Marco Colombini

List of Publications by Year
in descending order

97 papers	8,367 citations	43973 48 h-index	46693 89 g-index
97 all docs	97 docs citations	97 times ranked	5246 citing authors

#	Article	IF	Citations
1	Cooperativity and Steep Voltage Dependence in a Bacterial Channel. International Journal of Molecular Sciences, 2019, 20, 4501.	1.8	2
2	Ceramide Channels. Advances in Experimental Medicine and Biology, 2019, 1159, 33-48.	0.8	13
3	Ceramide channels and mitochondrial outer membrane permeability. Journal of Bioenergetics and Biomembranes, 2017, 49, 57-64.	1.0	75
4	The VDAC channel: Molecular basis for selectivity. Biochimica Et Biophysica Acta - Molecular Cell Research, 2016, 1863, 2498-2502.	1.9	73
5	Ceramide channel: Structural basis for selective membrane targeting. Chemistry and Physics of Lipids, 2016, 194, 110-116.	1.5	15
6	Antifungal drug itraconazole targets VDAC1 to modulate the AMPK/mTOR signaling axis in endothelial cells. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E7276-85.	3.3	84
7	Ceramide channels: destabilization by Bcl-xL and role in apoptosis. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 2374-2384.	1.4	47
8	Ceramide Channels. Springer Series in Biophysics, 2015, , 75-98.	0.4	0
9	Bax channel triplet: co-operativity and voltage gating. Biochemical Journal, 2014, 459, 397-404.	1.7	1
10	Membrane Channels Formed by Ceramide. Handbook of Experimental Pharmacology, 2013, , 109-126.	0.9	39
11	Bax and Bcl-xL exert their regulation on different sites of the ceramide channel. Biochemical Journal, 2012, 445, 81-91.	1.7	47
12	Mitochondrial Outer Membrane Channels. Chemical Reviews, 2012, 112, 6373-6387.	23.0	26
13	VDAC structure, selectivity, and dynamics. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 1457-1465.	1.4	232
14	Ceramide channels: Influence of molecular structure on channel formation in membranes. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 1291-1301.	1.4	38
15	Dynamics of Ceramide Channels Detected Using a Microfluidic System. PLoS ONE, 2012, 7, e43513.	1.1	12
16	Bax Forms Two Types of Channels, One of Which Is Voltage-Gated. Biophysical Journal, 2011, 101, 2163-2169.	0.2	18
17	Visualization of ceramide channels by transmission electron microscopy. Biochimica Et Biophysica Acta - Biomembranes, 2011, 1808, 1196-1201.	1.4	45
18	Rapid Microfluidic Perfusion Enabling Kinetic Studies of Lipid Ion Channels in a Bilayer Lipid Membrane Chip. Annals of Biomedical Engineering, 2011, 39, 2242-2251.	1.3	11

