

Gerhard Thiel

List of Publications by Year in Descending Order

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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	Experimental challenges in ion channel research: uncovering basic principles of permeation and gating in potassium channels. <i>Advances in Physics: X</i> , 2022 , 7,	5.1	1
165	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 , 167522	6.5	0
164	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	4.6	1
163	Gating movements and ion permeation in HCN4 pacemaker channels. <i>Molecular Cell</i> , 2021 , 81, 2929-2943, e6	13.6	8
162	Inferring functional units in ion channel pores via relative entropy. <i>European Biophysics Journal</i> , 2021 , 50, 37-57	1.9	
161	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	1.7	0
160	Distinct lipid bilayer compositions have general and protein-specific effects on K ⁺ channel function. <i>Journal of General Physiology</i> , 2021 , 153,	3.4	5
159	Cell-free electrophysiology of human VDACS incorporated into nanodiscs: An improved method. <i>Biophysical Reports</i> , 2021 , 1, None		3
158	Genetic Diversity of Potassium Ion Channel Proteins Encoded by Chloroviruses That Infect. <i>Viruses</i> , 2020 , 12,	6.2	2
157	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	3	0
156	Structural basis for ion selectivity in TMEM175 K channels. <i>ELife</i> , 2020 , 9,	8.9	10
155	Reply to Trewavas et al. and Calvo and Trewavas. <i>Trends in Plant Science</i> , 2020 , 25, 218-220	13.1	14
154	Characterization of an N-terminal Na _v 1.5 channel variant - a potential risk factor for arrhythmias and sudden death?. <i>BMC Medical Genetics</i> , 2020 , 21, 227	2.1	1
153	cyclic AMP Regulation and Its Command in the Pacemaker Channel HCN4. <i>Frontiers in Physiology</i> , 2020 , 11, 771	4.6	5
152	A Functional K Channel from Tetraselmis Virus 1, a Member of the. <i>Viruses</i> , 2020 , 12,	6.2	2
151	Membrane capacitance recordings resolve dynamics and complexity of receptor-mediated endocytosis in Wnt signalling. <i>Scientific Reports</i> , 2019 , 9, 12999	4.9	7
150	High bandwidth approaches in nanopore and ion channel recordings—A tutorial review. <i>Analytica Chimica Acta</i> , 2019 , 1061, 13-27	6.6	25

149	A small viral potassium ion channel with an inherent inward rectification. <i>Channels</i> , 2019 , 13, 124-135	3	4
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	2.3	2
147	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	5	10
146	Plants Neither Possess nor Require Consciousness. <i>Trends in Plant Science</i> , 2019 , 24, 677-687	13.1	47
145	The HCN domain couples voltage gating and cAMP response in hyperpolarization-activated cyclic nucleotide-gated channels. <i>ELife</i> , 2019 , 8,	8.9	21
144	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	6.7	4
143	Reconstitution and functional characterization of ion channels from nanodiscs in lipid bilayers. <i>Journal of General Physiology</i> , 2018 , 150, 637-646	3.4	24
142	Selectivity of the phospholamban ion channel investigated by single channel measurements. <i>Journal of Electroanalytical Chemistry</i> , 2018 , 812, 244-248	4.1	1
141	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	5.4	14
140	Ionizing Radiation Induces Morphological Changes and Immunological Modulation of Jurkat Cells. <i>Frontiers in Immunology</i> , 2018 , 9, 922	8.4	15
139	Influence of genetic modifiers on sudden cardiac death cases. <i>International Journal of Legal Medicine</i> , 2018 , 132, 379-385	3.1	10
138	HCN1 mutation spectrum: from neonatal epileptic encephalopathy to benign generalized epilepsy and beyond. <i>Brain</i> , 2018 , 141, 3160-3178	11.2	48
137	A light-gated potassium channel for sustained neuronal inhibition. <i>Nature Methods</i> , 2018 , 15, 969-976	21.6	27
136	Genes for Membrane Transport Proteins: Not So Rare in Viruses. <i>Viruses</i> , 2018 , 10,	6.2	12
135	A synthetic peptide that prevents cAMP regulation in mammalian hyperpolarization-activated cyclic nucleotide-gated (HCN) channels. <i>ELife</i> , 2018 , 7,	8.9	29
134	Vesicle Traffic and Plasma Membrane Transport 2018 , 313-327		
133	A reduced mechanical model for cAMP-modulated gating in HCN channels. <i>Scientific Reports</i> , 2017 , 7, 40168	4.9	14
132	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> , 2017 , 46, 517-523	1.9	13

