David E Clapham

List of Publications by Year
in descending order

227	51,218	1524 106	1436 220
papers	citations	h-index	g-index

264	264	264	39069
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Calcium Signaling. Cell, 2007, 131, 1047-1058.	27.8	3,672
2	TRP channels as cellular sensors. Nature, 2003, 426, 517-524.	36.2	2,434
3	Calcium signaling. Cell, 1995, 80, 259-268.	27.8	2,356
4	AN INTRODUCTION TO TRP CHANNELS. Annual Review of Physiology, 2006, 68, 619-647.	13.2	1,404
5	The mitochondrial calcium uniporter is a highly selective ion channel. Nature, 2004, 427, 360-364.	36.2	1,246
6	The Î²Î³ subunits of GTP-binding proteins activate the muscarinic K+ channel in heart. Nature, 1987, 325, 321-326.	36.2	1,182
7	The trp ion channel family. Nature Reviews Neuroscience, 2001, 2, 387-396.	10.7	1,040
8	A sperm ion channel required for sperm motility and male fertility. Nature, 2001, 413, 603-609.	36.2	857
9	Roles of G protein subunits in transmembrane signalling. Nature, 1988, 333, 129-134.	36.2	839
10	TRPV3 is a calcium-permeable temperature-sensitive cation channel. Nature, 2002, 418, 181-186.	36.2	805
11	G PROTEIN Î²Î³ SUBUNITS. Annual Review of Pharmacology and Toxicology, 1997, 37, 167-203.	9.6	797
12	TRPC6 is a glomerular slit diaphragm-associated channel required for normal renal function. Nature Genetics, 2005, 37, 739-744.	20.4	757
13	TRPC1 and TRPC5 Form a Novel Cation Channel in Mammalian Brain. Neuron, 2001, 29, 645-655.	8.0	701
14			

#	Article	IF	Citations
19	International Union of Basic and Clinical Pharmacology. LXXVI. Current Progress in the Mammalian TRP Ion Channel Family. Pharmacological Reviews, 2010, 62, 381-404.	16.1	517
20	Developmental Origin of a Bipotential Myocardial and Smooth Muscle Cell Precursor in the Mammalian Heart. Cell, 2006, 127, 1137-1150.	27.8	504
21	Rapid vesicular translocation and insertion of TRP channels. Nature Cell Biology, 2004, 6, 709-720.	10.0	501
22	The TRPM7 channel is inactivated by PIP2 hydrolysis. Nature Cell Biology, 2002, 4, 329-336.	10.0	485
23	TPC Proteins Are Phosphoinositide- Activated Sodium-Selective Ion Channels in Endosomes and Lysosomes. Cell, 2012, 151, 372-383.	27.8	467
24	All four CatSper ion channel proteins are required for male fertility and sperm cell hyperactivated motility. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 1219-1223.	7.6	463
25	Recombinant G-protein Î²Î³-subunits activate the muscarinic-gated atrial potassium channel. Nature, 1994, 368, 255-257.	36.2	453
26	Crystal structure of an orthologue of the NaChBac voltage-gated sodium channel. Nature, 2012, 486, 130-134.	36.2	448
27	Primary cilia are specialized calcium signalling organelles. Nature, 2013, 504, 311-314.	36.2	443
28	G-protein Î²Î³-subunits activate the cardiac muscarinic K+-channel via phospholipase A2. Nature, 1989, 337, 557-560.	36.2	438
29	Inositol 1,3,4,5-tetrakisphosphate activates an endothelial Ca2+-permeable channel. Nature, 1992, 355, 356-358.	36.2	419
30	Whole-cell patch-clamp measurements of spermatozoa reveal an alkaline-activated Ca2+ channel. Nature, 2006, 439, 737-740.	36.2	412
31	The NMDA Receptor Is Coupled to the ERK Pathway by a Direct Interaction between NR2B and RasGRF1. Neuron, 2003, 40, 775-784.	8.0	401
32	Formation of Novel TRPC Channels by Complex Subunit Interactions in Embryonic Brain. Journal of Biological Chemistry, 2003, 278, 39014-39019.	3.5	377
33	Phosphatidylinositol 3-Kinase Activates ERK in Primary Sensory Neurons and Mediates Inflammatory Heat Hyperalgesia through TRPV1 Sensitization. Journal of Neuroscience, 2004, 24, 8300-8309.	3.8	372
34	Molecular mechanisms of intracellular calcium excitability in X. laevis oocytes. Cell, 1992, 69, 283-294.	27.8	370
35	International Union of Pharmacology. XLI. Compendium of Voltage-Gated Ion Channels: Potassium Channels. Pharmacological Reviews, 2003, 55, 583-586.	16.1	364
36	Ion Channels â€" Basic Science and Clinical Disease. New England Journal of Medicine, 1997, 336, 1575-1586.	30.1	363

