David I Yule

List of Publications by Year
in descending order

119 papers	5,212 citations	71102 41 h-index	102487 66 g-index
128 all docs	128 docs citations	128 times ranked	4746 citing authors

#	Article	IF	Citations
1	Bcl-xL acts as an inhibitor of IP3R channels, thereby antagonizing Ca2+-driven apoptosis. Cell Death and Differentiation, 2022, 29, 788-805.	11.2	41
2	Metabolic adaptation to the chronic loss of Ca2+ signaling induced by KO of IP3 receptors or the mitochondrial Ca2+Âuniporter. Journal of Biological Chemistry, 2022, 298, 101436.	3.4	11
3	Functional communication between IP ₃ R and STIM2 at subthreshold stimuli is a critical checkpoint for initiation of SOCE. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	22
4	The volume-regulated anion channel LRRC8C suppresses T cell function by regulating cyclic dinucleotide transport and STINGâ€“p53 signaling. Nature Immunology, 2022, 23, 287-302.	14.5	40
5	In vivo Ca2+ Imaging in Mouse Salivary Glands. Bio-protocol, 2022, 12, e4380.	0.4	2
6	Platelet olfactory receptor activation limits platelet reactivity and growth of aortic aneurysms. Journal of Clinical Investigation, 2022, 132, .	8.2	18
7	Spatial and temporal crosstalk between the cAMP and Ca2+ signaling systems. Biochimica Et Biophysica Acta - Molecular Cell Research, 2022, 1869, 119293.	4.1	8
8	A Mathematical Model of Salivary Gland Duct Cells. Bulletin of Mathematical Biology, 2022, 84, .	1.9	3
9	Calcium Dynamics and Water Transport in Salivary Acinar Cells. Bulletin of Mathematical Biology, 2021, 83, 31.	1.9	7
10	Omnitemporal choreographies of all five STIM/Orai and IP3Rs underlie the complexity of mammalian Ca2+ signaling. Cell Reports, 2021, 34, 108760.	6.4	57
11	Highly localized intracellular Ca2+ signals promote optimal salivary gland fluid secretion. ELife, 2021, 10, .	6.0	16
12	Pancreas-specific CHRM3 activation causes pancreatitis in mice. JCI Insight, 2021, 6, .	5.0	8
13	CREB regulates the expression of type 1 inositol 1,4,5-trisphosphate receptors. Journal of Cell Science, 2021, 134, .	2.0	8
14	A protocol for detecting elemental calcium signals (Ca2+ puffs) in mammalian cells using total internal reflection fluorescence microscopy. STAR Protocols, 2021, 2, 100618.	1.2	8
15	The Mitochondrial Ca2+ uniporter is a central regulator of interorganellar Ca2+ transfer and NFAT activation. Journal of Biological Chemistry, 2021, 297, 101174.	3.4	30
16	Tracing the evolutionary history of Ca2+-signaling modulation by human Bcl-2: Insights from the Capsaspora owczarzaki IP3 receptor ortholog. Biochimica Et Biophysica Acta - Molecular Cell Research, 2021, 1868, 119121.	4.1	7
17	A KRAP(y) job: Defining the localization of active IP3R. Cell Calcium, 2021, 100, 102470.	2.4	1
18	Sex-Specific Platelet Activation Through Protease-Activated Receptors Reverses in Myocardial Infarction. Arteriosclerosis, Thrombosis, and Vascular Biology, 2021, 41, 390-400.	2.4	11

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19	Bcl-2-Protein Family as Modulators of IP₃Receptors and Other Organellar Ca²⁺Channels. Cold Spring Harbor Perspectives in Biology, 2020, 12, a035089.	5.5	50
20	An inside job: Annexin 1A-Inositol 1,4,5-trisphosphate receptor interaction conveys endoplasmic reticulum luminal Ca2+ sensitivity. Cell Calcium, 2020, 90, 102250.	2.4	1
