Ole Holger Petersen

List of Publications by Citations

97 papers	9,151 citations	47 h-index	95 g-index
113 ext. papers	10,942 ext. citations	9.9 avg, IF	6.03 L-index

#	Paper	IF	Citations
97	The ARRIVE guidelines 2.0: Updated guidelines for reporting animal research. *PLoS Biology*, **2020**, 18, e3000410	9.7	757
96	Calcium-activated potassium channels and their role in secretion. *Nature*, **1984**, 307, 693-6	50.4	637
95	Local and global cytosolic Ca2+ oscillations in exocrine cells evoked by agonists and inositol trisphosphate. *Cell*, **1993**, 74, 661-8	56.2	463
94	Reporting animal research: Explanation and elaboration for the ARRIVE guidelines 2.0. *PLoS Biology* , **2020**, 18, e3000411	9.7	352
93	ATP-dependent accumulation and inositol trisphosphate- or cyclic ADP-ribose-mediated release of Ca2+ from the nuclear envelope. *Cell*, **1995**, 80, 439-44	56.2	345
92	Pulsatile intracellular calcium release does not depend on fluctuations in inositol trisphosphate concentration. *Nature*, **1989**, 339, 317-20	50.4	332
91	Spatial dynamics of second messengers: IP3 and cAMP as long-range and associative messengers. *Trends in Neurosciences*, **1994**, 17, 95-101	13.3	274
90	Receptor-activated cytoplasmic Ca2+ spiking mediated by inositol trisphosphate is due to Ca2(+)-induced Ca2+ release. *Cell*, **1990**, 63, 1025-32	56.2	257
89	Ca2+ flow via tunnels in polarized cells: recharging of apical Ca2+ stores by focal Ca2+ entry through basal membrane patch. *Cell*, **1997**, 88, 49-55	56.2	248
88	Polarized calcium signaling in exocrine gland cells. *Annual Review of Physiology*, **2008**, 70, 273-99	23.1	232
87	Inositol trisphosphate and cyclic ADP-ribose-mediated release of Ca2+ from single isolated pancreatic zymogen granules. *Cell*, **1996**, 84, 473-80	56.2	217
86	Calcium uptake via endocytosis with rapid release from acidifying endosomes. *Current Biology*, **1998**, 8, 1335-8	6.3	213
85	NAADP mobilizes Ca2+ from a thapsigargin-sensitive store in the nuclear envelope by activating ryanodine receptors. *Journal of Cell Biology*, **2003**, 163, 271-82	7.3	202
84	Fatty acid ethyl esters cause pancreatic calcium toxicity via inositol trisphosphate receptors and loss of ATP synthesis. *Gastroenterology*, **2006**, 130, 781-93	13.3	194
83	Calcium signalling: past, present and future. *Cell Calcium*, **2005**, 38, 161-9	4	183
82	Intraluminal calcium as a primary regulator of endoplasmic reticulum function. *Cell Calcium*, **2005**, 38, 303-10	4	179
81	Calcium elevation in mitochondria is the main Ca2+ requirement for mitochondrial permeability transition pore (mPTP) opening. *Journal of Biological Chemistry*, **2009**, 284, 20796-803	5.4	170

