

Diomedes E Logothetis

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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.

92
papers

6,571
citations

39
h-index

80
g-index

96
ext. papers

7,146
ext. citations

7.9
avg, IF

5.3
L-index

#	Paper	IF	Citations
92	The beta gamma subunits of GTP-binding proteins activate the muscarinic K ⁺ channel in heart. <i>Nature</i> , 1987 , 325, 321-6	50.4	1067
91	PI(4,5)P2 regulates the activation and desensitization of TRPM8 channels through the TRP domain. <i>Nature Neuroscience</i> , 2005 , 8, 626-34	25.5	468
90	PIP(2) activates KCNQ channels, and its hydrolysis underlies receptor-mediated inhibition of M currents. <i>Neuron</i> , 2003 , 37, 963-75	13.9	422
89	Activation of inwardly rectifying K ⁺ channels by distinct PtdIns(4,5)P2 interactions. <i>Nature Cell Biology</i> , 1999 , 1, 183-8	23.4	408
88	Alterations in conserved Kir channel-PIP2 interactions underlie channelopathies. <i>Neuron</i> , 2002 , 34, 933-44	45.9	326
87	A region of adenylyl cyclase 2 critical for regulation by G protein beta gamma subunits. <i>Science</i> , 1995 , 268, 1166-9	33.3	240
86	Decoding the signaling of a GPCR heteromeric complex reveals a unifying mechanism of action of antipsychotic drugs. <i>Cell</i> , 2011 , 147, 1011-23	56.2	226
85	Receptor-mediated hydrolysis of plasma membrane messenger PIP2 leads to K ⁺ -current desensitization. <i>Nature Cell Biology</i> , 2000 , 2, 507-14	23.4	205
84	Specificity of activation by phosphoinositides determines lipid regulation of Kir channels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 745-50	11.5	170
83	Distinct specificities of inwardly rectifying K(+) channels for phosphoinositides. <i>Journal of Biological Chemistry</i> , 1999 , 274, 36065-72	5.4	162
82	Characteristic interactions with phosphatidylinositol 4,5-bisphosphate determine regulation of kir channels by diverse modulators. <i>Journal of Biological Chemistry</i> , 2004 , 279, 37271-81	5.4	154
81	PIP2 hydrolysis underlies agonist-induced inhibition and regulates voltage gating of two-pore domain K ⁺ channels. <i>Journal of Physiology</i> , 2005 , 564, 117-29	3.9	143
80	Incremental reductions of positive charge within the S4 region of a voltage-gated K ⁺ channel result in corresponding decreases in gating charge. <i>Neuron</i> , 1992 , 8, 531-40	13.9	128
79	Probing the G-protein regulation of GIRK1 and GIRK4, the two subunits of the KACH channel, using functional homomeric mutants. <i>Journal of Biological Chemistry</i> , 1997 , 272, 31553-60	5.4	127
78	Phosphoinositide-mediated gating of inwardly rectifying K(+) channels. <i>Pflugers Archiv European Journal of Physiology</i> , 2007 , 455, 83-95	4.6	101
77	Identification of a potassium channel site that interacts with G protein betagamma subunits to mediate agonist-induced signaling. <i>Journal of Biological Chemistry</i> , 1999 , 274, 12517-24	5.4	93
76	Identification of critical residues controlling G protein-gated inwardly rectifying K(+) channel activity through interactions with the beta gamma subunits of G proteins. <i>Journal of Biological Chemistry</i> , 2002 , 277, 6088-96	5.4	81

