Diomedes E Logothetis

List of Publications by Year in Descending Order

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	An optogenetic tool to recruit individual PKC isozymes to the cell surface and promote specific phosphorylation of membrane proteins.. *Journal of Biological Chemistry*, **2022**, 101893	5.4	1
91	A molecular switch controls the impact of cholesterol on a Kir channel.. *Proceedings of the National Academy of Sciences of the United States of America*, **2022**, 119, e2109431119	11.5	3
90	A novel small molecule selective activator of homomeric GIRK4 channels.. *Journal of Biological Chemistry*, **2022**, 102009	5.4	2
89	Protein Kinase C regulation of ion channels: the involvement of PIP.. *Journal of Biological Chemistry*, **2022**, 102035	5.4	5
88	Activation of specific bitter taste receptors by olive oil phenolics and secoiridoids. *Scientific Reports* , **2021**, 11, 22340	4.9	3
87	PIP regulation of TRPC5 channel activation and desensitization. *Journal of Biological Chemistry*, **2021**, 296, 100726	5.4	6
86	Kir Channel Molecular Physiology, Pharmacology, and Therapeutic Implications. *Handbook of Experimental Pharmacology*, **2021**, 267, 277-356	3.2	7
85	G protein-coupled receptor-effector macromolecular membrane assemblies (GEMMAs). *Pharmacology & Therapeutics*, **2021**, 107977	13.9	6
84	A benzopyran with antiarrhythmic activity is an inhibitor of Kir3.1-containing potassium channels. *Journal of Biological Chemistry*, **2021**, 296, 100535	5.4	3
83	Protein Binding Pocket Optimization for Virtual High-Throughput Screening (vHTS) Drug Discovery. *ACS Omega*, **2020**, 5, 14297-14307	3.9	4
82	The small molecule GAT1508 activates brain-specific GIRK1/2 channel heteromers and facilitates conditioned fear extinction in rodents. *Journal of Biological Chemistry*, **2020**, 295, 3614-3634	5.4	13
81	On the mechanism of GIRK2 channel gating by phosphatidylinositol bisphosphate, sodium, and the G dimer. *Journal of Biological Chemistry*, **2019**, 294, 18934-18948	5.4	18
80	Regulation of Kv2.1 channel inactivation by phosphatidylinositol 4,5-bisphosphate. *Scientific Reports*, **2018**, 8, 1769	4.9	13
79	Hydrogen sulfide inhibits Kir2 and Kir3 channels by decreasing sensitivity to the phospholipid phosphatidylinositol 4,5-bisphosphate (PIP). *Journal of Biological Chemistry*, **2018**, 293, 3546-3561	5.4	10
78	Essential Control of the Function of the Striatopallidal Neuron by Pre-coupled Complexes of Adenosine A-Dopamine D Receptor Heterotetramers and Adenylyl Cyclase. *Frontiers in Pharmacology*, **2018**, 9, 243	5.6	45
77	Structure-based analysis of CysZ-mediated cellular uptake of sulfate. *ELife*, **2018**, 7,	8.9	6
76	Exploring the Nanotoxicology of MoS: A Study on the Interaction of MoS Nanoflakes and K Channels. *ACS Nano*, **2018**, 12, 705-717	16.7	34

