

# Marco Colombini

## List of Publications by Year in descending order

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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	Solution Structure of the Integral Human Membrane Protein VDAC-1 in Detergent Micelles. <i>Science</i> , 2008, 321, 1206-1210.	6.0	605
2	Reconstitution in planar lipid bilayers of a voltage-dependent anion-selective channel obtained from paramecium mitochondria. <i>Journal of Membrane Biology</i> , 1976, 30, 99-120.	1.0	478
3	VDAC: The channel at the interface between mitochondria and the cytosol. <i>Molecular and Cellular Biochemistry</i> , 2004, 256, 107-115.	1.4	440
4	Bcl-x Promotes the Open Configuration of the Voltage-dependent Anion Channel and Metabolite Passage through the Outer Mitochondrial Membrane. <i>Journal of Biological Chemistry</i> , 2001, 276, 19414-19419.	1.6	336
5	Ceramide Channels Increase the Permeability of the Mitochondrial Outer Membrane to Small Proteins. <i>Journal of Biological Chemistry</i> , 2002, 277, 26796-26803.	1.6	317
6	Voltage gating in the mitochondrial channel, VDAC. <i>Journal of Membrane Biology</i> , 1989, 111, 103-111.	1.0	282
7	The Lipids C2- and C16-Ceramide Form Large Stable Channels. <i>Journal of Biological Chemistry</i> , 2000, 275, 38640-38644.	1.6	269
8	VDAC structure, selectivity, and dynamics. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2012, 1818, 1457-1465.	1.4	232
9	VDAC closure increases calcium ion flux. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2007, 1768, 2510-2515.	1.4	229
10	VDAC, a Channel in the Outer Mitochondrial Membrane. , 1996, 4, 169-202.		225
11	On the Role of VDAC in Apoptosis: Fact and Fiction. <i>Journal of Bioenergetics and Biomembranes</i> , 2005, 37, 129-142.	1.0	222
12	ATP Flux Is Controlled by a Voltage-gated Channel from the Mitochondrial Outer Membrane. <i>Journal of Biological Chemistry</i> , 1996, 271, 28006-28008.	1.6	218
13	Ceramide forms channels in mitochondrial outer membranes at physiologically relevant concentrations. <i>Mitochondrion</i> , 2006, 6, 118-125.	1.6	208
14	STRUCTURE AND MODE OF ACTION OF A VOLTAGE DEPENDENT ANION-SELECTIVE CHANNEL (VDAC) LOCATED IN THE OUTER MITOCHONDRIAL MEMBRANE DEPENDENT ANION-SELECTIVE CHANNEL (VDAC). <i>Annals of the New York Academy of Sciences</i> , 1980, 341, 552-563.	1.8	174
15	Bid, but Not Bax, Regulates VDAC Channels. <i>Journal of Biological Chemistry</i> , 2004, 279, 13575-13583.	1.6	174
16	The mitochondrial outer membrane channel, VDAC, is regulated by a synthetic polyanion. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1987, 905, 279-286.	1.4	145
17	Ceramide and activated Bax act synergistically to permeabilize the mitochondrial outer membrane. <i>Apoptosis: an International Journal on Programmed Cell Death</i> , 2010, 15, 553-562.	2.2	145
18	Toward the molecular structure of the mitochondrial channel, VDAC. <i>Journal of Bioenergetics and Biomembranes</i> , 1992, 24, 7-19.	1.0	142

