Diomedes E Logothetis

List of Publications by Year
in descending order

92 papers	7,610 citations	66343 42 h-index	51608 86 g-index
96 all docs	96 docs citations	96 times ranked	5377 citing authors

#	Article	IF	Citations
1	G protein-coupled receptor-effector macromolecular membrane assemblies (GEMMAs). , 2022, 231, 107977.		28
2	An optogenetic tool to recruit individual PKC isozymes to the cell surface and promote specific phosphorylation of membrane proteins. Journal of Biological Chemistry, 2022, 298, 101893.	3.4	5
3	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.	7.1	9
4	A novel small-molecule selective activator of homomeric GIRK4 channels. Journal of Biological Chemistry, 2022, 298, 102009.	3.4	11
5	PKC regulation of ion channels: The involvement of PIP2. Journal of Biological Chemistry, 2022, 298, 102035.	3.4	19
6	PIP2 regulation of TRPC5 channel activation and desensitization. Journal of Biological Chemistry, 2021, 296, 100726.	3.4	30
7	Kir Channel Molecular Physiology, Pharmacology, and Therapeutic Implications. Handbook of Experimental Pharmacology, 2021, 267, 277-356.	1.8	21
8	A benzopyran with antiarrhythmic activity is an inhibitor of Kir3.1-containing potassium channels. Journal of Biological Chemistry, 2021, 296, 100535.	3.4	7
9	Activation of specific bitter taste receptors by olive oil phenolics and secoiridoids. Scientific Reports, 2021, 11, 22340.	3.3	15
10	Protein Binding Pocket Optimization for Virtual High-Throughput Screening (vHTS) Drug Discovery. ACS Omega, 2020, 5, 14297-14307.	3.5	7
11	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.	3.4	20
12	On the mechanism of GIRK2 channel gating by phosphatidylinositol bisphosphate, sodium, and the GÎ²Î³ dimer. Journal of Biological Chemistry, 2019, 294, 18934-18948.	3.4	26
13	Regulation of Kv2.1 channel inactivation by phosphatidylinositol 4,5-bisphosphate. Scientific Reports, 2018, 8, 1769.	3.3	18
14	Hydrogen sulfide inhibits Kir2 and Kir3 channels by decreasing sensitivity to the phospholipid phosphatidylinositol 4,5-bisphosphate (PIP2). Journal of Biological Chemistry, 2018, 293, 3546-3561.	3.4	15
15	Exploring the Nanotoxicology of MoS₂: A Study on the Interaction of MoS₂ Nanoflakes and K⁺ Channels. ACS Nano, 2018, 12, 705-717.	14.6	44
16	Essential Control of the Function of the Striatopallidal Neuron by Pre-coupled Complexes of Adenosine A2A-Dopamine D2 Receptor Heterotetramers and Adenylyl Cyclase. Frontiers in Pharmacology, 2018, 9, 243.	3.5	73
17	Structure-based analysis of CysZ-mediated cellular uptake of sulfate. ELife, 2018, 7, .	6.0	10
18	Competition of calcified calmodulin N lobe and PIP ₂ 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.	7.1	46

