Ryszard Grygorczyk

List of Publications by Year
in descending order

50 papers	1,304 citations	393982 19 h-index	360668 35 g-index
50 all docs	50 docs citations	50 times ranked	1718 citing authors

#	Article	IF	Citations
1	Cell swelling-induced ATP release is tightly dependent on intracellular calcium elevations. Journal of Physiology, 2004, 561, 499-513.	1.3	128
2	Membrane Reserves and Hypotonic Cell Swelling. Journal of Membrane Biology, 2006, 214, 43-56.	1.0	110
3	Hemolysis is a primary ATP-release mechanism in human erythrocytes. Blood, 2014, 124, 2150-2157.	0.6	91
4	Cell swelling-induced ATP release and gadolinium-sensitive channels. American Journal of Physiology - Cell Physiology, 2002, 282, C219-C226.	2.1	85
5	Evidence of a functional CFTR Clâˆ’channel in adult alveolar epithelial cells. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2004, 287, L382-L392.	1.3	68
6	Ca²⁺â€dependent ATP release from A549 cells involves synergistic autocrine stimulation by coreleased uridine nucleotides. Journal of Physiology, 2007, 584, 419-435.	1.3	68
7	The Hydrogel Nature of Mammalian Cytoplasm Contributes to Osmosensing and Extracellular pH Sensing. Biophysical Journal, 2009, 96, 4276-4285.	0.2	68
8	Imaging exocytosis of ATP-containing vesicles with TIRF microscopy in lung epithelial A549 cells. Purinergic Signalling, 2012, 8, 59-70.	1.1	54
9	Cell volume and monovalent ion transporters: their role in cell death machinery triggering and progression. American Journal of Physiology - Cell Physiology, 2013, 305, C361-C372.	2.1	48
10	Calcium-dependent release of adenosine and uridine nucleotides from A549 cells. Purinergic Signalling, 2008, 4, 139-146.	1.1	43
11	Imaging and characterization of stretchâ€induced ATP release from alveolar A549 cells. Journal of Physiology, 2013, 591, 1195-1215.	1.3	41
12	Effects of Hypoxia on Erythrocyte Membrane Propertiesâ€"Implications for Intravascular Hemolysis and Purinergic Control of Blood Flow. Frontiers in Physiology, 2017, 8, 1110.	1.3	40
13	Cell deformation at the air-liquid interface induces Ca²⁺-dependent ATP release from lung epithelial cells. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2011, 300, L587-L595.	1.3	38
14	Complementary roles of KCa3.1 channels and Î²1-integrin during alveolar epithelial repair. Respiratory Research, 2015, 16, 100.	1.4	31
15	Real-time luminescence imaging of cellular ATP release. Methods, 2014, 66, 330-344.	1.9	29
16	Swelling rather than shrinkage precedes apoptosis in serum-deprived vascular smooth muscle cells. Apoptosis: an International Journal on Programmed Cell Death, 2012, 17, 429-438.	2.2	24
17	Volume-sensitive release of organic osmolytes in the human lung epithelial cell line A549: role of the 5-lipoxygenase. American Journal of Physiology - Cell Physiology, 2013, 305, C48-C60.	2.1	24
18	Myogenic tone in mouse mesenteric arteries: evidence for P2Y receptor-mediated, Na+, K+, 2Clâˆ’ cotransport-dependent signaling. Purinergic Signalling, 2009, 5, 343-349.	1.1	22

