Michel B Vivaudou

List of Publications by Year
in descending order

52 papers	1,682 citations	331670 21 h-index	276875 41 g-index
53 all docs	53 docs citations	53 times ranked	1511 citing authors

#	Article	IF	Citations
1	Pharmacological plasticity of cardiac ATP-sensitive potassium channels toward diazoxide revealed by ADP. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 12162-12167.	7.1	170
2	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
3	ATPase activity of the sulfonylurea receptor: a catalytic function for the KATPchannel complex. FASEB Journal, 2000, 14, 1943-1952.	0.5	131
4	The molecular basis of the specificity of action of KATP channel openers. EMBO Journal, 2000, 19, 6644-6651.	7.8	124
5	Regulation of one type of Ca 2+ current in smooth muscle cells by diacylglycerol and acetylcholine. FASEB Journal, 1988, 2, 2497-2504.	0.5	110
6	SUR, ABC proteins targeted by K channel openers. Journal of Molecular and Cellular Cardiology, 2005, 38, 951-963.	1.9	100
7	Skeletal muscle ATP-sensitive K+ channels recorded from sarcolemmal blebs of split fibers: ATP inhibition is reduced by magnesium and ADP. Journal of Membrane Biology, 1991, 122, 165-175.	2.1	78
8	A Transmembrane Domain of the Sulfonylurea Receptor Mediates Activation of ATP-Sensitive K+ Channels by K+Channel Openers. Molecular Pharmacology, 1999, 56, 308-315.	2.3	70
9	Zinc is both an intracellular and extracellular regulator of KATPchannel function. Journal of Physiology, 2004, 559, 157-167.	2.9	61
10	Coupling ion channels to receptors for biomolecule sensing. Nature Nanotechnology, 2008, 3, 620-625.	31.5	58
11	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
12	Membrane Permeation versus Amyloidogenicity: A Multitechnique Study of Islet Amyloid Polypeptide Interaction with Model Membranes. Journal of the American Chemical Society, 2017, 139, 137-148.	13.7	49
13	Hourglass SiO2 coating increases the performance of planar patch-clamp. Journal of Biotechnology, 2006, 125, 142-154.	3.8	47
14	Coassembly of Different Sulfonylurea Receptor Subtypes Extends the Phenotypic Diversity of ATP-sensitive Potassium (K_{ATP}) Channels. Molecular Pharmacology, 2008, 74, 1333-1344.	2.3	37
15	Adaptive torsion-angle quasi-statics: a general simulation method with applications to protein structure analysis and design. Bioinformatics, 2007, 23, i408-i417.	4.1	28
16	Recognition of Sulfonylurea Receptor (ABCC8/9) Ligands by the Multidrug Resistance Transporter P-glycoprotein (ABCB1). Journal of Biological Chemistry, 2011, 286, 3552-3569.	3.4	27
17	8 G protein gated potassium channels. Advances in Second Messenger and Phosphoprotein Research, 1999, 33, 179-201.	4.5	25
18	An automated technique for analysis of current transitions in multilevel single-channel recordings. Pflugers Archiv European Journal of Physiology, 1986, 407, 355-364.	2.8	24