21	Pivotal role of type-1 inositol 1,4,5-trisphosphate receptor for glucagon-induced gluconeogenesis. Cell Calcium, 2020, 90, 102243.	2.4	1
22	Disease-associated mutations in inositol 1,4,5-trisphosphate receptor subunits impair channel function. Journal of Biological Chemistry, 2020, 295, 18160-18178.	3.4	16
23	The native ORAI channel trio underlies the diversity of Ca2+ signaling events. Nature Communications, 2020, 11, 2444.	12.8	90
24	A Multicellular Model of Primary Saliva Secretion in the Parotid Gland. Bulletin of Mathematical Biology, 2020, 82, 38.	1.9	5
25	Magnesium Acts as a Second Messenger in the Regulation of NMDA Receptor-Mediated CREB Signaling in Neurons. Molecular Neurobiology, 2020, 57, 2539-2550.	4.0	14
26	Fluoride exposure alters Ca ²⁺ signaling and mitochondrial function in enamel cells. Science Signaling, 2020, 13, .	3.6	33
27	IP3 receptor isoforms differently regulate ER-mitochondrial contacts and local calcium transfer. Nature Communications, 2019, 10, 3726.	12.8	187
28	A Model of $$hbox {Ca}^{2+}$$ Dynamics in an Accurate Reconstruction of Parotid Acinar Cells. Bulletin of Mathematical Biology, 2019, 81, 1394-1426.	1.9	11
29	Bcl-2 and IP3 compete for the ligand-binding domain of IP3Rs modulating Ca2+ signaling output. Cellular and Molecular Life Sciences, 2019, 76, 3843-3859.	5.4	31
30	Acetylcholine Inhibits Platelet Activation. Journal of Pharmacology and Experimental Therapeutics, 2019, 369, 182-187.	2.5	9
31	Bok regulates mitochondrial fusion and morphology. Cell Death and Differentiation, 2019, 26, 2682-2694.	11.2	49
32	Expression of BK channels and Na+-K+ pumps in the apical membrane of lacrimal acinar cells suggests a new molecular mechanism for primary tear-secretion. Ocular Surface, 2019, 17, 272-277.	4.4	6
33	A Mathematical Model of Fluid Transport in an Accurate Reconstruction of Parotid Acinar Cells. Bulletin of Mathematical Biology, 2019, 81, 699-721.	1.9	9
34	IIntracellular BiP/GRP78 Mediates Endothelial Cell Permeability and Inflammation Associated with Acute Lung Injury. FASEB Journal, 2019, 33, lb610.	0.5	0
35	New saliva secretion model based on the expression of Na+-K+ pump and K+ channels in the apical membrane of parotid acinar cells. Pflugers Archiv European Journal of Physiology, 2018, 470, 613-621.	2.8	9
36	Inositol 1,4,5-Trisphosphate Receptor Mutations Associated with Human Disease. Messenger (Los) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.3	19

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37	Redox regulation of type-I inositol trisphosphate receptors in intact mammalian cells. Journal of Biological Chemistry, 2018, 293, 17464-17476.	3.4	42
38	All three IP ₃ receptor isoforms generate Ca ²⁺ puffs that display similar characteristics. Science Signaling, 2018, 11, .	3.6	53
39	Phosphatidylinositol 4-phosphate is a major source of GPCR-stimulated phosphoinositide production. Science Signaling, 2018, 11, .	3.6	32
40	Evidence That Calcium Entry Into Calcium-Transporting Dental Enamel Cells Is Regulated by Cholecystokinin, Acetylcholine and ATP. Frontiers in Physiology, 2018, 9, 801.	2.8	20
41	Carbohydrate Loading to Combat Acute Pancreatitis. Trends in Biochemical Sciences, 2018, 43, 741-744.	7.5	3