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19	Pore size and properties of channels from mitochondria isolated from <i>Neurospora crassa</i> . <i>Journal of Membrane Biology</i> , 1980, 53, 79-84.	1.0	140
20	Ceramide synthesis in the endoplasmic reticulum can permeabilize mitochondria to proapoptotic proteins. <i>Journal of Lipid Research</i> , 2008, 49, 625-634.	2.0	136
21	Anti-apoptotic Bcl-2 Family Proteins Disassemble Ceramide Channels. <i>Journal of Biological Chemistry</i> , 2008, 283, 6622-6630.	1.6	110
22	The published 3D structure of the VDAC channel: native or not?. <i>Trends in Biochemical Sciences</i> , 2009, 34, 382-389.	3.7	109
23	Ceramide channels and their role in mitochondria-mediated apoptosis. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2010, 1797, 1239-1244.	0.5	107
24	Regulation of mitochondrial respiration by controlling the permeability of the outer membrane through the mitochondrial channel, VDAC. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1992, 1098, 255-260.	0.5	105
25	The Sensor Regions of VDAC Are Translocated from within the Membrane to the Surface during the Gating Processes. <i>Biophysical Journal</i> , 1998, 74, 2926-2944.	0.2	95
26	The Topology of VDAC as Probed by Biotin Modification. <i>Journal of Biological Chemistry</i> , 1998, 273, 24406-24413.	1.6	90
27	Enlargement and Contracture of C2-Ceramide Channels. <i>Biophysical Journal</i> , 2003, 85, 1560-1575.	0.2	87
28	Dynamics of Nucleotides in VDAC Channels: Structure-Specific Noise Generation. <i>Biophysical Journal</i> , 2002, 82, 193-205.	0.2	84
29	Antifungal drug itraconazole targets VDAC1 to modulate the AMPK/mTOR signaling axis in endothelial cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, E7276-85.	3.3	84
30	A pharmacologic target of G3139 in melanoma cells may be the mitochondrial VDAC. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 7494-7499.	3.3	83
31	The mitochondrial outer membrane channel, VDAC, is modulated by a soluble protein. <i>FEBS Letters</i> , 1988, 241, 105-109.	1.3	82
32	Potassium channel openers are uncoupling protonophores: implication in cardioprotection. <i>FEBS Letters</i> , 2004, 568, 167-170.	1.3	82
33	Ceramide channels and mitochondrial outer membrane permeability. <i>Journal of Bioenergetics and Biomembranes</i> , 2017, 49, 57-64.	1.0	75
34	The VDAC channel: Molecular basis for selectivity. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2016, 1863, 2498-2502.	1.9	73
35	Purification of VDAC (Voltage-dependent anion-selective channel) from rat liver mitochondria. <i>Journal of Membrane Biology</i> , 1983, 74, 115-121.	1.0	72
36	The Role of Pyridine Dinucleotides in Regulating the Permeability of the Mitochondrial Outer Membrane. <i>Journal of Biological Chemistry</i> , 1996, 271, 26724-26731.	1.6	69

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37	Sphingosine Forms Channels in Membranes That Differ Greatly from Those Formed by Ceramide. <i>Journal of Bioenergetics and Biomembranes</i> , 2005, 37, 227-236.	1.0	64
38	Voltage dependence and ion selectivity of the mitochondrial channel, VDAC, are modified by succinic anhydride. <i>Journal of Membrane Biology</i> , 1985, 83, 81-86.	1.0	62
39	A soluble mitochondrial protein increases the voltage dependence of the mitochondrial channel, VDAC. <i>Journal of Bioenergetics and Biomembranes</i> , 1992, 24, 41-46.	1.0	61
40	Evidence for titratable gating charges controlling the voltage dependence of the outer mitochondrial membrane channel, VDAC. <i>Journal of Membrane Biology</i> , 1985, 86, 51-59.	1.0	60
41	Patch clamping VDAC in liposomes containing whole mitochondrial membranes. <i>Journal of Membrane Biology</i> , 1991, 123, 83-91.	1.0	57
42	The outer mitochondrial membrane channel, VDAC, is modulated by a protein localized in the intermembrane space. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1993, 1144, 396-402.	0.5	55
43	Avicins, a novel plant-derived metabolite lowers energy metabolism in tumor cells by targeting the outer mitochondrial membrane. <i>Mitochondrion</i> , 2007, 7, 234-240.	1.6	54
44	[43] Characterization of channels isolated from plant mitochondria. <i>Methods in Enzymology</i> , 1987, 148, 465-475.	0.4	53
45	Individual Leaflets of a Membrane Bilayer Can Independently Regulate Permeability. <i>Journal of Biological Chemistry</i> , 1996, 271, 11627-11630.	1.6	52
46	Phosphorothioate Oligonucleotides Block the VDAC Channel. <i>Biophysical Journal</i> , 2007, 93, 1184-1191.	0.2	52
47	Indications of a common folding pattern for VDAC channels from all sources. <i>Journal of Bioenergetics and Biomembranes</i> , 1996, 28, 153-161.	1.0	51
48	Probing the structure of the mitochondrial channel, VDAC, by site-directed mutagenesis: A progress report. <i>Journal of Bioenergetics and Biomembranes</i> , 1989, 21, 471-483.	1.0	49
49	Chapter 4 Anion Channels in the Mitochondrial Outer Membrane. <i>Current Topics in Membranes</i> , 1994, , 73-101.	0.5	49
50	Voltage-Dependent Channels Found in the Membrane Fraction of Corn Mitochondria. <i>Plant Physiology</i> , 1985, 79, 1094-1097.	2.3	48
51	Regulation of ceramide channels by Bcl-2 family proteins. <i>FEBS Letters</i> , 2010, 584, 2128-2134.	1.3	48
52	Bax and Bcl-xL exert their regulation on different sites of the ceramide channel. <i>Biochemical Journal</i> , 2012, 445, 81-91.	1.7	47
53	Ceramide channels: destabilization by Bcl-xL and role in apoptosis. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2015, 1848, 2374-2384.	1.4	47
54	New Insights into the Mechanism of Permeation through Large Channels. <i>Biophysical Journal</i> , 2005, 89, 3950-3959.	0.2	46

