Martin J Cann

List of Publications by Year
in descending order

46 papers	3,046 citations	279487 23 h-index	253896 43 g-index
49 all docs	49 docs citations	49 times ranked	2948 citing authors

#	Article	IF	Citations
1	Carbon Dioxide and the Carbamate Post-Translational Modification. Frontiers in Molecular Biosciences, 2022, 9, 825706.	1.6	9
2	Opposing modulation of Cx26 gap junctions and hemichannels by CO₂. Journal of Physiology, 2021, 599, 103-118.	1.3	10
3	Carbon dioxide detection in biological systems. Interface Focus, 2021, 11, 20210001.	1.5	0
4	A methodology for carbamate post-translational modification discovery and its application in <i>Escherichia coli</i>. Interface Focus, 2021, 11, 20200028.	1.5	5
5	Ubiquitin is a carbon dioxideâ€“binding protein. Science Advances, 2021, 7, eabi5507.	4.7	13
6	A DNA-Binding Bromodomain-Containing Protein Interacts with and Reduces Rx1-Mediated Immune Response to Potato Virus X. Plant Communications, 2020, 1, 100086.	3.6	10
7	The intracellular immune receptor Rx1 regulates the DNA-binding activity of a Golden2-like transcription factor. Journal of Biological Chemistry, 2018, 293, 3218-3233.	1.6	44
8	The identification of carbon dioxide mediated protein post-translational modifications. Nature Communications, 2018, 9, 3092.	5.8	41
9	Hypercapnia modulates cAMP signalling and cystic fibrosis transmembrane conductance regulatorâ€dependent anion and fluid secretion in airway epithelia. Journal of Physiology, 2016, 594, 1643-1661.	1.3	18
10	The Tomato Nucleotide-binding Leucine-rich Repeat Immune Receptor I-2 Couples DNA-binding to Nucleotide-binding Domain Nucleotide Exchange. Journal of Biological Chemistry, 2016, 291, 1137-1147.	1.6	17
11	The Potato Nucleotide-binding Leucine-rich Repeat (NLR) Immune Receptor Rx1 Is a Pathogen-dependent DNA-deforming Protein. Journal of Biological Chemistry, 2015, 290, 24945-24960.	1.6	36
12	Global low-frequency motions in protein allostery: CAP as a model system. Biophysical Reviews, 2015, 7, 175-182.	1.5	21
13	Multi-scale Approaches to Dynamical Transmission of Protein Allostery. , 2015, , 141-152.		0
14	Dynamic Transmission of Protein Allostery without Structural Change: Spatial Pathways or Global Modes?. Biophysical Journal, 2015, 109, 1240-1250.	0.2	41
15	The Role of Protein-Ligand Contacts in Allosteric Regulation of the Escherichia coli Catabolite Activator Protein. Journal of Biological Chemistry, 2015, 290, 22225-22235.	1.6	37
16	Ecto-5â€²-Nucleotidase, Adenosine and Transmembrane Adenylyl Cyclase Signalling Regulate Basal Carotid Body Chemoafferent Outflow and Establish the Sensitivity to Hypercapnia. Advances in Experimental Medicine and Biology, 2015, 860, 279-289.	0.8	13
17	The Crystal Structures of Apo and cAMP-Bound GlxR from Corynebacterium glutamicum Reveal Structural and Dynamic Changes upon cAMP Binding in CRP/FNR Family Transcription Factors. PLoS ONE, 2014, 9, e113265.	1.1	27
18	Î” Î”PT: a comprehensive toolbox for the analysis of protein motion. BMC Bioinformatics, 2013, 14, 183.	1.2	21