#	ARTICLE	IF	CITATIONS
19	Ca²⁺-Calmodulin and PIP2 interactions at the proximal C-terminus of Kv7 channels. Channels, 2017, 11, 686-695.	2.8	28
20	Elucidation of molecular kinetic schemes from macroscopic traces using system identification. PLoS Computational Biology, 2017, 13, e1005376.	3.2	1
21	Reformulating a Pharmacophore for 5-HT_{2A} Serotonin Receptor Antagonists. ACS Chemical Neuroscience, 2016, 7, 1292-1299.	3.5	8
22	The ICl,swell inhibitor DCPIB blocks Kir channels that possess weak affinity for PIP2. Pflugers Archiv European Journal of Physiology, 2016, 468, 817-824.	2.8	23
23	The Molecular Mechanism of Opening the Helix Bundle Crossing (HBC) Gate of a Kir Channel. Scientific Reports, 2016, 6, 29399.	3.3	26
24	Three pairs of weak interactions precisely regulate the G-loop gate of Kir2.1 channel. Proteins: Structure, Function and Bioinformatics, 2016, 84, 1929-1937.	2.6	5
25	Epilepsy-Related Slack Channel Mutants Lead to Channel Over-Activity by Two Different Mechanisms. Cell Reports, 2016, 14, 129-139.	6.4	60
26	Cross-signaling in metabotropic glutamate 2 and serotonin 2A receptor heteromers in mammalian cells. Pflugers Archiv European Journal of Physiology, 2016, 468, 775-793.	2.8	26
27	Allosteric signaling through an mGlu2 and 5-HT _{2A} heteromeric receptor complex and its potential contribution to schizophrenia. Science Signaling, 2016, 9, ra5.	3.6	91
28	Identification of the Conformational transition pathway in PIP2 Opening Kir Channels. Scientific Reports, 2015, 5, 11289.	3.3	24
29	Unifying Mechanism of Controlling Kir3 Channel Activity by G Proteins and Phosphoinositides. International Review of Neurobiology, 2015, 123, 1-26.	2.0	20
30	Positive allosteric modulators of metabotropic glutamate 2 receptors in schizophrenia treatment. Trends in Neurosciences, 2015, 38, 506-516.	8.6	48
31	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, 16517-16529.	3.4	12
32	A Critical Gating Switch at a Modulatory Site in Neuronal Kir3 Channels. Journal of Neuroscience, 2015, 35, 14397-14405.	3.6	22
33	Molecular overlap in the regulation of SK channels by small molecules and phosphoinositides. Science Advances, 2015, 1, e1500008.	10.3	11
34	Phosphoinositide Control of Membrane Protein Function: A Frontier Led by Studies on Ion Channels. Annual Review of Physiology, 2015, 77, 81-104.	13.1	84
35	Selective phosphorylation modulates the PIP2 sensitivity of the CaMâ€“SK channel complex. Nature Chemical Biology, 2014, 10, 753-759.	8.0	59
36	Structural-Functional Analysis of the Third Transmembrane Domain of the Corticotropin-releasing Factor Type 1 Receptor. Journal of Biological Chemistry, 2014, 289, 18966-18977.	3.4	16

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37	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, 18860-18872.	3.4	37
38	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.	2.5	8
39	G Protein-Coupled Receptor Signaling to Kir Channels in Xenopus Oocytes. Current Pharmaceutical Biotechnology, 2014, 15, 987-995.	1.6	15
40	A Computational Model Predicts That GÎ²Î³ Acts at a Cleft Between Channel Subunits to Activate GIRK1 Channels. Science Signaling, 2013, 6, ra69.	3.6	30
41	The where and how of PIP regulation of cone photoreceptor CNG channels. Journal of General Physiology, 2013, 141, 403-407.	1.9	1
42	SLO-2 isoforms with unique Ca2+- and voltage-dependence characteristics confer sensitivity to hypoxia inC. elegans. Channels, 2013, 7, 194-205.	2.8	11
43	PIP ₂ controls voltage-sensor movement and pore opening of Kv channels through the S4â€“S5 linker. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E2399-408.	7.1	84
44	The Molecular Mechanism by which PIP2 Opens the Intracellular G-Loop Gate of a Kir3.1 Channel. Biophysical Journal, 2012, 102, 2049-2059.	0.5	53
45	Dual Regulation of Voltage-Sensitive Ion Channels by PIP2. Frontiers in Pharmacology, 2012, 3, 170.	3.5	45
46	Cholesterol Sensitivity of KIR2.1 Is Controlled by a Belt of Residues around the Cytosolic Pore. Biophysical Journal, 2011, 100, 381-389.	0.5	52
47	Decoding the Signaling of a GPCR Heteromeric Complex Reveals a Unifying Mechanism of Action of Antipsychotic Drugs. Cell, 2011, 147, 1011-1023.	28.9	271
48	Phosphatidylinositol-4,5-bisphosphate regulates epidermal growth factor receptor activation. Pflugers Archiv European Journal of Physiology, 2011, 461, 387-397.	2.8	71
49	Channelopathies linked to plasma membrane phosphoinositides. Pflugers Archiv European Journal of Physiology, 2010, 460, 321-341.	2.8	87
50	Gating of a G protein-sensitive Mammalian Kir3.1 Prokaryotic Kir Channel Chimera in Planar Lipid Bilayers. Journal of Biological Chemistry, 2010, 285, 39790-39800.	3.4	34
51	Phosphatidylinositol 4,5-Bisphosphate Activates Slo3 Currents and Its Hydrolysis Underlies the Epidermal Growth Factor-induced Current Inhibition. Journal of Biological Chemistry, 2010, 285, 19259-19266.	3.4	27
52	The RCK2 Domain Uses a Coordination Site Present in Kir Channels to Confer Sodium Sensitivity to Slo2.2 Channels. Journal of Neuroscience, 2010, 30, 7554-7562.	3.6	60
53	Mass spectrometric analysis reveals a functionally important PKA phosphorylation site in a Kir3 channel subunit. Pflugers Archiv European Journal of Physiology, 2009, 458, 303-314.	2.8	13
54	Subtype-Specific Regulation of P2X3 and P2X2/3 Receptors by Phosphoinositides in Peripheral Nociceptors. Molecular Pain, 2009, 5, 1744-8069-5-47.	2.1	40