75	Competition of calcified calmodulin N lobe and PIP2 to an LQT mutation site in Kv7.1 channel. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E869-E878	11.5	34
74	Ca-Calmodulin and PIP2 interactions at the proximal C-terminus of Kv7 channels. *Channels*, **2017**, 11, 686-695	3	20
73	Elucidation of molecular kinetic schemes from macroscopic traces using system identification. *PLoS Computational Biology*, **2017**, 13, e1005376	5	0
72	The Molecular Mechanism of Opening the Helix Bundle Crossing (HBC) Gate of a Kir Channel. *Scientific Reports*, **2016**, 6, 29399	4.9	17
71	Three pairs of weak interactions precisely regulate the G-loop gate of Kir2.1 channel. *Proteins: Structure, Function and Bioinformatics*, **2016**, 84, 1929-1937	4.2	3
70	Epilepsy-Related Slack Channel Mutants Lead to Channel Over-Activity by Two Different Mechanisms. *Cell Reports*, **2016**, 14, 129-139	10.6	32
69	Cross-signaling in metabotropic glutamate 2 and serotonin 2A receptor heteromers in mammalian cells. *Pflugers Archiv European Journal of Physiology*, **2016**, 468, 775-93	4.6	19
68	Allosteric signaling through an mGlu2 and 5-HT2A heteromeric receptor complex and its potential contribution to schizophrenia. *Science Signaling*, **2016**, 9, ra5	8.8	70
67	Reformulating a Pharmacophore for 5-HT2A Serotonin Receptor Antagonists. *ACS Chemical Neuroscience*, **2016**, 7, 1292-9	5.7	5
66	The ICl,swell inhibitor DCPIB blocks Kir channels that possess weak affinity for PIP2. *Pflugers Archiv European Journal of Physiology*, **2016**, 468, 817-24	4.6	16
65	Positive allosteric modulators of metabotropic glutamate 2 receptors in schizophrenia treatment. *Trends in Neurosciences*, **2015**, 38, 506-16	13.3	43
64	Mutations in Nature Conferred a High Affinity Phosphatidylinositol 4,5-Bisphosphate-binding Site in Vertebrate Inwardly Rectifying Potassium Channels. *Journal of Biological Chemistry*, **2015**, 290, 16517-29	5.4	12
63	A Critical Gating Switch at a Modulatory Site in Neuronal Kir3 Channels. *Journal of Neuroscience*, **2015**, 35, 14397-405	6.6	17
62	Molecular overlap in the regulation of SK channels by small molecules and phosphoinositides. *Science Advances*, **2015**, 1, e1500008	14.3	9
61	Phosphoinositide control of membrane protein function: a frontier led by studies on ion channels. *Annual Review of Physiology*, **2015**, 77, 81-104	23.1	63
60	Identification of the Conformational transition pathway in PIP2 Opening Kir Channels. *Scientific Reports*, **2015**, 5, 11289	4.9	19
59	Unifying Mechanism of Controlling Kir3 Channel Activity by G Proteins and Phosphoinositides. *International Review of Neurobiology*, **2015**, 123, 1-26	4.4	16
58	Structural determinants of phosphatidylinositol 4,5-bisphosphate (PIP2) regulation of BK channel activity through the RCK1 Ca2+ coordination site. *Journal of Biological Chemistry*, **2014**, 289, 18860-72	5.4	25

57	Selective phosphorylation modulates the PIP2 sensitivity of the CaM-SK channel complex. *Nature Chemical Biology*, **2014**, 10, 753-9	11.7	49
56	Structural-functional analysis of the third transmembrane domain of the corticotropin-releasing factor type 1 receptor: role in activation and allosteric antagonism. *Journal of Biological Chemistry*, **2014**, 289, 18966-77	5.4	14
55	Lack of negatively charged residues at the external mouth of Kir2.2 channels enable the voltage-dependent block by external Mg2+. *PLoS ONE*, **2014**, 9, e111372	3.7	8
54	G protein-coupled receptor signaling to Kir channels in Xenopus oocytes. *Current Pharmaceutical Biotechnology*, **2014**, 15, 987-95	2.6	10
53	A computational model predicts that G□acts at a cleft between channel subunits to activate GIRK1 channels. *Science Signaling*, **2013**, 6, ra69	8.8	23
52	The where and how of PIP regulation of cone photoreceptor CNG channels. *Journal of General Physiology*, **2013**, 141, 403-7	3.4	1
51	SLO-2 isoforms with unique Ca(2+) - and voltage-dependence characteristics confer sensitivity to hypoxia in C. elegans. *Channels*, **2013**, 7, 194-205	3	8
50	PIP2 controls voltage-sensor movement and pore opening of Kv channels through the S4-S5 linker. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, E2399-408	11.5	67
49	The molecular mechanism by which PIP(2) opens the intracellular G-loop gate of a Kir3.1 channel. *Biophysical Journal*, **2012**, 102, 2049-59	2.9	46
48	Dual Regulation of Voltage-Sensitive Ion Channels by PIP(2). *Frontiers in Pharmacology*, **2012**, 3, 170	5.6	37
47	Cholesterol sensitivity of KIR2.1 is controlled by a belt of residues around the cytosolic pore. *Biophysical Journal*, **2011**, 100, 381-9	2.9	50
46	Decoding the signaling of a GPCR heteromeric complex reveals a unifying mechanism of action of antipsychotic drugs. *Cell*, **2011**, 147, 1011-23	56.2	226
45	Phosphatidylinositol-4,5-bisphosphate regulates epidermal growth factor receptor activation. *Pflugers Archiv European Journal of Physiology*, **2011**, 461, 387-97	4.6	61
44	Gating of a G protein-sensitive mammalian Kir3.1 prokaryotic Kir channel chimera in planar lipid bilayers. *Journal of Biological Chemistry*, **2010**, 285, 39790-800	5.4	33
43	Phosphatidylinositol 4,5-bisphosphate activates Slo3 currents and its hydrolysis underlies the epidermal growth factor-induced current inhibition. *Journal of Biological Chemistry*, **2010**, 285, 19259-66	5.4	25
42	The RCK2 domain uses a coordination site present in Kir channels to confer sodium sensitivity to Slo2.2 channels. *Journal of Neuroscience*, **2010**, 30, 7554-62	6.6	42
41	Channelopathies linked to plasma membrane phosphoinositides. *Pflugers Archiv European Journal of Physiology*, **2010**, 460, 321-41	4.6	79
40	Mass spectrometric analysis reveals a functionally important PKA phosphorylation site in a Kir3 channel subunit. *Pflugers Archiv European Journal of Physiology*, **2009**, 458, 303-14	4.6	12