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19	Bicarbonate-sensitive soluble and transmembrane adenylyl cyclases in peripheral chemoreceptors. Respiratory Physiology and Neurobiology, 2013, 188, 83-93.	0.7	14
20	Predicting Protein Homodimer Allosteric Ligand Binding through Multiscale Dynamics. Biophysical Journal, 2013, 104, 227a.	0.2	0
21	Modulation of Global Low-Frequency Motions Underlies Allosteric Regulation: Demonstration in CRP/FNR Family Transcription Factors. PLoS Biology, 2013, 11, e1001651.	2.6	71
22	CO2 directly modulates connexin 26 by formation of carbamate bridges between subunits. ELife, 2013, 2, e01213.	2.8	103
23	Elevated Carbon Dioxide Blunts Mammalian cAMP Signaling Dependent on Inositol 1,4,5-Triphosphate Receptor-mediated Ca2+ Release. Journal of Biological Chemistry, 2012, 287, 26291-26301.	1.6	18
24	A Nucleotide Phosphatase Activity in the Nucleotide Binding Domain of an Orphan Resistance Protein from Rice. Journal of Biological Chemistry, 2012, 287, 4023-4032.	1.6	22
25	Crystal Structure and Regulation Mechanisms of the CyaB Adenylyl Cyclase from the Human Pathogen Pseudomonas aeruginosa. Journal of Molecular Biology, 2012, 416, 271-286.	2.0	36
26	The <i>Pseudomonas aeruginosa</i> Chp chemosensory system regulates intracellular cAMP levels by modulating adenylate cyclase activity. Molecular Microbiology, 2010, 76, 889-904.	1.2	146
27	Stimulation of Mammalian G-protein-responsive Adenylyl Cyclases by Carbon Dioxide. Journal of Biological Chemistry, 2009, 284, 784-791.	1.6	43
28	Sodium regulation of GAF domain function. Biochemical Society Transactions, 2007, 35, 1032-1034.	1.6	17
29	Synthesis of 5â€²-amino-5â€²-deoxyguanosine-5â€²-N-phosphoramidate and its enzymatic incorporation at the 5â€²-termini of RNA molecules. Chemical Communications, 2007, , 5096.	2.2	27
30	A subset of GAF domains are evolutionarily conserved sodium sensors. Molecular Microbiology, 2007, 64, 461-472.	1.2	31
31	A Europium Complex That Selectively Stains Nucleoli of Cells. Journal of the American Chemical Society, 2006, 128, 2294-2299.	6.6	259
32	Regulation of prokaryotic adenylyl cyclases by CO2. Biochemical Journal, 2006, 396, 215-218.	1.7	49
33	Synthesis and characterisation of highly emissive and kinetically stable lanthanide complexes suitable for usage â€˜in celluloâ€™. Organic and Biomolecular Chemistry, 2005, 3, 1013-1024.	1.5	124
34	Bicarbonate Stimulated Adenylyl Cyclases. IUBMB Life, 2004, 56, 529-534.	1.5	18
35	Signalling through cyclic nucleotide monophosphates in cyanobacteria. New Phytologist, 2004, 161, 23-34.	3.5	17
36	Design, synthesis and evaluation of ratiometric probes for hydrogencarbonate based on europium emission. Organic and Biomolecular Chemistry, 2004, 2, 1624.	1.5	131

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37	Luminescent nonacoordinate cationic lanthanide complexes as potential cellular imaging and reactive probes. Organic and Biomolecular Chemistry, 2003, 1, 905-907.	1.5	66
38	A Defined Subset of Adenylyl Cyclases Is Regulated by Bicarbonate Ion. Journal of Biological Chemistry, 2003, 278, 35033-35038.	1.6	89
39	Identification of Transmembrane Adenylyl Cyclase Isoforms. Methods in Enzymology, 2002, 345, 150-159.	0.4	3
40	Ratiometric probes for hydrogencarbonate analysis in intracellular or extracellular environments using europium luminescence. Chemical Communications, 2002, , 1930-1931.	2.2	77
41	Restricted expression of a truncated adenylyl cyclase in the cephalic furrow of Drosophila melanogaster. Development Genes and Evolution, 2000, 210, 34-40.	0.4	7
42	A new family of adenylyl cyclase genes in the male germline of Drosophila melanogaster. Development Genes and Evolution, 2000, 210, 200-206.	0.4	24
43	Soluble Adenylyl Cyclase as an Evolutionarily Conserved Bicarbonate Sensor. Science, 2000, 289, 625-628.	6.0	771
44	Cytosolic adenylyl cyclase defines a unique signaling molecule in mammals. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 79-84.	3.3	487
45	Cloning and characterization of aDrosophilaadenylyl cyclase homologous to mammalian type IX. FEBS Letters, 1997, 413, 104-108.	1.3	15
46	6 Genetic characterization of adenylyl cyclase function. Advances in Second Messenger and Phosphoprotein Research, 1997, 32, 121-135.	4.5	8