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55	Proapoptotic Triterpene Electrophiles (Avicins) Form Channels in Membranes: Cholesterol Dependence. <i>Biophysical Journal</i> , 2005, 88, 2577-2584.	0.2	45
56	Visualization of ceramide channels by transmission electron microscopy. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2011, 1808, 1196-1201.	1.4	45
57	Determination of the number of polypeptide subunits in a functional VDAC channel from <i>Saccharomyces cerevisiae</i> . <i>Journal of Bioenergetics and Biomembranes</i> , 1992, 24, 27-31.	1.0	44
58	Evidence that the crystalline arrays in the outer membrane of <i>Neurospora</i> mitochondria are composed of the voltage-dependent channel protein. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1984, 774, 206-214.	1.4	43
59	The Voltage-Gating Process of the Voltage-Dependent Anion Channel Is Sensitive to Ion Flow. <i>Biophysical Journal</i> , 1998, 75, 704-713.	0.2	42
60	The Physiological Properties of a Novel Family of VDAC-Like Proteins from <i>Drosophila melanogaster</i> . <i>Biophysical Journal</i> , 2004, 86, 152-162.	0.2	39
61	Membrane Channels Formed by Ceramide. <i>Handbook of Experimental Pharmacology</i> , 2013, , 109-126.	0.9	39
62	Purification and characterization of the voltage-dependent anion channel from the outer mitochondrial membrane of yeast. <i>Journal of Membrane Biology</i> , 1987, 99, 65-72.	1.0	38
63	Sphingosine, a Product of Ceramide Hydrolysis, Influences the Formation of Ceramide Channels. <i>Biophysical Journal</i> , 2006, 91, 1749-1756.	0.2	38
64	Ceramide channels: Influence of molecular structure on channel formation in membranes. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2012, 1818, 1291-1301.	1.4	38
65	Self-catalyzed Insertion of Proteins into Phospholipid Membranes. <i>Journal of Biological Chemistry</i> , 1996, 271, 23675-23682.	1.6	33
66	Successful recovery of the normal electrophysiological properties of PorB (Class 3) porin from <i>Neisseria meningitidis</i> after expression in <i>Escherichia coli</i> and renaturation. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1998, 1370, 289-298.	1.4	33
67	Characterization and partial purification of the VDAC-channel-modulating protein from calf liver mitochondria. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1994, 1185, 203-212.	0.5	32
68	Group IIIA-metal hydroxides indirectly neutralize the voltage sensor of the voltage-dependent mitochondrial channel, VDAC, by interacting with a dynamic binding site. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1990, 1025, 127-134.	1.4	31
69	Voltage Gating in VDAC. , 1986, , 533-552.		29
70	Specific VDAC inhibitors: phosphorothioate oligonucleotides. <i>Journal of Bioenergetics and Biomembranes</i> , 2008, 40, 157-162.	1.0	27
71	Mitochondrial Outer Membrane Channels. <i>Chemical Reviews</i> , 2012, 112, 6373-6387.	23.0	26
72	Inhibition by aluminum hydroxide of the voltage-dependent closure of the mitochondrial channel, VDAC. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 1989, 991, 68-78.	1.1	24