#	Article	IF	Citations
37	CatSper1 required for evoked Ca2+ entry and control of flagellar function in sperm. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 14864-14868.	7.6	361
38	Abnormal Heart Rate Regulation in GIRK4 Knockout Mice. Neuron, 1998, 20, 103-114.	8.0	358
39	Rheotaxis Guides Mammalian Sperm. Current Biology, 2013, 23, 443-452.	4.0	352
40	Camphor Activates and Strongly Desensitizes the Transient Receptor Potential Vanilloid Subtype 1 Channel in a Vanilloid-Independent Mechanism. Journal of Neuroscience, 2005, 25, 8924-8937.	3.8	348
41	TRPC5 is a regulator of hippocampal neurite length and growth cone morphology. Nature Neuroscience, 2003, 6, 837-845.	14.5	346
42	New mammalian chloride channel identified by expression cloning. Nature, 1992, 356, 238-241.	36.2	343
43	CaT1 manifests the pore properties of the calcium-release-activated calcium channel. Nature, 2001, 410, 705-709.	36.2	337
44	mTOR Regulates Lysosomal ATP-Sensitive Two-Pore Na+ Channels to Adapt to Metabolic State. Cell, 2013, 152, 778-790.	27.8	323
45	TRP ion channels in the nervous system. Current Opinion in Neurobiology, 2004, 14, 362-369.	4.3	301
46	TRPV4 Is a Regulator of Adipose Oxidative Metabolism, Inflammation, and Energy Homeostasis. Cell, 2012, 151, 96-110.	27.8	300
47	The Control of Male Fertility by Spermatozoan Ion Channels. Annual Review of Physiology, 2012, 74, 453-475.	13.2	299
48	A voltage-gated ion channel expressed specifically in spermatozoa. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 12527-12531.	7.6	293
49	TRP Channel Regulates EGFR Signaling in Hair Morphogenesis and Skin Barrier Formation. Cell, 2010, 141, 331-343.	27.8	293
50	Direct recording and molecular identification of the calcium channel of primary cilia. Nature, 2013, 504, 315-318.	36.2	274
51	SynGAP-MUPP1-CaMKII Synaptic Complexes Regulate p38 MAP Kinase Activity and NMDA Receptor-Dependent Synaptic AMPA Receptor Potentiation. Neuron, 2004, 43, 563-574.	8.0	258
52	Essential Role for TRPC5 in Amygdala Function and Fear-Related Behavior. Cell, 2009, 137, 761-772.	27.8	254
53	Evaluation of the role of IKAChin atrial fibrillation using a mouse knockout model. Journal of the American College of Cardiology, 2001, 37, 2136-2143.	5.6	238
54	Hv1 proton channels are required for high-level NADPH oxidase-dependent superoxide production during the phagocyte respiratory burst. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 7642-7647.	7.6	238