75	Synergistic activation of G protein-gated inwardly rectifying potassium channels by the betagamma subunits of G proteins and Na(+) and Mg(2+) ions. <i>Journal of General Physiology</i> , 1999 , 114, 673-84	3.4	80
74	Channelopathies linked to plasma membrane phosphoinositides. <i>Pflugers Archiv European Journal of Physiology</i> , 2010 , 460, 321-41	4.6	79
73	Allosteric signaling through an mGlu2 and 5-HT2A heteromeric receptor complex and its potential contribution to schizophrenia. <i>Science Signaling</i> , 2016 , 9, ra5	8.8	70
72	PIP2 controls voltage-sensor movement and pore opening of Kv channels through the S4-S5 linker. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, E2399-408	11.5	67
71	Phosphoinositides regulate P2X4 ATP-gated channels through direct interactions. <i>Journal of Neuroscience</i> , 2008 , 28, 12938-45	6.6	66
70	Molecular characteristics of phosphoinositide binding. <i>Pflugers Archiv European Journal of Physiology</i> , 2007 , 455, 45-53	4.6	65
69	Phosphoinositide control of membrane protein function: a frontier led by studies on ion channels. <i>Annual Review of Physiology</i> , 2015 , 77, 81-104	23.1	63
68	Phosphatidylinositol-4,5-bisphosphate regulates epidermal growth factor receptor activation. <i>Pflugers Archiv European Journal of Physiology</i> , 2011 , 461, 387-97	4.6	61
67	Cholesterol sensitivity of KIR2.1 is controlled by a belt of residues around the cytosolic pore. <i>Biophysical Journal</i> , 2011 , 100, 381-9	2.9	50
66	Selective phosphorylation modulates the PIP2 sensitivity of the CaM-SK channel complex. <i>Nature Chemical Biology</i> , 2014 , 10, 753-9	11.7	49
65	Protein kinase A modulates PLC-dependent regulation and PIP2-sensitivity of K+ channels. <i>Channels</i> , 2007 , 1, 124-34	3	48
64	Phosphatidylinositol-4,5-bisphosphate regulates NMDA receptor activity through alpha-actinin. <i>Journal of Neuroscience</i> , 2007 , 27, 5523-32	6.6	48
63	Specific regions of heteromeric subunits involved in enhancement of G protein-gated K+ channel activity. <i>Journal of Biological Chemistry</i> , 1997 , 272, 6548-55	5.4	47
62	Gating charge differences between two voltage-gated K+ channels are due to the specific charge content of their respective S4 regions. <i>Neuron</i> , 1993 , 10, 1121-9	13.9	47
61	The molecular mechanism by which PIP(2) opens the intracellular G-loop gate of a Kir3.1 channel. <i>Biophysical Journal</i> , 2012 , 102, 2049-59	2.9	46
60	Diverse Kir modulators act in close proximity to residues implicated in phosphoinositide binding. <i>Journal of Physiology</i> , 2007 , 582, 953-65	3.9	46
59	Gbeta residues that do not interact with Galpha underlie agonist-independent activity of K+ channels. <i>Journal of Biological Chemistry</i> , 2002 , 277, 7348-55	5.4	46
58	Essential Control of the Function of the Striatopallidal Neuron by Pre-coupled Complexes of Adenosine A-Dopamine D Receptor Heterotetramers and Adenylyl Cyclase. <i>Frontiers in Pharmacology</i> , 2018 , 9, 243	5.6	45

57	Positive allosteric modulators of metabotropic glutamate 2 receptors in schizophrenia treatment. <i>Trends in Neurosciences</i> , 2015 , 38, 506-16	13.3	43
56	Assaying phosphatidylinositol bisphosphate regulation of potassium channels. <i>Methods in Enzymology</i> , 2002 , 345, 71-92	1.7	43
55	The RCK2 domain uses a coordination site present in Kir channels to confer sodium sensitivity to Slo2.2 channels. <i>Journal of Neuroscience</i> , 2010 , 30, 7554-62	6.6	42
54	A sodium-mediated structural switch that controls the sensitivity of Kir channels to PtdIns(4,5)P(2). <i>Nature Chemical Biology</i> , 2008 , 4, 624-31	11.7	42
53	Mechanism of PLC-mediated Kir3 current inhibition. <i>Channels</i> , 2007 , 1, 113-23	3	39
52	Subtype-specific regulation of P2X3 and P2X2/3 receptors by phosphoinositides in peripheral nociceptors. <i>Molecular Pain</i> , 2009 , 5, 47	3.4	38
51	Dual Regulation of Voltage-Sensitive Ion Channels by PIP(2). <i>Frontiers in Pharmacology</i> , 2012 , 3, 170	5.6	37
50	PIP2 Regulates the Ionic Current of P2X Receptors and P2X7 Receptor-Mediated Cell Death. <i>Channels</i> , 2007 , 1, 47-56	3	35
49	Competition of calcified calmodulin N lobe and PIP2 to an LQT mutation site in Kv7.1 channel. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E869-E878	11.5	34
48	Exploring the Nanotoxicology of MoS: A Study on the Interaction of MoS Nanoflakes and K Channels. <i>ACS Nano</i> , 2018 , 12, 705-717	16.7	34
47	Gating of a G protein-sensitive mammalian Kir3.1 prokaryotic Kir channel chimera in planar lipid bilayers. <i>Journal of Biological Chemistry</i> , 2010 , 285, 39790-800	5.4	33
46	Direct modulation of P2X1 receptor-channels by the lipid phosphatidylinositol 4,5-bisphosphate. <i>Molecular Pharmacology</i> , 2008 , 74, 785-92	4.3	33
45	Epilepsy-Related Slack Channel Mutants Lead to Channel Over-Activity by Two Different Mechanisms. <i>Cell Reports</i> , 2016 , 14, 129-139	10.6	32
44	PIP(2) regulates the ionic current of P2X receptors and P2X(7) receptor-mediated cell death. <i>Channels</i> , 2007 , 1, 46-55	3	31
43	Gating of G protein-sensitive inwardly rectifying K ⁺ channels through phosphatidylinositol 4,5-bisphosphate. <i>Journal of Physiology</i> , 1999 , 520 Pt 3, 630	3.9	30
42	Characterization of a Ca ²⁺ -activated K ⁺ current in insulin-secreting murine betaTC-3 cells. <i>Journal of Physiology</i> , 1998 , 509 (Pt 2), 355-70	3.9	26
41	Structural determinants of phosphatidylinositol 4,5-bisphosphate (PIP2) regulation of BK channel activity through the RCK1 Ca ²⁺ coordination site. <i>Journal of Biological Chemistry</i> , 2014 , 289, 18860-72	5.4	25
40	Phosphatidylinositol 4,5-bisphosphate activates Slo3 currents and its hydrolysis underlies the epidermal growth factor-induced current inhibition. <i>Journal of Biological Chemistry</i> , 2010 , 285, 19259-66	5.4	25