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19	Ceramide and activated Bax act synergistically to permeabilize the mitochondrial outer membrane. Apoptosis: an International Journal on Programmed Cell Death, 2010, 15, 553-562.	2.2	145
20	Ceramide channels and their role in mitochondria-mediated apoptosis. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 1239-1244.	0.5	107
21	Regulation of ceramide channels by Bclâ€2 family proteins. FEBS Letters, 2010, 584, 2128-2134.	1.3	48
22	Hard Constraints on the Structure of VDAC from Functional Studies. Biophysical Journal, 2010, 98, 208a.	0.2	0
23	Ceramide channel formed in open well thermal plastic chips. , 2009, , .		0
24	The published 3D structure of the VDAC channel: native or not?. Trends in Biochemical Sciences, 2009, 34, 382-389.	3.7	109
25	Specific VDAC inhibitors: phosphorothioate oligonucleotides. Journal of Bioenergetics and Biomembranes, 2008, 40, 157-162.	1.0	27
26	Solution Structure of the Integral Human Membrane Protein VDAC-1 in Detergent Micelles. Science, 2008, 321, 1206-1210.	6.0	605
27	Ceramide synthesis in the endoplasmic reticulum can permeabilize mitochondria to proapoptotic proteins. Journal of Lipid Research, 2008, 49, 625-634.	2.0	136
28	Anti-apoptotic Bcl-2 Family Proteins Disassemble Ceramide Channels. Journal of Biological Chemistry, 2008, 283, 6622-6630.	1.6	110
29	Comparison of D-G3139 and Its Enantiomer L-G3139 in Melanoma Cells Demonstrates Minimal In Vitro but Dramatic In Vivo Chiral Dependency. Molecular Therapy, 2007, 15, 270-278.	3.7	8
30	Measurement of VDAC Permeability in Intact Mitochondria and in Reconstituted Systems. Methods in Cell Biology, 2007, 80, 241-260.	0.5	23
31	Phosphorothioate oligonucleotides reduce mitochondrial outer membrane permeability to ADP. American Journal of Physiology - Cell Physiology, 2007, 292, C1388-C1397.	2.1	24
32	VDAC closure increases calcium ion flux. Biochimica Et Biophysica Acta - Biomembranes, 2007, 1768, 2510-2515.	1.4	229
33	Avicins, a novel plant-derived metabolite lowers energy metabolism in tumor cells by targeting the outer mitochondrial membrane. Mitochondrion, 2007, 7, 234-240.	1.6	54
34	Phosphorothioate Oligonucleotides Block the VDAC Channel. Biophysical Journal, 2007, 93, 1184-1191.	0.2	52
35	Sphingosine, a Product of Ceramide Hydrolysis, Influences the Formation of Ceramide Channels. Biophysical Journal, 2006, 91, 1749-1756.	0.2	38
36	Ceramide forms channels in mitochondrial outer membranes at physiologically relevant concentrations. Mitochondrion, 2006, 6, 118-125.	1.6	208

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37	A pharmacologic target of G3139 in melanoma cells may be the mitochondrial VDAC. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 7494-7499.	3.3	83
38	On the Role of VDAC in Apoptosis: Fact and Fiction. Journal of Bioenergetics and Biomembranes, 2005, 37, 129-142.	1.0	222
39	Sphingosine Forms Channels in Membranes That Differ Greatly from Those Formed by Ceramide. Journal of Bioenergetics and Biomembranes, 2005, 37, 227-236.	1.0	64
40	Proapoptotic Triterpene Electrophiles (Avicins) Form Channels in Membranes: Cholesterol Dependence. Biophysical Journal, 2005, 88, 2577-2584.	0.2	45
41	New Insights into the Mechanism of Permeation through Large Channels. Biophysical Journal, 2005, 89, 3950-3959.	0.2	46
42	Bid, but Not Bax, Regulates VDAC Channels. Journal of Biological Chemistry, 2004, 279, 13575-13583.	1.6	174
43	VDAC: The channel at the interface between mitochondria and the cytosol. Molecular and Cellular Biochemistry, 2004, 256, 107-115.	1.4	440
44	Potassium channel openers are uncoupling protonophores: implication in cardioprotection. FEBS Letters, 2004, 568, 167-170.	1.3	82
45	The Physiological Properties of a Novel Family of VDAC-Like Proteins from Drosophila melanogaster. Biophysical Journal, 2004, 86, 152-162.	0.2	39
46	Mitochondrial Outer Membrane and the VDAC Channel. , 2004, , 733-736.		0
47	Enlargement and Contracture of C2-Ceramide Channels. Biophysical Journal, 2003, 85, 1560-1575.	0.2	87
48	Ceramide Channels Increase the Permeability of the Mitochondrial Outer Membrane to Small Proteins. Journal of Biological Chemistry, 2002, 277, 26796-26803.	1.6	317
49	Catalyzed Insertion of Proteins into Phospholipid Membranes: Specificity of the Process. Biophysical Journal, 2002, 83, 2550-2559.	0.2	7
50	Dynamics of Nucleotides in VDAC Channels: Structure-Specific Noise Generation. Biophysical Journal, 2002, 82, 193-205.	0.2	84
51	Electrostatics Explains the Shift in VDAC Gating with Salt Activity Gradient. Biophysical Journal, 2002, 82, 1773-1783.	0.2	13
52	A model of VDAC structural rearrangement in the presence of a salt activity gradient. Chemical Physics Letters, 2001, 348, 102-106.	1.2	0
53	Bcl-x Promotes the Open Configuration of the Voltage-dependent Anion Channel and Metabolite Passage through the Outer Mitochondrial Membrane. Journal of Biological Chemistry, 2001, 276, 19414-19419.	1.6	336
54	The Lipids C2- and C16-Ceramide Form Large Stable Channels. Journal of Biological Chemistry, 2000, 275, 38640-38644.	1.6	269

