewavas et al. and Calvo and Trewavas. <i>Trends in Plant Science</i> , 2020, 25, 218-220.	8.8	15
114	Characterization of ion channels from <i>Acetabularia</i> plasma membrane in planar lipid bilayers. <i>Journal of Membrane Biology</i> , 1993, 133, 145-60.	2.1	14
115	The Absence of an Early Calcium Response to Heavy-Ion Radiation in Mammalian Cells. <i>Radiation Research</i> , 2008, 170, 316-326.	1.5	14
116	Membrane capacitance recordings resolve dynamics and complexity of receptor-mediated endocytosis in Wnt signalling. <i>Scientific Reports</i> , 2019, 9, 12999.	3.3	14
117	Flip-flopping salt bridges gate an ion channel. , 2006, 2, 572-573.		13
118	The sorting of a small potassium channel in mammalian cells can be shifted between mitochondria and plasma membrane. <i>Cell Calcium</i> , 2015, 58, 114-121.	2.4	13
119	Extended beta distributions open the access to fast gating in bilayer experimentsâ€”assigning the voltageâ€”dependent gating to the selectivity filter. <i>FEBS Letters</i> , 2017, 591, 3850-3860.	2.8	13
120	Influence of genetic modifiers on sudden cardiac death cases. <i>International Journal of Legal Medicine</i> , 2018, 132, 379-385.	2.2	13
121	Elongation of Outer Transmembrane Domain Alters Function of Miniature K ⁺ Channel Kcv. <i>Journal of Membrane Biology</i> , 2006, 210, 21-29.	2.1	12
122	Mutation in Pore Domain Uncovers Cation- and Voltage-Sensitive Recovery from Inactivation in KAT1 Channel. <i>Biophysical Journal</i> , 2000, 78, 1862-1871.	0.5	11
123	pâ€”CMBS Modifies Extrafacial Sulfhydryl Groups at the <i>Chara</i> Plasma Membrane: Activation of Ca ²⁺ Influx and Inhibition of Two Different K ⁺ Currents. <i>Botanica Acta</i> , 1991, 104, 345-354.	1.6	10
124	A minimalist model for ion partitioning and competition in a K ⁺ channel selectivity filter. <i>Journal of General Physiology</i> , 2011, 138, 371-373.	1.9	9
125	Relevance of Lysine Snorkeling in the Outer Transmembrane Domain of Small Viral Potassium Ion Channels. <i>Biochemistry</i> , 2012, 51, 5571-5579.	2.5	9
126	cyclic AMP Regulation and Its Command in the Pacemaker Channel HCN4. <i>Frontiers in Physiology</i> , 2020, 11, 771.	2.8	9

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127	Vesicle fusion and fission in plants and yeast. <i>Cell Calcium</i> , 2017, 67, 40-45.	2.4	8
128	Ca ²⁺ Mobilization from Internal Stores in Electrical Membrane Excitation in <i>Chara</i> . <i>Progress in Botany Fortschritte Der Botanik</i> , 2003, , 217-233.	0.3	8
129	Ca ²⁺ block and flickering both contribute to the negative slope of the IV curve in BK channels. <i>Journal of General Physiology</i> , 2013, 141, 499-505.	1.9	7
130	Coupling of a viral K ⁺ -channel with a glutamate-binding-domain highlights the modular design of ionotropic glutamate-receptors. <i>Communications Biology</i> , 2019, 2, 75.	4.4	7
131	Distinct lipid bilayer compositions have general and protein-specific effects on K ⁺ channel function. <i>Journal of General Physiology</i> , 2021, 153, .	1.9	7
132	Electrokinetics of Miniature K ⁺ Channel: Open-State V Sensitivity and Inhibition by K ⁺ Driving Force. <i>Journal of Membrane Biology</i> , 2006, 214, 9-17.	2.1	6
133	Viral membrane proteins. <i>European Biophysics Journal</i> , 2010, 39, 1041-1042.	2.2	6