39	Glycosylation of GIRK1 at Asn119 and ROMK1 at Asn117 has different consequences in potassium channel function. <i>Journal of Biological Chemistry</i> , 2000 , 275, 30677-82	5.4	24
38	A computational model predicts that G β acts at a cleft between channel subunits to activate GIRK1 channels. <i>Science Signaling</i> , 2013 , 6, ra69	8.8	23
37	Ca-Calmodulin and PIP2 interactions at the proximal C-terminus of Kv7 channels. <i>Channels</i> , 2017 , 11, 686-695	3	20
36	Regulation of ATP-gated P2X receptors by phosphoinositides. <i>Pflugers Archiv European Journal of Physiology</i> , 2007 , 455, 181-5	4.6	20
35	Cross-signaling in metabotropic glutamate 2 and serotonin 2A receptor heteromers in mammalian cells. <i>Pflugers Archiv European Journal of Physiology</i> , 2016 , 468, 775-93	4.6	19
34	Identification of the Conformational transition pathway in PIP2 Opening Kir Channels. <i>Scientific Reports</i> , 2015 , 5, 11289	4.9	19
33	On the mechanism of GIRK2 channel gating by phosphatidylinositol bisphosphate, sodium, and the G β dimer. <i>Journal of Biological Chemistry</i> , 2019 , 294, 18934-18948	5.4	18
32	A Critical Gating Switch at a Modulatory Site in Neuronal Kir3 Channels. <i>Journal of Neuroscience</i> , 2015 , 35, 14397-405	6.6	17
31	The Molecular Mechanism of Opening the Helix Bundle Crossing (HBC) Gate of a Kir Channel. <i>Scientific Reports</i> , 2016 , 6, 29399	4.9	17
30	Unifying Mechanism of Controlling Kir3 Channel Activity by G Proteins and Phosphoinositides. <i>International Review of Neurobiology</i> , 2015 , 123, 1-26	4.4	16
29	The ICL _{swell} inhibitor DCPIB blocks Kir channels that possess weak affinity for PIP2. <i>Pflugers Archiv European Journal of Physiology</i> , 2016 , 468, 817-24	4.6	16
28	Structural-functional analysis of the third transmembrane domain of the corticotropin-releasing factor type 1 receptor: role in activation and allosteric antagonism. <i>Journal of Biological Chemistry</i> , 2014 , 289, 18966-77	5.4	14
27	The small molecule GAT1508 activates brain-specific GIRK1/2 channel heteromers and facilitates conditioned fear extinction in rodents. <i>Journal of Biological Chemistry</i> , 2020 , 295, 3614-3634	5.4	13
26	Regulation of Kv2.1 channel inactivation by phosphatidylinositol 4,5-bisphosphate. <i>Scientific Reports</i> , 2018 , 8, 1769	4.9	13
25	Mutations in Nature Conferred a High Affinity Phosphatidylinositol 4,5-Bisphosphate-binding Site in Vertebrate Inwardly Rectifying Potassium Channels. <i>Journal of Biological Chemistry</i> , 2015 , 290, 16517-29	5.4	12
24	Mass spectrometric analysis reveals a functionally important PKA phosphorylation site in a Kir3 channel subunit. <i>Pflugers Archiv European Journal of Physiology</i> , 2009 , 458, 303-14	4.6	12
23	Stoichiometry of Kir channels with phosphatidylinositol bisphosphate. <i>Channels</i> , 2008 , 2, 19-33	3	12
22	Cloning and characterization of G protein-gated inward rectifier K ⁺ channel (GIRK1) isoforms from heart and brain. <i>Journal of Molecular Neuroscience</i> , 2001 , 16, 21-32	3.3	11