42	Region-specific proteolysis differentially modulates type 2 and type 3 inositol 1,4,5-trisphosphate receptor activity in models of acute pancreatitis. Journal of Biological Chemistry, 2018, 293, 13112-13124.	3.4	5
43	Differential regulation of ion channels function by proteolysis. Biochimica Et Biophysica Acta - Molecular Cell Research, 2018, 1865, 1698-1706.	4.1	10
44	Can pancreatitis be treated by inhibiting Ca2+ signaling?. Annals of Translational Medicine, 2018, 6, 124-124.	1.7	3
45	Subcellular Ca²⁺ Puffs Mediated By Different Inositol Trisphosphate Receptor Isoforms. FASEB Journal, 2018, 32, 750.33.	0.5	1
46	Inositol 1,4,5-trisphosphate Receptor Mutations associated with Human Disease. Messenger (Los) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.3	13
47	Modeling calcium waves in an anatomically accurate three-dimensional parotid acinar cell. Journal of Theoretical Biology, 2017, 419, 383-393.	1.7	9
48	On the dynamical structure of calcium oscillations. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 1456-1461.	7.1	81
49	DPB162-AE, an inhibitor of store-operated Ca2+ entry, can deplete the endoplasmic reticulum Ca2+ store. Cell Calcium, 2017, 62, 60-70.	2.4	21
50	Region-specific proteolysis differentially regulates type 1 inositol 1,4,5-trisphosphate receptor activity. Journal of Biological Chemistry, 2017, 292, 11714-11726.	3.4	17
51	Resveratrol-induced autophagy is dependent on IP3Rs and on cytosolic Ca2+. Biochimica Et Biophysica Acta - Molecular Cell Research, 2017, 1864, 947-956.	4.1	43
52	Proteolytic fragmentation of inositol 1,4,5â€trisphosphate receptors: a novel mechanism regulating channel activity?. Journal of Physiology, 2016, 594, 2867-2876.	2.9	17
53	Defining the stoichiometry of inositol 1,4,5-trisphosphate binding required to initiate Ca ²⁺ release. Science Signaling, 2016, 9, ra35.	3.6	140
54	Recessive and Dominant De Novo ITPR1 Mutations Cause Gillespie Syndrome. American Journal of Human Genetics, 2016, 98, 971-980.	6.2	113

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55	Unique Regulatory Properties of Heterotetrameric Inositol 1,4,5-Trisphosphate Receptors Revealed by Studying Concatenated Receptor Constructs. Journal of Biological Chemistry, 2016, 291, 4846-4860.	3.4	37
56	Store-operated Ca2+ entry regulates Ca2+-activated chloride channels and eccrine sweat gland function. Journal of Clinical Investigation, 2016, 126, 4303-4318.	8.2	68
57	The trans-membrane domain of Bcl-2Î±, but not its hydrophobic cleft, is a critical determinant for efficient IP3 receptor inhibition. Oncotarget, 2016, 7, 55704-55720.	1.8	34
58	Using concatenated subunits to investigate the functional consequences of heterotetrameric inositol 1,4,5-trisphosphate receptors. Biochemical Society Transactions, 2015, 43, 364-370.	3.4	16
59	IP3R deficit underlies loss of salivary fluid secretion in SjÃ¶grenâ€™s Syndrome. Scientific Reports, 2015, 5, 13953.	3.3	55
60	The type 2 inositol 1,4,5-trisphosphate receptor, emerging functions for an intriguing Ca2+-release channel. Biochimica Et Biophysica Acta - Molecular Cell Research, 2015, 1853, 1992-2005.	4.1	57
61	Tracing the Evolutionary History of Inositol, 1, 4, 5-Trisphosphate Receptor: Insights from Analyses of<i>Capsaspora owczarzaki</i>Ca²⁺Release Channel Orthologs. Molecular Biology and Evolution, 2015, 32, 2236-2253.	8.9	44