131	Identification of Intrahelical Bifurcated H-Bonds as a New Type of Gate in K Channels. <i>Journal of the American Chemical Society</i> , 2017 , 139, 7494-7503	16.4	16
130	Yeast-Based Screening System for the Selection of Functional Light-Driven K Channels. <i>Methods in Molecular Biology</i> , 2017 , 1596, 271-285	1.4	1
129	Conversion of an instantaneous activating K channel into a slow activating inward rectifier. <i>FEBS Letters</i> , 2017 , 591, 295-303	3.8	1
128	Fusicocin Activates KAT1 Channels by Stabilizing Their Interaction with 14-3-3 Proteins. <i>Plant Cell</i> , 2017 , 29, 2570-2580	11.6	24
127	Characterization of a novel KCNJ2 sequence variant detected in Andersen-Tawil syndrome patients. <i>BMC Medical Genetics</i> , 2017 , 18, 113	2.1	2
126	Vesicle fusion and fission in plants and yeast. <i>Cell Calcium</i> , 2017 , 67, 40-45	4	7
125	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> , 2017 , 591, 3850-3860	3.8	8
124	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	8.4	21
123	Mutation in S6 domain of HCN4 channel in patient with suspected Brugada syndrome modifies channel function. <i>Pflugers Archiv European Journal of Physiology</i> , 2016 , 468, 1663-71	4.6	16
122	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, 2374-83	4.8	9
121	Ion Channel Activity of Vpu Proteins Is Conserved throughout Evolution of HIV-1 and SIV. <i>Viruses</i> , 2016 , 8,	6.2	5
120	Noninvasive Measurement of Electrical Events Associated with a Single Chlorovirus Infection of a Microalgal Cell. <i>ACS Nano</i> , 2016 , 10, 5123-30	16.7	14
119	The sorting of a small potassium channel in mammalian cells can be shifted between mitochondria and plasma membrane. <i>Cell Calcium</i> , 2015 , 58, 114-21	4	10
118	Low-dose photon irradiation alters cell differentiation via activation of hIK channels. <i>Pflugers Archiv European Journal of Physiology</i> , 2015 , 467, 1835-49	4.6	11
117	Engineering a Ca ⁺⁺⁺ -sensitive (bio)sensor from the pore-module of a potassium channel. <i>Sensors</i> , 2015 , 15, 4913-24	3.8	2
116	Optogenetics. Engineering of a light-gated potassium channel. <i>Science</i> , 2015 , 348, 707-10	33.3	95
115	Large dsDNA chloroviruses encode diverse membrane transport proteins. <i>Virology</i> , 2015 , 479-480, 38-45	3.6	4
114	X-ray irradiation activates K ⁺ channels via H ₂ O ₂ signaling. <i>Scientific Reports</i> , 2015 , 5, 13861	4.9	11