134	Heterologous expression and purification of an active human <sc>TRPV</sc>3 ion channel. <i>FEBS Journal</i> , 2013, 280, 6010-6021.	4.7	6
135	Ion Channel Activity of Vpu Proteins Is Conserved throughout Evolution of HIV-1 and SIV. <i>Viruses</i> , 2016, 8, 325.	3.3	6
136	Codon Bias Can Determine Sorting of a Potassium Channel Protein. <i>Cells</i> , 2021, 10, 1128.	4.1	6
137	Cell-free electrophysiology of human VDACs incorporated into nanodiscs: An improved method. <i>Biophysical Reports</i> , 2021, 1, 100002.	1.2	6
138	Electrophysiology of Stomata. , 1994, , 59-78.		6
139	Structural and functional approaches to studying cAMP regulation of HCN channels. <i>Biochemical Society Transactions</i> , 2021, 49, 2573-2579.	3.4	6
140	Ferri- and Ferrocyanide Salts Change the Current/Voltage Relations of <i>Chara corallina</i> : No Correlation with the Transmembrane Redox System. <i>Journal of Experimental Botany</i> , 1990, 41, 1559-1565.	4.8	5
141	Synthesis of vesicle cargo determines amplitude of Ca ²⁺ -sensitive exocytosis. <i>Cell Calcium</i> , 2012, 52, 283-288.	2.4	5
142	Large dsDNA chloroviruses encode diverse membrane transport proteins. <i>Virology</i> , 2015, 479-480, 38-45.	2.4	5
143	A small viral potassium ion channel with an inherent inward rectification. <i>Channels</i> , 2019, 13, 124-135.	2.8	5
144	K ⁺ outward rectifying channels as targets of phosphatase inhibitor deltamethrin in <i>Vicia faba</i> guard cells. <i>Journal of Plant Physiology</i> , 2002, 159, 1097-1103.	3.5	4

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145	Engineering a Ca ⁺⁺ -Sensitive (Bio)Sensor from the Pore-Module of a Potassium Channel. <i>Sensors</i> , 2015, 15, 4913-4924.	3.8	4
146	Characterization of a novel KCNJ2 sequence variant detected in Andersen-Tawil syndrome patients. <i>BMC Medical Genetics</i> , 2017, 18, 113.	2.1	4
147	Redox-state of intact <i>Nitella</i> cells: dependency on intracellular pH and photosynthesis. <i>Protoplasma</i> , 1994, 179, 26-33.	2.1	3
148	Photolithographic Fabrication of Micro Apertures in Dry Film Polymer Sheets for Channel Recordings in Planar Lipid Bilayers. <i>Journal of Membrane Biology</i> , 2019, 252, 173-182.	2.1	3
149	Light-Regulated Transcription of a Mitochondrial-Targeted K ⁺ Channel. <i>Cells</i> , 2020, 9, 2507.	4.1	3
150	A Functional K ⁺ Channel from Tetraselmis Virus 1, a Member of the Mimiviridae. <i>Viruses</i> , 2020, 12, 1107.	3.3	3
151	Combining in vitro translation with nanodisc technology and functional reconstitution of channels in planar lipid bilayers. <i>Methods in Enzymology</i> , 2021, 652, 293-318.	1.0	3
152	X-ray irradiation triggers immune response in human T-lymphocytes via store-operated Ca ²⁺ entry and NFAT activation. <i>Journal of General Physiology</i> , 2022, 154, .	1.9	3
153	Weak Cation Selectivity in HCN Channels Results From K ⁺ -Mediated Release of Na ⁺ From Selectivity Filter Binding Sites. <i>Function</i> , 2022, 3, .	2.3	3
154	Extracellular hexacyanoferrate III inhibits cytoplasmic streaming in the alga <i>Lamprothamnium papulosum</i> . <i>New Phytologist</i> , 1990, 115, 587-594.	7.3	2
155	Creation of a Reactive Oxygen Species-Insensitive Kcv Channel. <i>Biochemistry</i> , 2013, 52, 3130-3137.	2.5	2