80	Ethanol toxicity in pancreatic acinar cells: mediation by nonoxidative fatty acid metabolites. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 10738-43	11.5	160
79	Transformation of local Ca2+ spikes to global Ca2+ transients: the combinatorial roles of multiple Ca2+ releasing messengers. *EMBO Journal*, **2002**, 21, 909-19	13	153
78	The endoplasmic reticulum: one continuous or several separate Ca(2+) stores?. *Trends in Neurosciences*, **2001**, 24, 271-6	13.3	141
77	NAADP, cADPR and IP3 all release Ca2+ from the endoplasmic reticulum and an acidic store in the secretory granule area. *Journal of Cell Science*, **2006**, 119, 226-38	5.3	133
76	Reactive oxygen species induced by bile acid induce apoptosis and protect against necrosis in pancreatic acinar cells. *Gastroenterology*, **2011**, 140, 2116-25	13.3	129
75	Activation of trypsinogen in large endocytic vacuoles of pancreatic acinar cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 5674-9	11.5	125
74	Ca2+ signalling and pancreatitis: effects of alcohol, bile and coffee. *Trends in Pharmacological Sciences*, **2006**, 27, 113-20	13.2	123
73	Bile acids induce calcium signals in mouse pancreatic acinar cells: implications for bile-induced pancreatic pathology. *Journal of Physiology*, **2002**, 540, 49-55	3.9	121
72	Ca2+ release-activated Ca2+ channel blockade as a potential tool in antipancreatitis therapy. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 13186-91	11.5	118
71	Menadione-induced apoptosis: roles of cytosolic Ca(2+) elevations and the mitochondrial permeability transition pore. *Journal of Cell Science*, **2002**, 115, 485-97	5.3	115
70	Mechanism of mitochondrial permeability transition pore induction and damage in the pancreas: inhibition prevents acute pancreatitis by protecting production of ATP. *Gut*, **2016**, 65, 1333-46	19.2	110
69	Bile acids induce Ca2+ release from both the endoplasmic reticulum and acidic intracellular calcium stores through activation of inositol trisphosphate receptors and ryanodine receptors. *Journal of Biological Chemistry*, **2006**, 281, 40154-63	5.4	110
68	Direct activation of cytosolic Ca2+ signaling and enzyme secretion by cholecystokinin in human pancreatic acinar cells. *Gastroenterology*, **2008**, 135, 632-41	13.3	107
67	Ribosome-free terminals of rough ER allow formation of STIM1 puncta and segregation of STIM1 from IP(3) receptors. *Current Biology*, **2009**, 19, 1648-53	6.3	104
66	Dynamic changes in cytosolic and mitochondrial ATP levels in pancreatic acinar cells. *Gastroenterology*, **2010**, 138, 1976-87	13.3	101
65	Fatty acid ethyl ester synthase inhibition ameliorates ethanol-induced Ca2+-dependent mitochondrial dysfunction and acute pancreatitis. *Gut*, **2014**, 63, 1313-24	19.2	97
64	The role of Ca2+ in the pathophysiology of pancreatitis. *Journal of Physiology*, **2014**, 592, 269-80	3.9	92
63	Ca2+ signalling and Ca2+-activated ion channels in exocrine acinar cells. *Cell Calcium*, **2005**, 38, 171-200	4	89

62	Pancreatic protease activation by alcohol metabolite depends on Ca2+ release via acid store IP3 receptors. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 10758-63	11.5	86
61	Generation of specific Ca(2+) signals from Ca(2+) stores and endocytosis by differential coupling to messengers. *Current Biology*, **2006**, 16, 1931-7	6.3	73
60	Calcium binding capacity of the cytosol and endoplasmic reticulum of mouse pancreatic acinar cells. *Journal of Physiology*, **1999**, 518 (Pt 2), 463-7	3.9	72
59	The exocrine pancreas: the acinar-ductal tango in physiology and pathophysiology. *Reviews of Physiology, Biochemistry and Pharmacology*, **2013**, 165, 1-30	2.9	69
58	Localization of Ca2+ extrusion sites in pancreatic acinar cells. *Journal of Biological Chemistry*, **1996**, 271, 7615-9	5.4	65
57	Localized Ca2+ uncaging reveals polarized distribution of Ca2+-sensitive Ca2+ release sites: mechanism of unidirectional Ca2+ waves. *Journal of Cell Biology*, **2002**, 158, 283-92	7.3	64
56	Caffeine protects against experimental acute pancreatitis by inhibition of inositol 1,4,5-trisphosphate receptor-mediated Ca2+ release. *Gut*, **2017**, 66, 301-313	19.2	57
55	From Galvani to patch clamp: the development of electrophysiology. *Pflugers Archiv European Journal of Physiology*, **2006**, 453, 233-47	4.6	55
54	Region-specific activity of the plasma membrane Ca2+ pump and delayed activation of Ca2+ entry characterize the polarized, agonist-evoked Ca2+ signals in exocrine cells. *Journal of Biological Chemistry*, **1995**, 270, 8528-35	5.4	54
53	Human pancreatic acinar cells: studies of stimulus-secretion coupling. *Gastroenterology*, **1985**, 89, 109-17	13.3	52
52	Localization and regulation of Ca2+ entry and exit pathways in exocrine gland cells. *Cell Calcium*, **2003**, 33, 337-44	4	48
51	Non-uniform distribution of mitochondria in pancreatic acinar cells. *Cell and Tissue Research*, **2003**, 313, 37-45	4.2	46
50	Short pulses of acetylcholine stimulation induce cytosolic Ca2+ signals that are excluded from the nuclear region in pancreatic acinar cells. *Pflugers Archiv European Journal of Physiology*, **1996**, 432, 1055-61	4.6	46
49	Calcium-dependent release of NO from intracellular S-nitrosothiols. *EMBO Journal*, **2006**, 25, 3024-32	13	45
48	Control of K+ conductance by cholecystokinin and Ca2+ in single pancreatic acinar cells studied by the patch-clamp technique. *Journal of Membrane Biology*, **1984**, 79, 293-8	2.3	44
47	Both RyRs and TPCs are required for NAADP-induced intracellular Ca□+ release. *Cell Calcium*, **2015**, 58, 237-45	4	41
46	Long distance communication between muscarinic receptors and Ca2+ release channels revealed by carbachol uncaging in cell-attached patch pipette. *Journal of Biological Chemistry*, **2003**, 278, 20860-4	5.4	40
45	Calmodulin protects against alcohol-induced pancreatic trypsinogen activation elicited via Ca2+ release through IP3 receptors. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 5873-8	11.5	39