62	The BRCA1 Tumor Suppressor Binds to Inositol 1,4,5-Trisphosphate Receptors to Stimulate Apoptotic Calcium Release. Journal of Biological Chemistry, 2015, 290, 7304-7313.	3.4	61
63	Isoform- and Species-specific Control of Inositol 1,4,5-Trisphosphate (IP3) Receptors by Reactive Oxygen Species. Journal of Biological Chemistry, 2014, 289, 8170-8181.	3.4	120
64	Preface. Cell Calcium, 2014, 55, 281.	2.4	0
65	Multiscale modelling of saliva secretion. Mathematical Biosciences, 2014, 257, 69-79.	1.9	19
66	Characterization of ryanodine receptor type 1 single channel activity using â€œon-nucleusâ€• patch clamp. Cell Calcium, 2014, 56, 96-107.	2.4	22
67	Irbit Mediates Synergy Between Ca2+ and cAMP Signaling Pathways During Epithelial Transport in Mice. Gastroenterology, 2013, 145, 232-241.	1.3	81
68	Phospholipase CÎµ Hydrolyzes Perinuclear Phosphatidylinositol 4-Phosphate to Regulate Cardiac Hypertrophy. Cell, 2013, 153, 216-227.	28.9	150
69	Manganese transport via the transferrin mechanism. NeuroToxicology, 2013, 34, 118-127.	3.0	80
70	Fragmented Inositol 1,4,5-Trisphosphate Receptors Retain Tetrameric Architecture and Form Functional Ca2+ Release Channels. Journal of Biological Chemistry, 2013, 288, 11122-11134.	3.4	31
71	Functional Inositol 1,4,5-Trisphosphate Receptors Assembled from Concatenated Homo- and Heteromeric Subunits. Journal of Biological Chemistry, 2013, 288, 29772-29784.	3.4	40
72	Alpha-Helical Destabilization of the Bcl-2-BH4-Domain Peptide Abolishes Its Ability to Inhibit the IP3 Receptor. PLoS ONE, 2013, 8, e73386.	2.5	27

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73	Apical Ca2+-activated potassium channels in mouse parotid acinar cells. Journal of General Physiology, 2012, 139, 121-133.	1.9	39
74	Regulation of Ca²⁺release through inositol 1,4,5-trisphosphate receptors by adenine nucleotides in parotid acinar cells. American Journal of Physiology - Renal Physiology, 2012, 302, G97-G104.	3.4	13
75	A Kinetic Model for Type I and II IP3R Accounting for Mode Changes. Biophysical Journal, 2012, 103, 658-668.	0.5	59
76	Stimulus-secretion Coupling in Pancreatic Acinar Cells. , 2012, , 1361-1398.		16
77	Modelling the effects of calcium waves and oscillations on saliva secretion. Journal of Theoretical Biology, 2012, 305, 45-53.	1.7	20
78	Differential regulation of the InsP₃ receptor typeâ€‘1 and â€‘2 single channel properties by InsP₃, Ca²⁺ and ATP. Journal of Physiology, 2012, 590, 3245-3259.	2.9	75
79	Phenotypic changes in mouse pancreatic stellate cell Ca²⁺ signaling events following activation in culture and in a disease model of pancreatitis. Molecular Biology of the Cell, 2011, 22, 421-436.	2.1	48
80	Phospholipase C Îµ Regulates Multiple Agonistsâ€‘Induced Cardiomyocyte Hypertrophy in Neonatal Rat Ventricular Myocytes By Binding To mAKAP (Muscle Aâ€‘Kinase Anchoring Protein) And Generating Local IP3â€‘Dependent Nuclear Calcium Release. FASEB Journal, 2011, 25, 1012.1.	0.5	0
81	A dynamic model of saliva secretion. Journal of Theoretical Biology, 2010, 266, 625-640.	1.7	43
82	Protein kinase A regulation of P2X4 receptors: Requirement for a specific motif in the C-terminus. Biochimica Et Biophysica Acta - Molecular Cell Research, 2010, 1803, 275-287.	4.1	18