#	Article	IF	Citations
55	International Union of Pharmacology. XLIII. Compendium of Voltage-Gated Ion Channels: Transient Receptor Potential Channels. Pharmacological Reviews, 2003, 55, 591-596.	16.1	230
56	Functional TRPM7 Channels Accumulate at the Plasma Membrane in Response to Fluid Flow. Circulation Research, 2006, 98, 245-253.	10.7	228
57	Structurally Distinct Ca2+ Signaling Domains of Sperm Flagella Orchestrate Tyrosine Phosphorylation and Motility. Cell, 2014, 157, 808-822.	27.8	225
58	The Structure of the Polycystic Kidney Disease Channel PKD2 in Lipid Nanodiscs. Cell, 2016, 167, 763-773.e11.	27.8	222
59	A thermodynamic framework for understanding temperature sensing by transient receptor potential (TRP) channels. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 19492-19497.	7.6	220
60	Gî²î³ Binds Directly to the G Protein-gated K+ Channel, IKACh. Journal of Biological Chemistry, 1995, 270, 29059-29062.	3.5	217
61	The voltage-gated proton channel Hv1 enhances brain damage from ischemic stroke. Nature Neuroscience, 2012, 15, 565-573.	14.5	213
62	Molecular characterization of a swelling-induced chloride conductance regulatory protein, pICln. Cell, 1994, 76, 439-448.	27.8	206
63	CACNA1H Mutations in Autism Spectrum Disorders. Journal of Biological Chemistry, 2006, 281, 22085-22091.	3.5	206
64	Subcellular patterns of calcium release determined by G protein-specific residues of muscarinic receptors. Nature, 1991, 350, 505-508.	36.2	205
65	KSper, a pH-sensitive K+ current that controls sperm membrane potential. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 7688-7692.	7.6	203
66	Transient receptor potential cation channel, subfamily C, member 5 (TRPC5) is a cold-transducer in the peripheral nervous system. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 18114-18119.	7.6	199
67	Calcium release from the nucleus by InsP3 receptor channels. Neuron, 1995, 14, 163-167.	8.0	195
68	Activating mutation in a mucolipin transient receptor potential channel leads to melanocyte loss in varitintâ€“waddler mice. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 18321-18326.	7.6	194
69	The TRPM7 Ion Channel Functions in Cholinergic Synaptic Vesicles and Affects Transmitter Release. Neuron, 2006, 52, 485-496.	8.0	188
70	Cloning of a Xenopus laevis Inwardly Rectifying K+ Channel Subunit That Permits GIRK1 Expression of IKACh Currents in Oocytes. Neuron, 1996, 16, 423-429.	8.0	180
71	Mammalian MagT1 and TUSC3 are required for cellular magnesium uptake and vertebrate embryonic development. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 15750-15755.	7.6	177
72	A Novel Inward Rectifier K+ Channel with Unique Pore Properties. Neuron, 1998, 20, 995-1005.	8.0	174

#	Article	IF	Citations
73	A novel gene required for male fertility and functional CATSPER channel formation in spermatozoa. Nature Communications, 2011, 2, 153.	13.2	174
74	TRPM1 Forms Ion Channels Associated with Melanin Content in Melanocytes. Science Signaling, 2009, 2, ra21.	5.1	171
75	Replenishing the stores. Nature, 1995, 375, 634-635.	36.2	170
76	An aqueous H+ permeation pathway in the voltage-gated proton channel Hv1. Nature Structural and Molecular Biology, 2010, 17, 869-875.	8.1	163
77	MCU encodes the pore conducting mitochondrial calcium currents. ELife, 2013, 2, e00704.	5.9	162
78	The channel kinase, TRPM7 , is required for early embryonic development. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E225-33.	7.6	154
79	Molecular dynamics of ion transport through the open conformation of a bacterial voltage-gated sodium channel. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 6364-6369.	7.6	154
80	The TRPM7 Chanzyme Is Cleaved to Release a Chromatin-Modifying Kinase. Cell, 2014, 157, 1061-1072.	27.8	152
81	A Superfamily of Voltage-gated Sodium Channels in Bacteria*. Journal of Biological Chemistry, 2004, 279, 9532-9538.	3.5	151
82	CatSperÎ², a Novel Transmembrane Protein in the CatSper Channel Complex. Journal of Biological Chemistry, 2007, 282, 18945-18952.	3.5	150
83	The Cation Selectivity Filter of the Bacterial Sodium Channel, NaChBac. Journal of General Physiology, 2002, 120, 845-853.	1.9	144
84	Cleavage of TRPM7 Releases the Kinase Domain from the Ion Channel and Regulates Its Participation in Fas-Induced Apoptosis. Developmental Cell, 2012, 22, 1149-1162.	7.0	134
85	Bisandrographolide from Andrographis paniculata Activates TRPV4 Channels. Journal of Biological Chemistry, 2006, 281, 29897-29904.	3.5	131
86	Intracellular calcium strongly potentiates agonist-activated TRPC5 channels. Journal of General Physiology, 2009, 133, 525-546.	1.9	130
87	Calbindin-D28K dynamically controls TRPV5-mediated Ca2+ transport. EMBO Journal, 2006, 25, 2978-2988.	8.2	128
88	Functional reconstitution of the mitochondrial Ca2+/H+ antiporter Letm1. Journal of General Physiology, 2014, 143, 67-73.	1.9	126
89	Ion channels that control fertility in mammalian spermatozoa. International Journal of Developmental Biology, 2008, 52, 607-613.	0.7	125
90	Prokaryotic NavMs channel as a structural and functional model for eukaryotic sodium channel antagonism. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 8428-8433.	7.6	124