113	High-resolution membrane capacitance measurements for studying endocytosis and exocytosis in yeast. <i>Traffic</i> , 2015 , 16, 760-72	5.7	13
112	Cyclic dinucleotides bind the C-linker of HCN4 to control channel cAMP responsiveness. <i>Nature Chemical Biology</i> , 2014 , 10, 457-62	11.7	40
111	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, 14577-82	11.5	57
110	Pseudo painting/air bubble technique for planar lipid bilayers. <i>Journal of Neuroscience Methods</i> , 2014 , 233, 13-7	3	17
109	Viral potassium channels as a robust model system for studies of membrane-protein interaction. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2014 , 1838, 1096-103	3.8	22
108	Dynamic attachment of Chlorovirus PBCV-1 to Chlorella variabilis. <i>Virology</i> , 2014 , 466-467, 95-102	3.6	13
107	Clustering of giant virus-DNA based on variations in local entropy. <i>Viruses</i> , 2014 , 6, 2259-67	6.2	2
106	Viruses infecting marine picoplankton encode functional potassium ion channels. <i>Virology</i> , 2014 , 466-467, 103-11	3.6	13
105	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> , 2014 , 9, e107406	3.7	14
104	Heterologous expression and purification of an active human TRPV3 ion channel. <i>FEBS Journal</i> , 2013 , 280, 6010-21	5.7	5
103	Creation of a reactive oxygen species-insensitive Kcv channel. <i>Biochemistry</i> , 2013 , 52, 3130-7	3.2	2
102	Potassium ion channels: could they have evolved from viruses?. <i>Plant Physiology</i> , 2013 , 162, 1215-24	6.6	15
101	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> , 2013 , 94, 2549-2556	4.9	19
100	The voltage-sensing domain of a phosphatase gates the pore of a potassium channel. <i>Journal of General Physiology</i> , 2013 , 141, 389-95	3.4	41
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> , 2013 , 450, 407-15	3.8	21
98	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	3.4	7
97	Structure-function relation of phospholamban: modulation of channel activity as a potential regulator of SERCA activity. <i>PLoS ONE</i> , 2013 , 8, e52744	3.7	17
96	Synthesis of vesicle cargo determines amplitude of Ca(2+)-sensitive exocytosis. <i>Cell Calcium</i> , 2012 , 52, 283-8	4	4

95	Relevance of lysine snorkeling in the outer transmembrane domain of small viral potassium ion channels. <i>Biochemistry</i> , 2012 , 51, 5571-9	3.2	7
94	Phycodnavirus potassium ion channel proteins question the virus molecular piracy hypothesis. <i>PLoS ONE</i> , 2012 , 7, e38826	3.7	13
93	Structural organization of DNA in chlorella viruses. <i>PLoS ONE</i> , 2012 , 7, e30133	3.7	21
92	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, 580-8	3.8	31
91	Functional HAK/KUP/KT-like potassium transporter encoded by chlorella viruses. <i>Plant Journal</i> , 2011 , 68, 977-86	6.9	20
90	Ion channel activity of HIV-1 Vpu is dispensable for counteraction of CD317. <i>Virology</i> , 2011 , 416, 75-85	3.6	35
89	Phospholamban generates cation selective ion channels. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 12935-9	3.6	16
88	A minimalist model for ion partitioning and competition in a K ⁺ channel selectivity filter. <i>Journal of General Physiology</i> , 2011 , 138, 371-3	3.4	8
87	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, 44811-20	5.4	88
86	Membrane anchoring and interaction between transmembrane domains are crucial for K ⁺ channel function. <i>Journal of Biological Chemistry</i> , 2011 , 286, 11299-306	5.4	16
85	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, 669-80	9.8	56
84	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> , 2010 , 11, 548-59	5.7	14
83	The proapoptotic influenza A virus protein PB1-F2 forms a nonselective ion channel. <i>PLoS ONE</i> , 2010 , 5, e11112	3.7	42
82	A functional calcium-transporting ATPase encoded by chlorella viruses. <i>Journal of General Virology</i> , 2010 , 91, 2620-9	4.9	12
81	Salt bridges in the miniature viral channel Kcv are important for function. <i>European Biophysics Journal</i> , 2010 , 39, 1057-68	1.9	20
80	Viral membrane proteins. <i>European Biophysics Journal</i> , 2010 , 39, 1041-2	1.9	6
79	Initial Events Associated with Virus PBCV-1 Infection of Chlorella NC64A. <i>Progress in Botany Fortschritte Der Botanik</i> , 2010 , 71, 169-183	0.6	34
78	Chlorella viruses prevent multiple infections by depolarizing the host membrane. <i>Journal of General Virology</i> , 2009 , 90, 2033-2039	4.9	24