83	Linking structure to function: Recent lessons from inositol 1,4,5-trisphosphate receptor mutagenesis. Cell Calcium, 2010, 47, 469-479.	2.4	77
84	Impaired TNF-Î± control of IP3R-mediated Ca2+ release in Alzheimer's disease mouse neurons. Cellular Signalling, 2010, 22, 519-526.	3.6	12
85	InsP3R-associated cGMP Kinase Substrate Determines Inositol 1,4,5-Trisphosphate Receptor Susceptibility to Phosphoregulation by Cyclic Nucleotide-dependent Kinases. Journal of Biological Chemistry, 2010, 285, 37927-37938.	3.4	21
86	Regulation of Inositol 1,4,5-Trisphosphate Receptors by Phosphorylation and Adenine Nucleotides. Current Topics in Membranes, 2010, 66, 273-298.	0.9	24
87	Pancreatic acinar cells: Molecular insight from studies of signal-transduction using transgenic animals. International Journal of Biochemistry and Cell Biology, 2010, 42, 1757-1761.	2.8	16
88	ATP Regulation of Type-1 Inositol 1,4,5-Trisphosphate Receptor Activity Does Not Require Walker A-type ATP-binding Motifs. Journal of Biological Chemistry, 2009, 284, 16156-16163.	3.4	35
89	Tumor Necrosis Factor-Î±-mediated Regulation of the Inositol 1,4,5-Trisphosphate Receptor Promoter. Journal of Biological Chemistry, 2009, 284, 27557-27566.	3.4	26
90	Protein Kinase A Increases Type-2 Inositol 1,4,5-Trisphosphate Receptor Activity by Phosphorylation of Serine 937. Journal of Biological Chemistry, 2009, 284, 25116-25125.	3.4	59

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91	Regulation of single inositol 1,4,5â€trisphosphate receptor channel activity by protein kinase A phosphorylation. Journal of Physiology, 2008, 586, 3577-3596.	2.9	79
92	Studying isoform-specific inositol 1,4,5-trisphosphate receptor function and regulation. Methods, 2008, 46, 177-182.	3.8	25
93	Molecular Characterization of the Inositol 1,4,5-Trisphosphate Receptor Pore-forming Segment. Journal of Biological Chemistry, 2008, 283, 2939-2948.	3.4	49
94	Tumor Necrosis Factor-Î± Potentiates Intraneuronal Ca2+ Signaling via Regulation of the Inositol 1,4,5-Trisphosphate Receptor. Journal of Biological Chemistry, 2008, 283, 33069-33079.	3.4	40
95	The Type 2 Inositol (1,4,5)-Trisphosphate (InsP3) Receptor Determines the Sensitivity of InsP3-induced Ca2+ Release to ATP in Pancreatic Acinar Cells. Journal of Biological Chemistry, 2008, 283, 26081-26088.	3.4	36
96	ATP Modulation of Ca2+ Release by Type-2 and Type-3 Inositol (1, 4, 5)-Triphosphate Receptors. Journal of Biological Chemistry, 2008, 283, 21579-21587.	3.4	72
97	Visualizing form and function in organotypic slices of the adult mouse parotid gland. American Journal of Physiology - Renal Physiology, 2008, 295, G629-G640.	3.4	23
98	ATP Potentiates Insitolâ€1,4,5â€triphosphateâ€induced Calcium Release in Permeabilized Parotid and Pancreatic Acini. FASEB Journal, 2008, 22, 1181.2.	0.5	0
99	Ca²⁺release dynamics in parotid and pancreatic exocrine acinar cells evoked by spatially limited flash photolysis. American Journal of Physiology - Renal Physiology, 2007, 293, G1166-G1177.	3.4	28
100	Protein kinase C regulation of P2X3 receptors is unlikely to involvedirect receptor phosphorylation. Biochimica Et Biophysica Acta - Molecular Cell Research, 2007, 1773, 166-175.	4.1	34