39	Subtype-specific regulation of P2X3 and P2X2/3 receptors by phosphoinositides in peripheral nociceptors. *Molecular Pain*, **2009**, 5, 47	3.4	38
38	Direct modulation of P2X1 receptor-channels by the lipid phosphatidylinositol 4,5-bisphosphate. *Molecular Pharmacology*, **2008**, 74, 785-92	4.3	33
37	Stoichiometry of Kir channels with phosphatidylinositol bisphosphate. *Channels*, **2008**, 2, 19-33	3	12
36	A sodium-mediated structural switch that controls the sensitivity of Kir channels to PtdIns(4,5)P(2). *Nature Chemical Biology*, **2008**, 4, 624-31	11.7	42
35	Phosphoinositides regulate P2X4 ATP-gated channels through direct interactions. *Journal of Neuroscience*, **2008**, 28, 12938-45	6.6	66
34	Diverse Kir modulators act in close proximity to residues implicated in phosphoinositide binding. *Journal of Physiology*, **2007**, 582, 953-65	3.9	46
33	Regulation of ATP-gated P2X receptors by phosphoinositides. *Pflugers Archiv European Journal of Physiology*, **2007**, 455, 181-5	4.6	20
32	Phosphoinositide-mediated gating of inwardly rectifying K(+) channels. *Pflugers Archiv European Journal of Physiology*, **2007**, 455, 83-95	4.6	101
31	Molecular characteristics of phosphoinositide binding. *Pflugers Archiv European Journal of Physiology*, **2007**, 455, 45-53	4.6	65
30	Mechanism of PLC-mediated Kir3 current inhibition. *Channels*, **2007**, 1, 113-23	3	39
29	Protein kinase A modulates PLC-dependent regulation and PIP2-sensitivity of K+ channels. *Channels*, **2007**, 1, 124-34	3	48
28	PIP2 Regulates the Ionic Current of P2X Receptors and P2X 7 Receptor-Mediated Cell Death. *Channels*, **2007**, 1, 47-56	3	35
27	Phosphatidylinositol-4,5-bisphosphate regulates NMDA receptor activity through alpha-actinin. *Journal of Neuroscience*, **2007**, 27, 5523-32	6.6	48
26	PIP(2) regulates the ionic current of P2X receptors and P2X(7) receptor-mediated cell death. *Channels*, **2007**, 1, 46-55	3	31
25	PI(4,5)P2 regulates the activation and desensitization of TRPM8 channels through the TRP domain. *Nature Neuroscience*, **2005**, 8, 626-34	25.5	468
24	PIP2 hydrolysis underlies agonist-induced inhibition and regulates voltage gating of two-pore domain K+ channels. *Journal of Physiology*, **2005**, 564, 117-29	3.9	143
23	Characteristic interactions with phosphatidylinositol 4,5-bisphosphate determine regulation of kir channels by diverse modulators. *Journal of Biological Chemistry*, **2004**, 279, 37271-81	5.4	154
22	Specificity of activation by phosphoinositides determines lipid regulation of Kir channels. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 745-50	11.5	170