#	Article	IF	Citations
91	Molecular Determinants for Subcellular Localization of PSD-95 with an Interacting K+ Channel. Neuron, 1999, 23, 149-157.	8.0	119
92	The G-protein nanomachine. Nature, 1996, 379, 297-299.	36.2	118
93	Letm1, the mitochondrial Ca ²⁺ /H ⁺ antiporter, is essential for normal glucose metabolism and alters brain function in Wolfâ€“Hirschhorn syndrome. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E2249-54.	7.6	116
94	Structure of the mouse TRPC4 ion channel. Nature Communications, 2018, 9, 3102.	13.2	115
95	Not So Funny Anymore. Neuron, 1998, 21, 5-7.	8.0	114
96	Brain Localization and Behavioral Impact of the G-Protein-Gated K⁺Channel Subunit GIRK4. Journal of Neuroscience, 2000, 20, 5608-5615.	3.8	113
97	Targeted Cytosolic Delivery of Cell-Impermeable Compounds by Nanoparticle-Mediated, Light-Triggered Endosome Disruption. Nano Letters, 2010, 10, 2211-2219.	9.5	111
98	The voltage-gated Na+ channel NaVBP has a role in motility, chemotaxis, and pH homeostasis of an alkaliphilic Bacillus. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 10566-10571.	7.6	110
99	Number and Stoichiometry of Subunits in the Native Atrial G-protein-gated K+ Channel, IKACh. Journal of Biological Chemistry, 1998, 273, 5271-5278.	3.5	107
100	Structure of the mammalian TRPM7, a magnesium channel required during embryonic development. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E8201-E8210.	7.6	107
101	Citral Sensing by TRANSient Receptor Potential Channels in Dorsal Root Ganglion Neurons. PLoS ONE, 2008, 3, e2082.	2.5	103
102	POST, partner of stromal interaction molecule 1 (STIM1), targets STIM1 to multiple transporters. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 19234-19239.	7.6	102
103	Specificity of receptor-G protein interactions: Searching for the structure behind the signal. Cellular Signalling, 1993, 5, 505-518.	3.7	100
104	Ion channel-kinase TRPM 7 is required for maintaining cardiac automaticity. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E3037-46.	7.6	100
105	Molecular basis of ion permeability in a voltageâ€gated sodium channel. EMBO Journal, 2016, 35, 820-830.	8.2	100
106	Functional and Biochemical Evidence for G-protein-gated Inwardly Rectifying K+ (GIRK) Channels Composed of GIRK2 and GIRK3. Journal of Biological Chemistry, 2000, 275, 36211-36216.	3.5	99
107	Nucleoplasmic and cytoplasmic differences in the fluorescence properties of the calcium indicator Fluo-3. Cell Calcium, 1997, 21, 275-282.	3.2	97
108	TRPM7 facilitates cholinergic vesicle fusion with the plasma membrane. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 8304-8308.	7.6	97