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55	Direct Modulation of P2X1 Receptor-Channels by the Lipid Phosphatidylinositol 4,5-Bisphosphate. Molecular Pharmacology, 2008, 74, 785-792.	2.3	35
56	Stoichiometry of Kir channels with phosphatidylinositol bisphosphate. Channels, 2008, 2, 19-33.	2.8	12
57	A sodium-mediated structural switch that controls the sensitivity of Kir channels to PtdIns(4,5)P2. Nature Chemical Biology, 2008, 4, 624-631.	8.0	48
58	Phosphoinositides Regulate P2X₄ATP-Gated Channels through Direct Interactions. Journal of Neuroscience, 2008, 28, 12938-12945.	3.6	78
59	Mechanism of PLC-Mediated Kir3 Current Inhibition. Channels, 2007, 1, 113-123.	2.8	45
60	Protein Kinase A Modulates PLC-Dependent Regulation and PIP₂-Sensitivity of K⁺Channels. Channels, 2007, 1, 124-134.	2.8	53
61	PIP₂Â-Regulates the Ionic Current of P2X Receptors and P2X_{Â7}Receptor-Mediated Cell Death. Channels, 2007, 1, 47-56.	2.8	41
62	Phosphatidylinositol-4,5-Bisphosphate Regulates NMDA Receptor Activity through Â-Actinin. Journal of Neuroscience, 2007, 27, 5523-5532.	3.6	50
63	Diverse Kir modulators act in close proximity to residues implicated in phosphoinositide binding. Journal of Physiology, 2007, 582, 953-965.	2.9	49
64	Regulation of ATP-gated P2X receptors by phosphoinositides. Pflugers Archiv European Journal of Physiology, 2007, 455, 181-185.	2.8	21
65	Phosphoinositide-mediated gating of inwardly rectifying K+ channels. Pflugers Archiv European Journal of Physiology, 2007, 455, 83-95.	2.8	106
66	Molecular characteristics of phosphoinositide binding. Pflugers Archiv European Journal of Physiology, 2007, 455, 45-53.	2.8	73
67	PIP(2) regulates the ionic current of P2X receptors and P2X(7) receptor-mediated cell death. Channels, 2007, 1, 46-55.	2.8	31
68	PI(4,5)P2 regulates the activation and desensitization of TRPM8 channels through the TRP domain. Nature Neuroscience, 2005, 8, 626-634.	14.8	535
69	PIP2hydrolysis underlies agonist-induced inhibition and regulates voltage gating of two-pore domain K+channels. Journal of Physiology, 2005, 564, 117-129.	2.9	164
70	Characteristic Interactions with Phosphatidylinositol 4,5-Bisphosphate Determine Regulation of Kir Channels by Diverse Modulators. Journal of Biological Chemistry, 2004, 279, 37271-37281.	3.4	162
71	PIP2 Activates KCNQ Channels, and Its Hydrolysis Underlies Receptor-Mediated Inhibition of M Currents. Neuron, 2003, 37, 963-975.	8.1	474
72	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, 745-750.	7.1	206