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19	Multiple types of Ca2+ channels in visceral smooth muscle cells. Pflugers Archiv European Journal of Physiology, 1991, 418, 144-152.	2.8	22
20	Modulation by Mg2+ and ADP of ATP-sensitive potassium channels in frog skeletal muscle. Journal of Membrane Biology, 1993, 132, 87-94.	2.1	22
21	The Size of a Single Residue of the Sulfonylurea Receptor Dictates the Effectiveness of KATP Channel Openers. Molecular Pharmacology, 2005, 67, 1026-1033.	2.3	22
22	Three Câ€terminal residues from the sulphonylurea receptor contribute to the functional coupling between the K_{ATP} channel subunits SUR2A and Kir6.2. Journal of Physiology, 2008, 586, 3075-3085.	2.9	20
23	Regulation of Cardiac ATP-sensitive Potassium Channel Surface Expression by Calcium/Calmodulin-dependent Protein Kinase II. Journal of Biological Chemistry, 2013, 288, 1568-1581.	3.4	20
24	Substance P, like acetylcholine, augments one type of Ca2+ current in isolated smooth muscle cells. Pflugers Archiv European Journal of Physiology, 1989, 413, 565-567.	2.8	19
25	Providencia stuartii form biofilms and floating communities of cells that display high resistance to environmental insults. PLoS ONE, 2017, 12, e0174213.	2.5	18
26	CFTR inhibition by glibenclamide requires a positive charge in cytoplasmic loop three. Biochimica Et Biophysica Acta - Biomembranes, 2007, 1768, 2438-2446.	2.6	17
27	Engineering of an Artificial Light-Modulated Potassium Channel. PLoS ONE, 2012, 7, e43766.	2.5	16
28	Î²2-Adrenergic Ion-Channel Coupled Receptors as Conformational Motion Detectors. PLoS ONE, 2011, 6, e18226.	2.5	13
29	Remodelling of the SUR-Kir6.2 interface of the KATPchannel upon ATP binding revealed by the conformational blocker rhodamine 123. Journal of Physiology, 2007, 582, 27-39.	2.9	12
30	Single-step production of functional OEP24 proteoliposomes. Protein Expression and Purification, 2010, 69, 106-111.	1.3	12
31	Kir6.2 activation by sulfonylurea receptors: a different mechanism of action for SUR1 and SUR2A subunits via the same residues. Physiological Reports, 2015, 3, e12533.	1.7	12
32	Porin self-association enables cell-to-cell contact in Providencia stuartii floating communities. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E2220-E2228.	7.1	11
33	Intracellular protons control the affinity of skeletal muscle ATP-sensitive K+channels for potassium-channel-openers. FEBS Letters, 1993, 325, 276-280.	2.8	10
34	Inhibition of ATP-sensitive K+ channels by substituted benzo[c]quinolizinium CFTR activators. Biochemical Pharmacology, 2003, 66, 425-430.	4.4	10
35	Functional Assay for T4 Lysozyme-Engineered G Protein-Coupled Receptors with an Ion Channel Reporter. Structure, 2014, 22, 149-155.	3.3	9
36	Ion Channel Reporter for Monitoring the Activity of Engineered GPCRs. Methods in Enzymology, 2015, 556, 425-454.	1.0	9

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37	Neurotransmitter Regulation of Ionic Channels in Freshly Dissociated Smooth Muscle Cells. Annals of the New York Academy of Sciences, 1988, 527, 346-359.	3.8	8
38	The unusual stoichiometry of ADP activation of the KATP channel. Frontiers in Physiology, 2014, 5, 11.	2.8	8
39	Tuning the allosteric regulation of artificial muscarinic and dopaminergic ligand-gated potassium channels by protein engineering of G protein-coupled receptors. Scientific Reports, 2017, 7, 41154.	3.3	8
40	Molecular Pharmacology of ATP-Sensitive K+Channels: How and Why?. , 2001, , 257-277.		8
41	C-Terminal Engineering of CXCL12 and CCL5 Chemokines: Functional Characterization by Electrophysiological Recordings. PLoS ONE, 2014, 9, e87394.	2.5	8
42	Ion Channels as Reporters of Membrane Receptor Function: Automated Analysis in Xenopus Oocytes. Methods in Molecular Biology, 2017, 1635, 283-301.	0.9	7
43	Assaying the proton transport and regulation of UCP1 using solid supported membranes. European Biophysics Journal, 2012, 41, 675-679.	2.2	5
44	Impact of Disease-causing SUR1 Mutations on the KATP Channel Subunit Interface Probed with a Rhodamine Protection Assay. Journal of Biological Chemistry, 2010, 285, 3084-3091.	3.4	4
45	Rebuilding a macromolecular membrane complex at the atomic scale: Case of the Kir6.2 potassium channel coupled to the muscarinic acetylcholine receptor M2. Proteins: Structure, Function and Bioinformatics, 2014, 82, 1694-1707.	2.6	4
46	Functional mapping of the N-terminal arginine cluster and C-terminal acidic residues of Kir6.2 channel fused to a G protein-coupled receptor. Biochimica Et Biophysica Acta - Biomembranes, 2017, 1859, 2144-2153.	2.6	2
47	Dose-dependent activation and block by bisG10, a K+channel blocker, of mouse and frog skeletal muscle KATPchannels. FEBS Letters, 1995, 375, 215-219.	2.8	1
48	Design of Biosensors Based on the Covalent Assembly of G-Protein Coupled Receptors and Potassium Channels. Biophysical Journal, 2010, 98, 193a.	0.5	1
49	Ion-Channel Coupled Receptors: New Tools for the Study of Receptors and Channels. Biophysical Journal, 2012, 102, 539a.	0.5	1
50	Characterization of Loss-Of-Function KCNJ2 Mutations in Atypical Andersen Tawil Syndrome. Frontiers in Genetics, 2021, 12, 773177.	2.3	1
51	Functional Assessment of Crystallization-Optimized G Protein-Coupled Receptors using Ion Channel-Coupled Receptors. Biophysical Journal, 2013, 104, 25a.	0.5	0
52	Antiobesity Strategy Targets Energy Economy Safeguards. Molecular Therapy, 2015, 23, 615-616.	8.2	0