21	PIP(2) activates KCNQ channels, and its hydrolysis underlies receptor-mediated inhibition of M currents. *Neuron*, **2003**, 37, 963-75	13.9	422
20	Gbeta residues that do not interact with Galpha underlie agonist-independent activity of K+ channels. *Journal of Biological Chemistry*, **2002**, 277, 7348-55	5.4	46
19	Identification of critical residues controlling G protein-gated inwardly rectifying K(+) channel activity through interactions with the beta gamma subunits of G proteins. *Journal of Biological Chemistry*, **2002**, 277, 6088-96	5.4	81
18	Assaying phosphatidylinositol bisphosphate regulation of potassium channels. *Methods in Enzymology*, **2002**, 345, 71-92	1.7	43
17	Alterations in conserved Kir channel-PIP2 interactions underlie channelopathies. *Neuron*, **2002**, 34, 933-44	13.9	326
16	Cloning and characterization of G protein-gated inward rectifier K+ channel (GIRK1) isoforms from heart and brain. *Journal of Molecular Neuroscience*, **2001**, 16, 21-32	3.3	11
15	Receptor-mediated hydrolysis of plasma membrane messenger PIP2 leads to K+-current desensitization. *Nature Cell Biology*, **2000**, 2, 507-14	23.4	205
14	Glycosylation of GIRK1 at Asn119 and ROMK1 at Asn117 has different consequences in potassium channel function. *Journal of Biological Chemistry*, **2000**, 275, 30677-82	5.4	24
13	Synergistic activation of G protein-gated inwardly rectifying potassium channels by the betagamma subunits of G proteins and Na(+) and Mg(2+) ions. *Journal of General Physiology*, **1999**, 114, 673-84	3.4	80
12	Identification of a potassium channel site that interacts with G protein betagamma subunits to mediate agonist-induced signaling. *Journal of Biological Chemistry*, **1999**, 274, 12517-24	5.4	93
11	Distinct specificities of inwardly rectifying K(+) channels for phosphoinositides. *Journal of Biological Chemistry*, **1999**, 274, 36065-72	5.4	162
10	Activation of inwardly rectifying K+ channels by distinct PtdIns(4,5)P2 interactions. *Nature Cell Biology*, **1999**, 1, 183-8	23.4	408
9	Gating of G protein-sensitive inwardly rectifying K+ channels through phosphatidylinositol 4,5-bisphosphate. *Journal of Physiology*, **1999**, 520 Pt 3, 630	3.9	30
8	Characterization of a Ca2+-activated K+ current in insulin-secreting murine betaTC-3 cells. *Journal of Physiology*, **1998**, 509 (Pt 2), 355-70	3.9	26
7	Specific regions of heteromeric subunits involved in enhancement of G protein-gated K+ channel activity. *Journal of Biological Chemistry*, **1997**, 272, 6548-55	5.4	47
6	Probing the G-protein regulation of GIRK1 and GIRK4, the two subunits of the KACh channel, using functional homomeric mutants. *Journal of Biological Chemistry*, **1997**, 272, 31553-60	5.4	127
5	A region of adenylyl cyclase 2 critical for regulation by G protein beta gamma subunits. *Science*, **1995**, 268, 1166-9	33.3	240
4	Gating charge differences between two voltage-gated K+ channels are due to the specific charge content of their respective S4 regions. *Neuron*, **1993**, 10, 1121-9	13.9	47

3	Incremental reductions of positive charge within the S4 region of a voltage-gated K+ channel result in corresponding decreases in gating charge. *Neuron*, **1992**, 8, 531-40	13.9	128
2	The beta gamma subunits of GTP-binding proteins activate the muscarinic K+ channel in heart. *Nature*, **1987**, 325, 321-6	50.4	1067
1	Lick Rate and the Circadian Rhythm of Water Intake in the Rat: Effects of Deuterium Oxidea. *Annals of the New York Academy of Sciences*, **1984**, 423, 614-617	6.5	3