77	Fast and slow gating are inherent properties of the pore module of the K ⁺ channel Kcv. <i>Journal of General Physiology</i> , 2009 , 134, 219-29	3.4	36
76	Rhythmic kinetics of single fusion and fission in a plant cell protoplast. <i>Annals of the New York Academy of Sciences</i> , 2009 , 1152, 1-6	6.5	17
75	Model development for the viral Kcv potassium channel. <i>Biophysical Journal</i> , 2009 , 96, 485-98	2.9	34
74	Chlorella virus ATCV-1 encodes a functional potassium channel of 82 amino acids. <i>Biochemical Journal</i> , 2009 , 420, 295-303	3.8	36
73	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	3.7	37
72	Chlorella viruses evoke a rapid release of K ⁺ from host cells during the early phase of infection. <i>Virology</i> , 2008 , 372, 340-8	3.6	42
71	The absence of an early calcium response to heavy-ion radiation in Mammalian cells. <i>Radiation Research</i> , 2008 , 170, 316-26	3.1	12
70	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, 12313-8	11.5	35
69	Chlorovirus-mediated membrane depolarization of Chlorella alters secondary active transport of solutes. <i>Journal of Virology</i> , 2008 , 82, 12181-90	6.6	25
68	Molecular dynamics simulation of the cytosolic mouth in Kcv-type potassium channels. <i>Biochemistry</i> , 2007 , 46, 4826-39	3.2	39
67	Guard cells elongate: relationship of volume and surface area during stomatal movement. <i>Biophysical Journal</i> , 2007 , 92, 1072-80	2.9	59
66	Absciscic acid triggers the endocytosis of the arabidopsis KAT1 K ⁺ channel and its recycling to the plasma membrane. <i>Current Biology</i> , 2007 , 17, 1396-402	6.3	161
65	A plant homolog of animal chloride intracellular channels (CLICs) generates an ion conductance in heterologous systems. <i>Journal of Biological Chemistry</i> , 2007 , 282, 8786-92	5.4	31
64	Plant neurobiology: no brain, no gain?. <i>Trends in Plant Science</i> , 2007 , 12, 135-6	13.1	118
63	Molecular properties of Kcv, a virus encoded K ⁺ channel. <i>Biochemistry</i> , 2007 , 46, 1079-90	3.2	43
62	Characean Algae: Still a Valid Model System to Examine Fundamental Principles in Plants. <i>Progress in Botany Fortschritte Der Botanik</i> , 2007 , 193-220	0.6	16
61	Elongation of outer transmembrane domain alters function of miniature K ⁺ channel Kcv. <i>Journal of Membrane Biology</i> , 2006 , 210, 21-9	2.3	12
60	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	2.3	5