21	Hydrogen sulfide inhibits Kir2 and Kir3 channels by decreasing sensitivity to the phospholipid phosphatidylinositol 4,5-bisphosphate (PIP). <i>Journal of Biological Chemistry</i> , 2018 , 293, 3546-3561	5.4	10
20	G protein-coupled receptor signaling to Kir channels in <i>Xenopus oocytes</i> . <i>Current Pharmaceutical Biotechnology</i> , 2014 , 15, 987-95	2.6	10
19	Molecular overlap in the regulation of SK channels by small molecules and phosphoinositides. <i>Science Advances</i> , 2015 , 1, e1500008	14.3	9
18	SLO-2 isoforms with unique Ca(2+) - and voltage-dependence characteristics confer sensitivity to hypoxia in <i>C. elegans</i> . <i>Channels</i> , 2013 , 7, 194-205	3	8
17	Lack of negatively charged residues at the external mouth of Kir2.2 channels enable the voltage-dependent block by external Mg2+. <i>PLoS ONE</i> , 2014 , 9, e111372	3.7	8
16	Kir Channel Molecular Physiology, Pharmacology, and Therapeutic Implications. <i>Handbook of Experimental Pharmacology</i> , 2021 , 267, 277-356	3.2	7
15	Structure-based analysis of CysZ-mediated cellular uptake of sulfate. <i>ELife</i> , 2018 , 7,	8.9	6
14	PIP regulation of TRPC5 channel activation and desensitization. <i>Journal of Biological Chemistry</i> , 2021 , 296, 100726	5.4	6
13	G protein-coupled receptor-effector macromolecular membrane assemblies (GEMMAs). <i>Pharmacology & Therapeutics</i> , 2021 , 107977	13.9	6
12	Reformulating a Pharmacophore for 5-HT2A Serotonin Receptor Antagonists. <i>ACS Chemical Neuroscience</i> , 2016 , 7, 1292-9	5.7	5
11	Protein Kinase C regulation of ion channels: the involvement of PIP.. <i>Journal of Biological Chemistry</i> , 2022 , 102035	5.4	5
10	Protein Binding Pocket Optimization for Virtual High-Throughput Screening (vHTS) Drug Discovery. <i>ACS Omega</i> , 2020 , 5, 14297-14307	3.9	4
9	Three pairs of weak interactions precisely regulate the G-loop gate of Kir2.1 channel. <i>Proteins: Structure, Function and Bioinformatics</i> , 2016 , 84, 1929-1937	4.2	3
8	Lick Rate and the Circadian Rhythm of Water Intake in the Rat: Effects of Deuterium Oxide. <i>Annals of the New York Academy of Sciences</i> , 1984 , 423, 614-617	6.5	3
7	Activation of specific bitter taste receptors by olive oil phenolics and secoiridoids. <i>Scientific Reports</i> , 2021 , 11, 22340	4.9	3
6	A benzopyran with antiarrhythmic activity is an inhibitor of Kir3.1-containing potassium channels. <i>Journal of Biological Chemistry</i> , 2021 , 296, 100535	5.4	3
5	A molecular switch controls the impact of cholesterol on a Kir channel.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022 , 119, e2109431119	11.5	3
4	A novel small molecule selective activator of homomeric GIRK4 channels.. <i>Journal of Biological Chemistry</i> , 2022 , 102009	5.4	2

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| 3 | The where and how of PIP regulation of cone photoreceptor CNG channels. <i>Journal of General Physiology</i> , 2013 , 141, 403-7 | 3-4 | 1 |
| 2 | An optogenetic tool to recruit individual PKC isozymes to the cell surface and promote specific phosphorylation of membrane proteins.. <i>Journal of Biological Chemistry</i> , 2022 , 101893 | 5-4 | 1 |
| 1 | Elucidation of molecular kinetic schemes from macroscopic traces using system identification. <i>PLoS Computational Biology</i> , 2017 , 13, e1005376 | 5 | 0 |