#	Article	IF	Citations
109	Timing of Myocardial Trpm7 Deletion During Cardiogenesis Variably Disrupts Adult Ventricular Function, Conduction, and Repolarization. Circulation, 2013, 128, 101-114.	9.3	95
110	Evolutionary Genomics Reveals Lineage-Specific Gene Loss and Rapid Evolution of a Sperm-Specific Ion Channel Complex: CatSpers and CatSperÎ². PLoS ONE, 2008, 3, e3569.	2.5	95
111	pICln Inhibits snRNP Biogenesis by Binding Core Spliceosomal Proteins. Molecular and Cellular Biology, 1999, 19, 4113-4120.	2.5	93
112	TRPM7 senses oxidative stress to release Zn ²⁺ from unique intracellular vesicles. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E6079-E6088.	7.6	93
113	Identification of Native Atrial G-protein-regulated Inwardly Rectifying K+ (GIRK4) Channel Homomultimers. Journal of Biological Chemistry, 1998, 273, 27499-27504.	3.5	91
114	Real-Time Imaging of Nuclear Permeation by EGFP in Single Intact Cells. Biophysical Journal, 2003, 84, 1317-1327.	0.5	91
115	Ancestral Ca2+ Signaling Machinery in Early Animal and Fungal Evolution. Molecular Biology and Evolution, 2012, 29, 91-100.	9.2	91
116	Conformational Changes of the in Situ Nuclear Pore Complex. Biophysical Journal, 1999, 77, 241-247.	0.5	90
117	Decreased Anxiety-Like Behavior and G_{Î±q/11}-Dependent Responses in the Amygdala of Mice Lacking TRPC4 Channels. Journal of Neuroscience, 2014, 34, 3653-3667.	3.8	89
118	Caspase-11 Controls Interleukin-1Î² Release through Degradation of TRPC1. Cell Reports, 2014, 6, 1122-1128.	6.3	89
119	Mitochondrial calcium uniporter regulator 1 (MCUR1) regulates the calcium threshold for the mitochondrial permeability transition. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E1872-80.	7.6	85
120	Calcium waves. Current Opinion in Neurobiology, 1993, 3, 375-382.	4.3	84
121	Structure of full-length human TRPM4. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2377-2382.	7.6	84
122	G-protein regulation of ion channels. Current Opinion in Neurobiology, 1995, 5, 278-285.	4.3	82
123	Fundamental Ca2+ Signaling Mechanisms in Mouse Dendritic Cells: CRAC Is the Major Ca2+ Entry Pathway. Journal of Immunology, 2001, 166, 6126-6133.	0.8	82
124	TRP Is Cracked but Is CRAC TRP?. Neuron, 1996, 16, 1069-1072.	8.0	80
125	GÎ²Î³ Binding to GIRK4 Subunit Is Critical for G Protein-gated K+ Channel Activation. Journal of Biological Chemistry, 1998, 273, 16946-16952.	3.5	79
126	Evidence for Direct Physical Association between a K⁺Channel (Kir6.2) and an ATP-Binding Cassette Protein (SUR1) Which Affects Cellular Distribution and Kinetic Behavior of an ATP-Sensitive K⁺ Channel. Molecular and Cellular Biology, 1998, 18, 1652-1659.	2.5	79

#	Article	IF	Citations
127	GIRK4 Confers Appropriate Processing and Cell Surface Localization to G-protein-gated Potassium Channels. Journal of Biological Chemistry, 1999, 274, 2571-2582.	3.5	77
128	The G Protein Î²Î³ Subunit Transduces the Muscarinic Receptor Signal for Ca2+ Release in Xenopus Oocytes. Journal of Biological Chemistry, 1995, 270, 30068-30074.	3.5	76
129	A serotonergic axon-cilium synapse drives nuclear signaling to alter chromatin accessibility. Cell, 2022, 185, 3390-3407.e18.	27.8	76
130	Chloride channels in the nuclear membrane. Journal of Membrane Biology, 1991, 123, 49-54.	2.3	75
131	Cryo-EM structure of TRPC5 at 2.8-Ã... resolution reveals unique and conserved structural elements essential for channel function. Science Advances, 2019, 5, eaaw7935.	10.9	75
132	Mutations in G protein-linked receptors: Novel insights on disease. Cell, 1993, 75, 1237-1239.	27.8	74
133	Role of the C-terminal domain in the structure and function of tetrameric sodium channels. Nature Communications, 2013, 4, 2465.	13.2	73
134	TRPM7, the Mg2+ Inhibited Channel and Kinase. Advances in Experimental Medicine and Biology, 2011, 704, 173-183.	0.0	72
135	The G-proteinâ€“gated K+ channel, IKACh, is required for regulation of pacemaker activity and recovery of resting heart rate after sympathetic stimulation. Journal of General Physiology, 2013, 142, 113-126.	1.9	72
136	Nuclear calcium and the regulation of the nuclear pore complex. BioEssays, 1997, 19, 787-792.	2.6	65
137	Simultaneous knockout ofSlo3andCatSper1abolishes all alkalization- and voltage-activated current in mouse spermatozoa. Journal of General Physiology, 2013, 142, 305-313.	1.9	65
138	TRPV3 Channels Mediate Strontium-Induced Mouse-Egg Activation. Cell Reports, 2013, 5, 1375-1386.	6.3	64
139	A Spontaneous, Recurrent Mutation in Divalent Metal Transporter-1 Exposes a Calcium Entry Pathway. PLoS Biology, 2004, 2, e50.	5.4	60
140	Development of electrical coupling and action potential synchrony between paired aggregates of embryonic heart cells. Journal of Membrane Biology, 1979, 51, 75-96.	2.3	59
141	Calcium regulation of nuclear pore permeability. Cell Calcium, 1998, 23, 91-101.	3.2	58
142	Perspective: The List of Potential Volume-sensitive Chloride Currents Continues to Swell (and Shrink). Journal of General Physiology, 1998, 111, 623-624.	1.9	58
143	Sorting out MIC, TRP, and CRAC Ion Channels. Journal of General Physiology, 2002, 120, 217-220.	1.9	58
144	Calcium release and influx colocalize to the endoplasmic reticulum. Current Biology, 1997, 7, 599-602.	4.0	57