59	Potassium ion channels of Chlorella viruses cause rapid depolarization of host cells during infection. <i>Journal of Virology</i> , 2006 , 80, 2437-44	6.6	36
58	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, 5355-60	11.5	41
57	The potassium channel KAT1 is activated by plant and animal 14-3-3 proteins. <i>Journal of Biological Chemistry</i> , 2006 , 281, 35735-41	5.4	53
56	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 <i>Mesembryanthemum crystallinum</i> L. <i>Planta</i> , 2006 , 224, 944-51	4.7	13
55	Magnetic Measurements in Plant Electrophysiology 2006 , 187-218		1
54	Intracellular axial current in <i>Chara corallina</i> reflects the altered kinetics of ions in cytoplasm under the influence of light. <i>Biophysical Journal</i> , 2005 , 88, 690-7	2.9	12
53	Ion channels as functional components in sensors of biomedical information 2005 , 463-478		
52	KAT1 inactivates at sub-millimolar concentrations of external potassium. <i>Journal of Experimental Botany</i> , 2005 , 56, 3103-10	7	18
51	Structure and Function of a Viral Encoded K ⁺ Channel 2005 , 21-32		
50	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, 5318-24	11.5	65
49	Long distance interactions within the potassium channel pore are revealed by molecular diversity of viral proteins. <i>Journal of Biological Chemistry</i> , 2004 , 279, 28443-9	5.4	36
48	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, 182-93	6.9	133
47	Genetic diversity in chlorella viruses flanking <i>kcv</i> , a gene that encodes a potassium ion channel protein. <i>Virology</i> , 2004 , 326, 150-9	3.6	19
46	Two functionally different vacuoles for static and dynamic purposes in one plant mesophyll leaf cell. <i>Plant Journal</i> , 2004 , 37, 294-300	6.9	53
45	Trafficking of the plant potassium inward rectifier KAT1 in guard cell protoplasts of <i>Vicia faba</i> . <i>Plant Journal</i> , 2004 , 37, 391-7	6.9	74
44	Vacuolar malate uptake is mediated by an anion-selective inward rectifier. <i>Plant Journal</i> , 2003 , 35, 116-28	6.9	85
43	Possible function for virus encoded K ⁺ channel <i>Kcv</i> in the replication of chlorella virus PBCV-1. <i>FEBS Letters</i> , 2003 , 552, 7-11	3.8	29
42	The viral potassium channel <i>Kcv</i> : structural and functional features. <i>FEBS Letters</i> , 2003 , 552, 12-6	3.8	42

41	Ca ²⁺ Mobilization from Internal Stores in Electrical Membrane Excitation in Chara. <i>Progress in Botany Fortschritte Der Botanik</i> , 2003 , 217-233	0.6	8
40	Unitary exocytotic and endocytotic events in Zea mays L. coleoptile protoplasts. <i>Plant Journal</i> , 2002 , 13, 117-120	6.9	16
39	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, 10215-20	11.5	42
38	The short N-terminus is required for functional expression of the virus-encoded miniature K(+) channel Kcv. <i>FEBS Letters</i> , 2002 , 530, 65-9	3.8	35
37	K ⁺ outward rectifying channels as targets of phosphatase inhibitor deltamethrin in Vicia faba guard cells. <i>Journal of Plant Physiology</i> , 2002 , 159, 1097-1103	3.6	3
36	Cytochalasin D attenuates the desensitisation of pressure-stimulated vesicle fusion in guard cell protoplasts. <i>European Journal of Cell Biology</i> , 2001 , 80, 521-6	6.1	15
35	Electrically triggered all-or-none Ca(2 ⁺)-liberation during action potential in the giant alga Chara. <i>Journal of General Physiology</i> , 2001 , 118, 11-22	3.4	51
34	Osmotically evoked shrinking of guard-cell protoplasts causes vesicular retrieval of plasma membrane into the cytoplasm. <i>Planta</i> , 2000 , 210, 423-31	4.7	59
33	Ca-sensitive and Ca-insensitive exocytosis in maize coleoptile protoplasts. <i>Pflügers Archiv European Journal of Physiology</i> , 2000 , 439, r152-r153	4.6	18
32	Ca(2 ⁺)-stimulated exocytosis in maize coleoptile cells. <i>Plant Cell</i> , 2000 , 12, 1127-36	11.6	37
31	Ca 2 ⁺ -Stimulated Exocytosis in Maize Coleoptile Cells. <i>Plant Cell</i> , 2000 , 12, 1127	11.6	20
30	Mutation in pore domain uncovers cation- and voltage-sensitive recovery from inactivation in KAT1 channel. <i>Biophysical Journal</i> , 2000 , 78, 1862-71	2.9	11
29	Ca ²⁺ -sensitive and Ca ²⁺ -insensitive exocytosis in maize coleoptile protoplasts. <i>Pflügers Archiv European Journal of Physiology</i> , 2000 , 439, R152-R153	4.6	
28	Auxin augments conductance of K ⁺ inward rectifier in maize coleoptile protoplasts. <i>Planta</i> , 1999 , 208, 38-45	4.7	32
27	Calcium release from InsP3-sensitive internal stores initiates action potential in Chara. <i>FEBS Letters</i> , 1999 , 453, 72-6	3.8	35
26	Unitary exocytotic and endocytotic events in guard-cell protoplasts during osmotically driven volume changes. <i>FEBS Letters</i> , 1999 , 460, 495-9	3.8	53
25	The action potential in Chara: Ca ²⁺ release from internal stores visualized by Mn ²⁺ -induced quenching of fura-dextran. <i>Plant Journal</i> , 1998 , 13, 167-175	6.9	52
24	Exocytosis in plants 1998 , 111-125		0