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55	Meningococcal PorA/C1, a Channel that Combines High Conductance and High Selectivity. Biophysical Journal, 1999, 76, 804-813.	0.2	23
56	Successful recovery of the normal electrophysiological properties of PorB (Class 3) porin from Neisseria meningitidis after expression in Escherichia coli and renaturation. Biochimica Et Biophysica Acta - Biomembranes, 1998, 1370, 289-298.	1.4	33
57	The Voltage-Gating Process of the Voltage-Dependent Anion Channel Is Sensitive to Ion Flow. Biophysical Journal, 1998, 75, 704-713.	0.2	42
58	The Sensor Regions of VDAC Are Translocated from within the Membrane to the Surface during the Gating Processes. Biophysical Journal, 1998, 74, 2926-2944.	0.2	95
59	The Topology of VDAC as Probed by Biotin Modification. Journal of Biological Chemistry, 1998, 273, 24406-24413.	1.6	90
60	Isolation and characterization of the mitochondrial channel, VDAC, from the insect Heliothis virescens. Biochimica Et Biophysica Acta - Biomembranes, 1997, 1327, 193-203.	1.4	7
61	An unique method for determining the permeability of the mitochondrial outer membrane. Cytotechnology, 1997, 19, 71-81.	0.7	5
62	The Role of Pyridine Dinucleotides in Regulating the Permeability of the Mitochondrial Outer Membrane. Journal of Biological Chemistry, 1996, 271, 26724-26731.	1.6	69
63	Indications of a common folding pattern for VDAC channels from all sources. Journal of Bioenergetics and Biomembranes, 1996, 28, 153-161.	1.0	51
64	The control of mitochondrial respiration in yeast: A possible role of the outer mitochondrial membrane. Cell Biochemistry and Function, 1996, 14, 201-208.	1.4	19
65	Self-catalyzed Insertion of Proteins into Phospholipid Membranes. Journal of Biological Chemistry, 1996, 271, 23675-23682.	1.6	33
66	ATP Flux Is Controlled by a Voltage-gated Channel from the Mitochondrial Outer Membrane. Journal of Biological Chemistry, 1996, 271, 28006-28008.	1.6	218
67	Individual Leaflets of a Membrane Bilayer Can Independently Regulate Permeability. Journal of Biological Chemistry, 1996, 271, 11627-11630.	1.6	52
68	VDAC, a Channel in the Outer Mitochondrial Membrane. , 1996, 4, 169-202.		225
69	Characterization and partial purification of the VDAC-channel-modulating protein from calf liver mitochondria. Biochimica Et Biophysica Acta - Bioenergetics, 1994, 1185, 203-212.	0.5	32
70	The Mitochondrial Voltage-Dependent Anion-Selective Channel. Advances in Chemistry Series, 1994, , 245-258.	0.6	3
71	Chapter 4 Anion Channels in the Mitochondrial Outer Membrane. Current Topics in Membranes, 1994, , 73-101.	0.5	49
72	Structure and Function of the VDAC Ion Channel. , 1994, , 281-296.		1