#	Article	IF	Citations
145	pICln Binds to a Mammalian Homolog of a Yeast Protein Involved in Regulation of Cell Morphology. Journal of Biological Chemistry, 1998, 273, 10811-10814.	3.5	57
146	Calpain cleaves and activates the TRPC5 channel to participate in semaphorin 3A-induced neuronal growth cone collapse. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 7888-7892.	7.6	57
147	Insights into the early evolution of animal calcium signaling machinery: A unicellular point of view. Cell Calcium, 2015, 57, 166-173.	3.2	57
148	Isomeric Tuning Yields Bright and Targetable Red Ca²⁺ Indicators. Journal of the American Chemical Society, 2019, 141, 13734-13738.	14.6	56
149	A Switch Mechanism for GÎ²Î³ Activation of IKACh. Journal of Biological Chemistry, 2000, 275, 29709-29716.	3.5	55
150	Controlled delivery of bioactive molecules into live cells using the bacterial mechanosensitive channel MscL. Nature Communications, 2012, 3, 990.	13.2	55
151	Odontoblast TRPC5 channels signal cold pain in teeth. Science Advances, 2021, 7, .	10.9	55
152	ATP-activated P2X2 current in mouse spermatozoa. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 14342-14347.	7.6	54
153	Calcium wave propagation by calcium-induced calcium release: An unusual excitable system. Bulletin of Mathematical Biology, 1993, 55, 315-344.	1.9	52
154	Some like it hot: spicing up ion channels. Nature, 1997, 389, 783-784.	36.2	52
155	Therapeutic Restoration of Spinal Inhibition via Druggable Enhancement of Potassium-Chloride Cotransporter KCC2â€“Mediated Chloride Extrusion in Peripheral Neuropathic Pain. JAMA Neurology, 2014, 71, 640.	9.3	52
156	The Cardiac Inward Rectifier K+ Channel Subunit, CIR, Does Not Comprise the ATP-sensitive K+ Channel, IKATP. Journal of Biological Chemistry, 1995, 270, 28777-28779.	3.5	51
157	Mechanism of Persistent Protein Kinase D1 Translocation and Activation. Developmental Cell, 2003, 4, 561-574.	7.0	51
158	Active Nuclear Import and Export Is Independent of Lumenal Ca2+ Stores in Intact Mammalian Cells. Journal of General Physiology, 1999, 113, 239-248.	1.9	50
159	Cardiac chloride channels. Trends in Cardiovascular Medicine, 1993, 3, 23-28.	5.3	49
160	Analysis of the selectivity filter of the voltage-gated sodium channel NavRh. Cell Research, 2013, 23, 409-422.	12.2	48
161	Early Evolution of the Eukaryotic Ca2+ Signaling Machinery: Conservation of the CatSper Channel Complex. Molecular Biology and Evolution, 2014, 31, 2735-2740.	9.2	45
162	Cryo-EM structure of the polycystin 2-l1 ion channel. ELife, 2018, 7, .	5.9	45