44	Ca tunnelling through the ER lumen as a mechanism for delivering Ca entering via store-operated Ca channels to specific target sites. *Journal of Physiology*, **2017**, 595, 2999-3014	3.9	37
43	Ca(2+) signals mediated by bradykinin type 2 receptors in normal pancreatic stellate cells can be inhibited by specific Ca(2+) channel blockade. *Journal of Physiology*, **2016**, 594, 281-93	3.9	36
42	Cation channels: homing in on the elusive CAN channels. *Current Biology*, **2002**, 12, R520-2	6.3	34
41	A novel role for Bcl-2 in regulation of cellular calcium extrusion. *Current Biology*, **2012**, 22, 1241-6	6.3	33
40	Bile acids induce a cationic current, depolarizing pancreatic acinar cells and increasing the intracellular Na+ concentration. *Journal of Biological Chemistry*, **2005**, 280, 1764-70	5.4	33
39	The effect of Na+ and Cl- removal and of loop diuretics on acetylcholine-evoked membrane potential changes in mouse lacrimal acinar cells. *Quarterly Journal of Experimental Physiology (Cambridge, England)*, **1985**, 70, 437-45		33
38	Stimulus-excitation coupling in plasma membranes of pancreatic acinar cells. *BBA - Biomembranes*, **1982**, 694, 163-84		33
37	Calcium and ATP control multiple vital functions. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2016**, 371,	5.8	29
36	Nitric oxide signals are interlinked with calcium signals in normal pancreatic stellate cells upon oxidative stress and inflammation. *Open Biology*, **2016**, 6,	7	28
35	Bile acids induce necrosis in pancreatic stellate cells dependent on calcium entry and sodium-driven bile uptake. *Journal of Physiology*, **2016**, 594, 6147-6164	3.9	26
34	Cholecystokinin-58 and cholecystokinin-8 exhibit similar actions on calcium signaling, zymogen secretion, and cell fate in murine pancreatic acinar cells. *American Journal of Physiology - Renal Physiology*, **2009**, 297, G1085-92	5.1	24
33	Morphological and functional changes of dissociated single pancreatic acinar cells: testing the suitability of the single cell as a model for exocytosis and calcium signaling. *Cell Calcium*, **2004**, 35, 367-79	4	24
32	Calcium signalling in the acinar environment of the exocrine pancreas: physiology and pathophysiology. *Journal of Physiology*, **2018**, 596, 2663-2678	3.9	22
31	Calcium and adenosine triphosphate control of cellular pathology: asparaginase-induced pancreatitis elicited via protease-activated receptor 2. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2016**, 371,	5.8	22
30	Endocytic uptake of SARS-CoV-2: the critical roles of pH, Ca2+, and NAADP. *Function*, **2020**, 1,	6.1	20
29	Revision of the ARRIVE guidelines: rationale and scope. *BMJ Open Science*, **2018**, 2, e000002	4.6	20
28	Specific mitochondrial functions in separate sub-cellular domains of pancreatic acinar cells. *Pflugers Archiv European Journal of Physiology*, **2012**, 464, 77-87	4.6	18
27	Pathobiology of acute pancreatitis: focus on intracellular calcium and calmodulin. *F1000 Medicine Reports*, **2011**, 3, 15		18