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73	The outer mitochondrial membrane channel, VDAC, is modulated by a protein localized in the intermembrane space. Biochimica Et Biophysica Acta - Bioenergetics, 1993, 1144, 396-402.	0.5	55
74	Regulation of mitochondrial respiration by controlling the permeability of the outer membrane through the mitochondrial channel, VDAC. Biochimica Et Biophysica Acta - Bioenergetics, 1992, 1098, 255-260.	0.5	105
75	Toward the molecular structure of the mitochondrial channel, VDAC. Journal of Bioenergetics and Biomembranes, 1992, 24, 7-19.	1.0	142
76	Determination of the number of polypeptide subunits in a functional VDAC channel fromSaccharomyces cerevisiae. Journal of Bioenergetics and Biomembranes, 1992, 24, 27-31.	1.0	44
77	A soluble mitochondrial protein increases the voltage dependence of the mitochondrial channel, VDAC. Journal of Bioenergetics and Biomembranes, 1992, 24, 41-46.	1.0	61
78	Patch clamping VDAC in liposomes containing whole mitochondrial membranes. Journal of Membrane Biology, 1991, 123, 83-91.	1.0	57
79	Group IIIA-metal hydroxides indirectly neutralize the voltage sensor of the voltage-dependent mitochondrial channel, VDAC, by interacting with a dynamic binding site. Biochimica Et Biophysica Acta - Biomembranes, 1990, 1025, 127-134.	1.4	31
80	Voltage gating in the mitochondrial channel, VDAC. Journal of Membrane Biology, 1989, 111, 103-111.	1.0	282
81	Probing the structure of the mitochondrial channel, VDAC, by site-directed mutagenesis: A progress report. Journal of Bioenergetics and Biomembranes, 1989, 21, 471-483.	1.0	49
82	Inhibition by aluminum hydroxide of the voltage-dependent closure of the mitochondrial channel, VDAC. Biochimica Et Biophysica Acta - General Subjects, 1989, 991, 68-78.	1.1	24
83	The mitochondrial outer membrane channel, VDAC, is modulated by a soluble protein. FEBS Letters, 1988, 241, 105-109.	1.3	82
84	[43] Characterization of channels isolated from plant mitochondria. Methods in Enzymology, 1987, 148, 465-475.	0.4	53
85	The mitochondrial outer membrane channel, VDAC, is regulated by a synthetic polyanion. Biochimica Et Biophysica Acta - Biomembranes, 1987, 905, 279-286.	1.4	145
86	Purification and characterization of the voltage-dependent anion channel from the outer mitochondrial membrane of yeast. Journal of Membrane Biology, 1987, 99, 65-72.	1.0	38
87	Elimination and restoration of voltage dependence in the mitochondrial channel, VDAC, by graded modification with succinic anhydride. Journal of Membrane Biology, 1987, 98, 157-168.	1.0	21
88	Voltage Gating in VDAC. , 1986, , 533-552.		29
89	Voltage dependence and ion selectivity of the mitochondrial channel, VDAC, are modified by succinic anhydride. Journal of Membrane Biology, 1985, 83, 81-86.	1.0	62
90	Evidence for titratable gating charges controlling the voltage dependence of the outer mitochondrial membrane channel, VDAC. Journal of Membrane Biology, 1985, 86, 51-59.	1.0	60

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91	Voltage-Dependent Channels Found in the Membrane Fraction of Corn Mitochondria. Plant Physiology, 1985, 79, 1094-1097.	2.3	48
92	Evidence that the crystalline arrays in the outer membrane of Neurospora mitochondria are composed of the voltage-dependent channel protein. Biochimica Et Biophysica Acta - Biomembranes, 1984, 774, 206-214.	1.4	43
93	Purification of VDAC (Voltage-dependent anion-selective channel) from rat liver mitochondria. Journal of Membrane Biology, 1983, 74, 115-121.	1.0	72
94	A food dye, erythrosine B, increases membrane permeability to calcium and other ions. Biochimica Et Biophysica Acta - Biomembranes, 1981, 648, 49-54.	1.4	16
95	Pore size and properties of channels from mitochondria isolated fromNeurospora crassa. Journal of Membrane Biology, 1980, 53, 79-84.	1.0	140
96	STRUCTURE AND MODE OF ACTION OF A VOLTAGE DEPENDENT ANION-SELECTIVE CHANNEL (VDAC) LOCATED IN THE OUTER MITOCHONDRIAL MEMBRANE DEPENDENT ANION-SELECTIVE CHANNEL (VDAC). Annals of the New York Academy of Sciences, 1980, 341, 552-563.	1.8	174
97	Reconstitution in planar lipid bilayers of a voltage-dependent anion-selective channel obtained from paramecium mitochondria. Journal of Membrane Biology, 1976, 30, 99-120.	1.0	478