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73	Phosphorothioate oligonucleotides reduce mitochondrial outer membrane permeability to ADP. <i>American Journal of Physiology - Cell Physiology</i> , 2007, 292, C1388-C1397.	2.1	24
74	Meningococcal PorA/C1, a Channel that Combines High Conductance and High Selectivity. <i>Biophysical Journal</i> , 1999, 76, 804-813.	0.2	23
75	Measurement of VDAC Permeability in Intact Mitochondria and in Reconstituted Systems. <i>Methods in Cell Biology</i> , 2007, 80, 241-260.	0.5	23
76	Elimination and restoration of voltage dependence in the mitochondrial channel, VDAC, by graded modification with succinic anhydride. <i>Journal of Membrane Biology</i> , 1987, 98, 157-168.	1.0	21
77	The control of mitochondrial respiration in yeast: A possible role of the outer mitochondrial membrane. <i>Cell Biochemistry and Function</i> , 1996, 14, 201-208.	1.4	19
78	Bax Forms Two Types of Channels, One of Which Is Voltage-Gated. <i>Biophysical Journal</i> , 2011, 101, 2163-2169.	0.2	18
79	A food dye, erythrosine B, increases membrane permeability to calcium and other ions. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1981, 648, 49-54.	1.4	16
80	Ceramide channel: Structural basis for selective membrane targeting. <i>Chemistry and Physics of Lipids</i> , 2016, 194, 110-116.	1.5	15
81	Electrostatics Explains the Shift in VDAC Gating with Salt Activity Gradient. <i>Biophysical Journal</i> , 2002, 82, 1773-1783.	0.2	13
82	Ceramide Channels. <i>Advances in Experimental Medicine and Biology</i> , 2019, 1159, 33-48.	0.8	13
83	Dynamics of Ceramide Channels Detected Using a Microfluidic System. <i>PLoS ONE</i> , 2012, 7, e43513.	1.1	12
84	Rapid Microfluidic Perfusion Enabling Kinetic Studies of Lipid Ion Channels in a Bilayer Lipid Membrane Chip. <i>Annals of Biomedical Engineering</i> , 2011, 39, 2242-2251.	1.3	11
85	Comparison of D-G3139 and Its Enantiomer L-G3139 in Melanoma Cells Demonstrates Minimal In Vitro but Dramatic In Vivo Chiral Dependency. <i>Molecular Therapy</i> , 2007, 15, 270-278.	3.7	8
86	Isolation and characterization of the mitochondrial channel, VDAC, from the insect <i>Heliothis virescens</i> . <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1997, 1327, 193-203.	1.4	7
87	Catalyzed Insertion of Proteins into Phospholipid Membranes: Specificity of the Process. <i>Biophysical Journal</i> , 2002, 83, 2550-2559.	0.2	7
88	An unique method for determining the permeability of the mitochondrial outer membrane. <i>Cytotechnology</i> , 1997, 19, 71-81.	0.7	5
89	The Mitochondrial Voltage-Dependent Anion-Selective Channel. <i>Advances in Chemistry Series</i> , 1994, , 245-258.	0.6	3
90	Cooperativity and Steep Voltage Dependence in a Bacterial Channel. <i>International Journal of Molecular Sciences</i> , 2019, 20, 4501.	1.8	2

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91	Bax channel triplet: co-operativity and voltage gating. Biochemical Journal, 2014, 459, 397-404.	1.7	1
92	Structure and Function of the VDAC Ion Channel. , 1994, , 281-296.		1
93	A model of VDAC structural rearrangement in the presence of a salt activity gradient. Chemical Physics Letters, 2001, 348, 102-106.	1.2	0
94	Ceramide channel formed in open well thermal plastic chips. , 2009, , .		0
95	Hard Constraints on the Structure of VDAC from Functional Studies. Biophysical Journal, 2010, 98, 208a.	0.2	0
96	Mitochondrial Outer Membrane and the VDAC Channel. , 2004, , 733-736.		0
97	Ceramide Channels. Springer Series in Biophysics, 2015, , 75-98.	0.4	0