#	Article	IF	Citations
163	SIGNAL TRANSDUCTION: Hot and Cold TRP Ion Channels. Science, 2002, 295, 2228-2229.	20.9	44
164	The Stoichiometry of GÎ²Î³ Binding to G-protein-regulated Inwardly Rectifying K+ Channels (GIRKs). Journal of Biological Chemistry, 2001, 276, 11409-11413.	3.5	43
165	TATA-Binding Protein (TBP)-Like Factor (TLF) Is a Functional Regulator of Transcription: Reciprocal Regulation of the Neurofibromatosis Type 1 and c- fos Genes by TLF/TRF2 and TBP. Molecular and Cellular Biology, 2005, 25, 2632-2643.	2.5	42
166	Atypical calcium regulation of the PKD2-L1 polycystin ion channel. ELife, 2016, 5, .	5.9	42
167	TRP channels and mice deficient in TRP channels. Pflugers Archiv European Journal of Physiology, 2005, 451, 11-18.	2.8	41
168	Progress in ciliary ion channel physiology. Journal of General Physiology, 2017, 149, 37-47.	1.9	40
169	Ion channels and calcium signaling in motile cilia. ELife, 2015, 4, .	5.9	39
170	A mysterious new influx factor?. Nature, 1993, 364, 763-764.	36.2	38
171	GÎ²Î³ Binding Increases the Open Time of IKACh: Kinetic Evidence for Multiple GÎ²Î³ Binding Sites. Biophysical Journal, 1999, 76, 246-252.	0.5	38
172	Employing NaChBac for cryo-EM analysis of toxin action on voltage-gated Na ⁺ channels in nanodisc. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 14187-14193.	7.6	38
173	Distinct Ion Channel Classes Are Expressed on the Outer Nuclear Envelope of T- and B-Lymphocyte Cell Lines. Biophysical Journal, 2000, 79, 202-214.	0.5	37
174	Leucine-rich repeat containing 8A (LRRC8A) â€“dependent volume-regulated anion channel activity is dispensable for T-cell development and function. Journal of Allergy and Clinical Immunology, 2017, 140, 1651-1659.e1.	2.9	37
175	Ionic selectivity and thermal adaptations within the voltage-gated sodium channel family of alkaliphilic Bacillus. ELife, 2014, 3, .	5.9	37
176	Voltage-Activated K Channels in Embryonic Chick Heart. Biophysical Journal, 1984, 45, 40-42.	0.5	36
177	Histone phosphorylation by TRPM6â€™s cleaved kinase attenuates adjacent arginine methylation to regulate gene expression. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E7092-E7100.	7.6	36
178	Somatostatin activates an inwardly rectifying K+ channel in neonatal rat atrial cells. Pflugers Archiv European Journal of Physiology, 1989, 414, 492-494.	2.8	34
179	ICln Is Essential for Cellular and Early Embryonic Viability. Journal of Biological Chemistry, 2000, 275, 12363-12366.	3.5	33
180	Signal transduction through G proteins in the cardiac myocyte. Trends in Cardiovascular Medicine, 1992, 2, 6-11.	5.3	32

#	Article	IF	Citations
181	Sperm Patch-Clamp. Methods in Enzymology, 2013, 525, 59-83.	1.7	30
182	A STIMulus Package Puts Orai Calcium Channels to Work. Cell, 2009, 136, 814-816.	27.8	29
183	The SARS-CoV-2 accessory protein Orf3a is not an ion channel, but does interact with trafficking proteins. ELife, 0, 12, .	5.9	28
184	The voltage-gated Na+ channel NaVBP co-localizes with methyl-accepting chemotaxis protein at cell poles of alkaliphilic Bacillus pseudofirmus OF4. Microbiology (United Kingdom), 2007, 153, 4027-4038.	1.8	27
185	Anion-Sensitive Fluorophore Identifies the Drosophila Swell-Activated Chloride Channel in a Genome-Wide RNA Interference Screen. PLoS ONE, 2012, 7, e46865.	2.5	27
186	Structural characterization of the mouse Girk genes. Gene, 2002, 284, 241-250.	2.3	26
187	Modified herpes simplex virus delivery of enhanced GFP into the central nervous system. Journal of Neuroscience Methods, 2002, 121, 211-219.	2.6	26
188	1 Intracellular calcium waves. Advances in Second Messenger and Phosphoprotein Research, 1995, 30, 1-24.	0.0	26
189	How to Lose Your Hippocampus by Working on Chloride Channels. Neuron, 2001, 29, 1-3.	8.0	24
190	Partial Structure, Chromosome Localization, and Expression of the MouseGirk4Gene. Genomics, 1997, 40, 395-401.	2.9	23
191	Visualizing synaptic dopamine efflux with a 2D composite nanofilm. ELife, 0, 11, .	5.9	19
192	Pain-sensing TRPA1 channel resolved. Nature, 2015, 520, 439-441.	36.2	18
193	Intracellular Regulation of Ion Channels in Cell Membranes. Mayo Clinic Proceedings, 1990, 65, 1127-1143.	2.8	16
194	Arachidonic acid and its metabolites in the regulation of G-protein gated K+ channels in atrial myocytes. Biochemical Pharmacology, 1990, 39, 813-815.	4.6	16
195	Intracellular signalling: More jobs for GÎ²Î³. Current Biology, 1996, 6, 814-816.	4.0	15
196	The theoretical small signal impedance of the frog node,Rana pipiens. Pflugers Archiv European Journal of Physiology, 1976, 366, 273-276.	2.8	14
197	Small signal impedance of heart cell membranes. Journal of Membrane Biology, 1982, 67, 63-71.	2.3	13
198	Partial Structure, Chromosome Localization, and Expression of the MouseIclnGene. Genomics, 1997, 40, 402-408.	2.9	13