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73	GÎ² Residues That Do Not Interact with GÎ± Underlie Agonist-independent Activity of K+ Channels. Journal of Biological Chemistry, 2002, 277, 7348-7355.	3.4	48
74	Identification of Critical Residues Controlling G Protein-gated Inwardly Rectifying K+ Channel Activity through Interactions with the Î²Î³ Subunits of G Proteins. Journal of Biological Chemistry, 2002, 277, 6088-6096.	3.4	92
75	Assaying Phosphatidylinositol Bisphosphate Regulation of Potassium Channels. Methods in Enzymology, 2002, 345, 71-92.	1.0	43
76	Alterations in Conserved Kir Channel-PIP2 Interactions Underlie Channelopathies. Neuron, 2002, 34, 933-944.	8.1	368
77	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.	2.3	11
78	Receptor-mediated hydrolysis of plasma membrane messenger PIP2 leads to K+-current desensitization. Nature Cell Biology, 2000, 2, 507-514.	10.3	219
79	Glycosylation of GIRK1 at Asn119 and ROMK1 at Asn117 Has Different Consequences in Potassium Channel Function. Journal of Biological Chemistry, 2000, 275, 30677-30682.	3.4	25
80	Synergistic Activation of G Proteinâ€"Gated Inwardly Rectifying Potassium Channels by the Î²Î³ Subunits of G Proteins and Na+ and Mg2+ Ions. Journal of General Physiology, 1999, 114, 673-684.	1.9	84
81	Identification of a Potassium Channel Site That Interacts with G Protein Î²Î³ Subunits to Mediate Agonist-induced Signaling. Journal of Biological Chemistry, 1999, 274, 12517-12524.	3.4	106
82	Distinct Specificities of Inwardly Rectifying K+Channels for Phosphoinositides. Journal of Biological Chemistry, 1999, 274, 36065-36072.	3.4	179
83	Activation of inwardly rectifying K+ channels by distinct PtdIns(4,5)P2 interactions. Nature Cell Biology, 1999, 1, 183-188.	10.3	444
84	Gating of G protein-sensitive inwardly rectifying K+channels through phosphatidylinositol 4,5-bisphosphate. Journal of Physiology, 1999, 520, 630-630.	2.9	33
85	Characterization of a Ca2+-activated K+current in insulin-secreting murine Î²TC-3 cells. Journal of Physiology, 1998, 509, 355-370.	2.9	28
86	Specific Regions of Heteromeric Subunits Involved in Enhancement of G Protein-gated K+ Channel Activity. Journal of Biological Chemistry, 1997, 272, 6548-6555.	3.4	54
87	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, 31553-31560.	3.4	149
88	A region of adenylyl cyclase 2 critical for regulation by G protein beta gamma subunits. Science, 1995, 268, 1166-1169.	12.6	261
89	Gating charge differences between two voltagegated K+ channels are due to the specific charge content of their respective S4 regions. Neuron, 1993, 10, 1121-1129.	8.1	52
90	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, 531-540.	8.1	142

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91	The Î²Î³ subunits of GTP-binding proteins activate the muscarinic K+ channel in heart. Nature, 1987, 325, 321-326.	27.8	1,173
92	Lick Rate and the Circadian Rhythm of Water Intake in the Rat: Effects of Deuterium Oxide. Annals of the New York Academy of Sciences, 1984, 423, 614-617.	3.8	3