101	Akt Kinase Phosphorylation of Inositol 1,4,5-Trisphosphate Receptors. Journal of Biological Chemistry, 2006, 281, 3731-3737.	3.4	133
102	ATP Binding to a Unique Site in the Type-1 S2- Inositol 1,4,5-Trisphosphate Receptor Defines Susceptibility to Phosphorylation by Protein Kinase A. Journal of Biological Chemistry, 2006, 281, 17410-17419.	3.4	26
103	REGULATION OF FLUID AND ELECTROLYTE SECRETION IN SALIVARY GLAND ACINAR CELLS. Annual Review of Physiology, 2005, 67, 445-469.	13.1	386
104	Agonist activation of arachidonate-regulated Ca2+-selective (ARC) channels in murine parotid and pancreatic acinar cells. Journal of Physiology, 2005, 564, 791-801.	2.9	53
105	Functional Consequences of Phosphomimetic Mutations at Key cAMP-dependent Protein Kinase Phosphorylation Sites in the Type 1 Inositol 1,4,5-Trisphosphate Receptor. Journal of Biological Chemistry, 2004, 279, 46242-46252.	3.4	63
106	Modulation of [Ca2+] Signaling Dynamics and Metabolism by Perinuclear Mitochondria in Mouse Parotid Acinar Cells. Journal of Biological Chemistry, 2004, 279, 12909-12917.	3.4	78
107	Crosstalk between cAMP and Ca2+ signaling in non-excitable cells. Cell Calcium, 2003, 34, 431-444.	2.4	111
108	Phosphorylation of Type-1 Inositol 1,4,5-Trisphosphate Receptors by Cyclic Nucleotide-dependent Protein Kinases. Journal of Biological Chemistry, 2003, 278, 45811-45817.	3.4	96

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109	Critical role for NHE1 in intracellular pH regulation in pancreatic acinar cells. American Journal of Physiology - Renal Physiology, 2003, 285, G804-G812.	3.4	35
110	Modulation of Ca2+ oscillations by phosphorylation of Ins(1,4,5)P3 receptors. Biochemical Society Transactions, 2003, 31, 954-957.	3.4	27
111	Ca2+-dependent Protein Kinase-A Modulation of the Plasma Membrane Ca2+-ATPase in Parotid Acinar Cells. Journal of Biological Chemistry, 2002, 277, 48172-48181.	3.4	39
112	A Role for Phosphorylation of Inositol 1,4,5-Trisphosphate Receptors in Defining Calcium Signals Induced by Peptide Agonists in Pancreatic Acinar Cells. Journal of Biological Chemistry, 2002, 277, 31949-31956.	3.4	51
113	Phosphorylation of Inositol 1,4,5-Trisphosphate Receptors in Parotid Acinar Cells. Journal of Biological Chemistry, 2002, 277, 1340-1348.	3.4	130
114	Cytosolic Ca2+and Ca2+â€activated Clâˆ’current dynamics: insights from two functionally distinct mouse exocrine cells. Journal of Physiology, 2002, 540, 469-484.	2.9	75
115	Subtype-Specific Regulation of Inositol 1,4,5-Trisphosphate Receptors. Journal of General Physiology, 2001, 117, 431-434.	1.9	33
116	Targeted Phosphorylation of Inositol 1,4,5-Trisphosphate Receptors Selectively Inhibits Localized Ca2+ Release and Shapes Oscillatory Ca2+ Signals. Journal of Biological Chemistry, 2000, 275, 33704-33711.	3.4	81
117	Calcium Wave Propagation in Pancreatic Acinar Cells. Journal of General Physiology, 2000, 116, 547-560.	1.9	168
118	Secretagogues cause ubiquitination and down-regulation of inositol 1,4,5-trisphosphate receptors in rat pancreatic acinar cells. Gastroenterology, 1999, 116, 1194-1201.	1.3	53
119	Evidence That Zymogen Granules Are Not a Physiologically Relevant Calcium Pool. Journal of Biological Chemistry, 1997, 272, 9093-9098.	3.4	178