#	Article	IF	Citations
199	Unlocking Family Secrets. Cell, 1999, 97, 547-550.	27.8	13
200	Naturally Produced Defensive Alkenal Compounds Activate TRPA1. Chemical Senses, 2016, 41, 281-292.	2.1	11
201	G protein opening of K+ channels. Nature, 1987, 327, 22-22.	36.2	9
202	Structure and Function of G-Protein Î²Î³ Subunit. , 1990, , 41-61.		9
203	At last, the structure of an ion-selective channel. Nature Structural Biology, 1998, 5, 342-344.	8.1	8
204	Symmetry, Selectivity, and the 2003 Nobel Prize. Cell, 2003, 115, 641-646.	27.8	8
205	The MUPP1â€“SynGAPÎ± protein complex does not mediate activity-induced LTP. Molecular and Cellular Neurosciences, 2008, 38, 183-188.	2.2	8
206	Outstanding questions regarding the permeation, selectivity, and regulation of the mitochondrial calcium uniporter. Biochemical and Biophysical Research Communications, 2014, 449, 367-369.	2.2	8
207	The Fungal Sexual Pheromone Sirenin Activates the Human CatSper Channel Complex. ACS Chemical Biology, 2016, 11, 452-459.	3.6	8
208	Why testicles are cool. Nature, 1994, 371, 109-110.	36.2	7
209	Intracellular Signaling and Regulation of Cardiac Ion Channels. , 2004, , 33-41.		7
210	Sperm BerserKers. ELife, 2013, 2, e01469.	5.9	7
211	Simultaneous Near Ultraviolet and Visible Excitation Confocal Microscopy of Calcium Transients in Xenopus Oocytes. Methods in Cell Biology, 1994, 40, 263-284.	2.1	6
212	More pieces of the K+ ion channel puzzle. Nature Structural and Molecular Biology, 1999, 6, 807-810.	8.1	4
213	Recording Electrical Currents across the Plasma Membrane of Mammalian Sperm Cells. Journal of Visualized Experiments, 2021, , .	0.3	4
214	The mother of all endocytosis. ELife, 2013, 2, e01738.	5.9	3
215	Sperm CatSper ion channel swims into sharper focus. Nature, 2021, 595, 654-655.	36.2	2
216	Simultaneous Ultraviolet and Visible Wavelength Confocal Microscopy. , 1994, , 95-100.		1

#	Article	IF	Citations
217	Touch Channels Sense Blood Pressure. Neuron, 1998, 21, 1224-1226.	8.0	1
218	Chapter 16 G-Protein-Gated Potassium Channels: Implication for the weaver Mouse. Current Topics in Membranes, 1999, 46, 295-320.	2.0	1
219	Excitability and Conduction. , 2001, , 311-335.		1
220	Influences: Short circuits. Journal of General Physiology, 2018, 150, 513-515.	1.9	1
221	Intercellular Coupling between Embryonic Heart Cell Aggregates. Developments in Cardiovascular Medicine, 1982, , 265-281.	0.0	1
222	[27] G-protein-mediated pathways assayed by electrophysiology and confocal microscopy. Methods in Enzymology, 1994, 238, 321-335.	1.7	0
223	Mechanisms of Transmembrane Signaling. , 1997, , 689-742.		0
224	Near-membrane protein dynamics revealed by evanescent field microscopy. , 2004, 5467, 326.		0
225	Direct Recording and Molecular Identification of the Calcium Channel of Primary Cilia. Biophysical Journal, 2014, 106, 638a.	0.5	0
226	Feeling the heat: Temperature sensing by ion channels â€“ how do they do it?. Biochemist, 2011, 33, 22-25.	0.5	0
227	Primary cilia and other mysteries. Proceedings for Annual Meeting of the Japanese Pharmacological Society, 2019, 92, 3-SL10.	0.0	0