23	Operation of K ⁺ -channels in stomatal movement. <i>Trends in Plant Science</i> , 1997 , 2, 339-345	13.1	47
22	Dynamics of chloride and potassium currents during the action potential in Chara studied with action potential clamp. <i>European Biophysics Journal</i> , 1995 , 24, 85	1.9	7
21	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	4.7	23
20	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	2.3	27
19	K ⁺ channels of stomatal guard cells: bimodal control of the K ⁺ inward-rectifier evoked by auxin. <i>Plant Journal</i> , 1994 , 5, 55-68	6.9	146
18	Redox-state of intact Nitella cells: dependency on intracellular pH and photosynthesis. <i>Protoplasma</i> , 1994 , 179, 26-33	3.4	3
17	Phosphatase antagonist okadaic acid inhibits steady-state K ⁺ currents in guard cells of Vicia faba. <i>Plant Journal</i> , 1994 , 5, 727-733	6.9	71
16	Electrophysiology of Stomata 1994 , 59-78		4
15	Hormonal Control of Ion Channel Gating. <i>Annual Review of Plant Biology</i> , 1993 , 44, 543-567		85
14	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	2.3	27
13	Electrocoupling of ion transporters in plants. <i>Journal of Membrane Biology</i> , 1993 , 136, 327-32	2.3	66
12	Characterization of ion channels from Acetabularia plasma membrane in planar lipid bilayers. <i>Journal of Membrane Biology</i> , 1993 , 133, 145-60	2.3	7
11	Membrane transport in stomatal guard cells: the importance of voltage control. <i>Journal of Membrane Biology</i> , 1992 , 126, 1-18	2.3	142
10	p-CMBS Modifies Extracellular Sulfhydryl Groups at the Chara Plasma Membrane: Activation of Ca ²⁺ Influx and Inhibition of Two Different K ⁺ Currents. <i>Botanica Acta</i> , 1991 , 104, 345-354		9
9	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	3.6	37
8	Extracellular hexacyanoferrate III inhibits cytoplasmic streaming in the alga Lamprothamnium papulosum. <i>New Phytologist</i> , 1990 , 115, 587-594	9.8	2
7	Reversible inactivation of K ⁺ channels of Vicia stomatal guard cells following the photolysis of caged inositol 1,4,5-trisphosphate. <i>Nature</i> , 1990 , 346, 766-9	50.4	298
6	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> , 1990 , 41, 1559-1565	7	4

5	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	3.6	60
4	Transmembrane Ferricyanide Reduction and Membrane Properties in the Euryhaline Charophyte <i>Lamprothamnium papulosum</i> . <i>Journal of Experimental Botany</i> , 1988 , 39, 641-654	7	21
3	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		34
2	Electron transport across the plasmalemma of <i>Lemna gibba</i> G1. <i>Planta</i> , 1986 , 169, 251-9	4.7	57
1	Structural basis for ion selectivity in TMEM175 K ⁺ channels		2