156	Clustering of Giant Virus-DNA Based on Variations in Local Entropy. <i>Viruses</i> , 2014, 6, 2259-2267.	3.3	2
157	Selectivity of the phospholamban ion channel investigated by single channel measurements. <i>Journal of Electroanalytical Chemistry</i> , 2018, 812, 244-248.	3.8	2
158	Genetic Diversity of Potassium Ion Channel Proteins Encoded by Chloroviruses That Infect <i>Chlorella heliozoae</i> . <i>Viruses</i> , 2020, 12, 678.	3.3	2
159	Experimental challenges in ion channel research: uncovering basic principles of permeation and gating in potassium channels. <i>Advances in Physics: X</i> , 2022, 7, .	4.1	2
160	Yeast-Based Screening System for the Selection of Functional Light-Driven K ⁺ Channels. <i>Methods in Molecular Biology</i> , 2017, 1596, 271-285.	0.9	1
161	Conversion of an instantaneous activating K ⁺ channel into a slow activating inward rectifier. <i>FEBS Letters</i> , 2017, 591, 295-303.	2.8	1
162	Characterization of an N-terminal Nav1.5 channel variant “a potential risk factor for arrhythmias and sudden death?”. <i>BMC Medical Genetics</i> , 2020, 21, 227.	2.1	1

#	ARTICLE	IF	CITATIONS
163	The mutation L69P in the PAS domain of the hERG potassium channel results in LQTS by trafficking deficiency. <i>Channels</i> , 2020, 14, 163-174.	2.8	1
164	Inferring functional units in ion channel pores via relative entropy. <i>European Biophysics Journal</i> , 2021, 50, 37-57.	2.2	1
165	Magnetic Measurements in Plant Electrophysiology. , 2006, , 187-218.		1
166	Asymmetric Interplay Between K ⁺ and Blocker and Atomistic Parameters From Physiological Experiments Quantify K ⁺ Channel Blocker Release. <i>Frontiers in Physiology</i> , 2021, 12, 737834.	2.8	1
167	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> , 2022, 434, 167522.	4.2	1
168	Ion channels as functional components in sensors of biomedical information. , 2005, , 463-478.		0
169	Discovery and Characterization of a Distinct Cyclic Nucleotide Binding Pocket in HCN Channels. <i>Biophysical Journal</i> , 2014, 106, 627a.	0.5	0
170	HCN Channels: The Molecular Basis for their cAMP-TRIP8b Regulation. <i>Biophysical Journal</i> , 2015, 108, 366a.	0.5	0
171	Design of a Glutamate-Activated Potassium Channel upon Fusion of the Ligand-Binding Domain of the Mammalian AMPA Receptor GluA1 to the Channel Pore of the Viral ATCV-1 KCV K ⁺ Channel. <i>Biophysical Journal</i> , 2017, 112, 418a-419a.	0.5	0
172	Impact of Codon Usage and Prolyl Isomerization on K Channel Function. <i>Biophysical Journal</i> , 2019, 116, 397a.	0.5	0
173	A Modular Toolbox for Optogenetic Manipulation of K ⁺ Conductance. <i>Biophysical Journal</i> , 2020, 118, 482a-483a.	0.5	0
174	Magnetogenetics: The Debate is On. <i>Biophysical Journal</i> , 2021, 120, 159a.	0.5	0
175	Permutation of the Amino Acid at the Cytosolic Entry to the Cavity Alters Conductance and Gating of K ⁺ Channel in an Amino Specific Manner. <i>Biophysical Journal</i> , 2021, 120, 59a.	0.5	0
176	Structure and Function of a Viral Encoded K ⁺ Channel. , 2005, , 21-32.		0
177	Ca ²⁺ -sensitive and Ca ²⁺ -insensitive exocytosis in maize coleoptile protoplasts. <i>Pflügers Archiv European Journal of Physiology</i> , 2000, 439, R152-R153.	2.8	0