26	High versus low energy administration in the early phase of acute pancreatitis (GOULASH trial): protocol of a multicentre randomised double-blind clinical trial. *BMJ Open*, **2017**, 7, e015874	3	17
25	Galactose protects against cell damage in mouse models of acute pancreatitis. *Journal of Clinical Investigation*, **2018**, 128, 3769-3778	15.9	16
24	Ca2+ signalling in the endoplasmic reticulum/secretory granule microdomain. *Cell Calcium*, **2015**, 58, 397-404	4	15
23	Calcium signalling in pancreatic stellate cells: Mechanisms and potential roles. *Cell Calcium*, **2016**, 59, 140-4	4	15
22	EarLy Elimination of Fatty Acids iN hypertriglyceridemia-induced acuTe pancreatitis (ELEFANT trial): Protocol of an open-label, multicenter, adaptive randomized clinical trial. *Pancreatology*, **2020**, 20, 369-376	3.8	15
21	The roles of calcium and ATP in the physiology and pathology of the exocrine pancreas. *Physiological Reviews*, **2021**, 101, 1691-1744	47.9	14
20	ABT-199 (Venetoclax), a BH3-mimetic Bcl-2 inhibitor, does not cause Ca -signalling dysregulation or toxicity in pancreatic acinar cells. *British Journal of Pharmacology*, **2019**, 176, 4402-4415	8.6	10
19	Academia Europaea Position Paper on Translational Medicine: The Cycle Model for Translating Scientific Results into Community Benefits. *Journal of Clinical Medicine*, **2020**, 9,	5.1	9
18	BH3 mimetic-elicited Ca signals in pancreatic acinar cells are dependent on Bax and can be reduced by Ca-like peptides. *Cell Death and Disease*, **2017**, 8, e2640	9.8	8
17	Monitoring of intra-ER free Ca2+. *Environmental Sciences Europe*, **2014**, 3, 63-71	5	6
16	BH4 domain peptides derived from Bcl-2/Bcl-XL as novel tools against acute pancreatitis. *Cell Death Discovery*, **2018**, 4, 58	6.9	4
15	The effects of Ca buffers on cytosolic Ca signalling. *Journal of Physiology*, **2017**, 595, 3107-3108	3.9	3
14	current acute pancreatitis prevention by the elimination of alcohol and cigaette smoking (REAPPEAR): protocol of a randomised controlled trial and a cohort study.. *BMJ Open*, **2022**, 12, e050821	3	3
13	Calcium Signaling in Pancreatic Immune Cells .. *Function*, **2021**, 2, zqaa026	6.1	3
12	One or Two Ca Stores in the Neuronal Endoplasmic Reticulum?. *Trends in Neurosciences*, **2019**, 42, 755-757	13.3	2
11	SARS-CoV-2 S Protein Subunit 1 Elicits Ca Influx - Dependent Ca Signals in Pancreatic Stellate Cells and Macrophages .. *Function*, **2022**, 3, zqac002	6.1	2
10	Physiology of Acinar Cell Secretion **2018**, 41-55		1
9	Is CD38 involved in Ca signalling elicited by activation of T cell receptors?. *Cell Calcium*, **2021**, 101, 102524	4	1

List of Publications

8	Electrophysiology of Exocrine Gland Cells. *Bioelectricity*, **2022**, 4, 48-58	2	1
7	In Memoriam Sir Michael Berridge 1938 - 2020. *Cell Calcium*, **2020**, 88, 102209	4	0
6	Inequality of Research Funding between Different Countries and Regions is a Serious Problem for Global Science.. *Function*, **2021**, 2, zqab060	6.1	0
5	Bradykinin, COVID-19, and Pancreatitis, a Personal Perspective. *Function*, **2021**, 2, zqab046	6.1	0
4	Ups and Downs of Science during a Tumultuous Period of History: A Personal Perspective. *European Review*,1-36	0.3	0
3	Do We Need a Different Debate About How to Manage Pandemics?. *Function*, **2022**, 3, zqab075	6.1	
2	Science and Scientific Advice in a Time of Crisis.. *Function*, **2020**, 1, zqaa025	6.1	
1	Editorial Statement.. *Function*, **2022**, 3, zqac014	6.1	