#	ARTICLE	IF	CITATIONS
19	P2Y₁₃ and P2X₇ receptors modulate mechanically induced adenosine triphosphate release from mast cells. Experimental Dermatology, 2020, 29, 499-508.	1.4	22
20	Activation of Subcutaneous Mast Cells in Acupuncture Points Triggers Analgesia. Cells, 2022, 11, 809.	1.8	20
21	Modulation of Extracellular ATP Content of Mast Cells and DRG Neurons by Irradiation: Studies on Underlying Mechanism of Low-Level-Laser Therapy. Mediators of Inflammation, 2015, 2015, 1-9.	1.4	19
22	Heat induces adenosine triphosphate release from mast cells in vitro: a putative mechanism for moxibustion. Journal of Traditional Chinese Medicine = Chung I Tsa Chih Ying Wen Pan / Sponsored By All-China Association of Traditional Chinese Medicine, Academy of Traditional Chinese Medicine, 2015, 35, 323-328.	0.4	19
23	Real-time imaging of inflation-induced ATP release in the ex vivo rat lung. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2016, 311, L956-L969.	1.3	16
24	CrossTalk opposing view: the triggering and progression of the cell death machinery can occur without cell volume perturbations. Journal of Physiology, 2013, 591, 6123-6125.	1.3	13
25	Real-time imaging of exocytotic mucin release and swelling in Calu-3 cells using acridine orange. Methods, 2014, 66, 312-324.	1.9	13
26	Proteomics-based identification of hypoxia-sensitive membrane-bound proteins in rat erythrocytes. Journal of Proteomics, 2018, 184, 25-33.	1.2	13
27	Imaging viscosity of intragranular mucin matrix in cystic fibrosis cells. Scientific Reports, 2017, 7, 16761.	1.6	12
28	Type 2 secretory cells are primary source of ATP release in mechanically stretched lung alveolar cells. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2020, 318, L49-L58.	1.3	12
29	Role of cytoskeleton network in anisosmotic volume changes of intact and permeabilized A549 cells. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 2337-2343.	1.4	11
30	Deoxygenation Affects Composition of Membrane-Bound Proteins in Human Erythrocytes. Cellular Physiology and Biochemistry, 2016, 39, 81-88.	1.1	11
31	The Death of Ouabain-Treated Renal Epithelial C11-MDCK Cells is Not Mediated by Swelling-Induced Plasma Membrane Rupture. Journal of Membrane Biology, 2011, 241, 145-154.	1.0	10
32	Response: Hemolysis is a primary and physiologically relevant ATP release mechanism in human erythrocytes. Blood, 2015, 125, 1845-1846.	0.6	10
33	Lytic Release of Cellular ATP: Physiological Relevance and Therapeutic Applications. Life, 2021, 11, 700.	1.1	10
34	Activation of P2Y receptors causes strong and persistent shrinkage of C11-MDCK renal epithelial cells. American Journal of Physiology - Cell Physiology, 2011, 301, C403-C412.	2.1	9
35	Search for Upstream Cell Volume Sensors. Current Topics in Membranes, 2018, 81, 53-82.	0.5	9
36	Elevation of Intracellular Na+ Contributes to Expression of Early Response Genes Triggered by Endothelial Cell Shrinkage. Cellular Physiology and Biochemistry, 2019, 53, 638-647.	1.1	9

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37	Salt and osmosensing: role of cytoplasmic hydrogel. Pflugers Archiv European Journal of Physiology, 2015, 467, 475-487.	1.3	8
38	Mechanosensitive ATP release in the lungs: New insights from real-time luminescence imaging studies. Current Topics in Membranes, 2019, 83, 45-76.	0.5	8
39	Wide field of view quantitative imaging of cellular ATP release. American Journal of Physiology - Cell Physiology, 2019, 317, C566-C575.	2.1	7
40	Temperature-Induced Inactivation of Cytoplasmic Biogel Osmosensing Properties is Associated with Suppression of Regulatory Volume Decrease in A549 Cells. Journal of Membrane Biology, 2014, 247, 571-579.	1.0	6
41	Calcium is not required for triggering volume restoration in hypotonically challenged A549 epithelial cells. Pflugers Archiv European Journal of Physiology, 2016, 468, 2075-2085.	1.3	6
42	Dissociation of natriuresis and diuresis by oxytocin molecular forms in rats. PLoS ONE, 2019, 14, e0219205.	1.1	6
43	Hypotonic Shock Modulates Na+ Current via a Cl- and Ca2+/Calmodulin Dependent Mechanism in Alveolar Epithelial Cells. PLoS ONE, 2013, 8, e74565.	1.1	4
44	Hyperosmotic and isosmotic shrinkage differentially affect protein phosphorylation and ion transport. Canadian Journal of Physiology and Pharmacology, 2012, 90, 209-217.	0.7	3
45	More than one way to shrink. Blood, 2015, 126, 1263-1264.	0.6	2
46	The emerging role of calcium-dependent exocytosis in ATP release from nonexcitable cells. , 2005, , 21-22.		2
47	Mechanosensetive ATP Release Involves a Non-Conductive Pathway: Evidence from Large Field of View Real-Time Imaging. Biophysical Journal, 2017, 112, 311a.	0.2	1
48	Propidium uptake and ATP release in A549 cells share similar transport mechanisms. Biophysical Journal, 2022, , .	0.2	1
49	Î²1â€Integrin, KCa3.1 and TRPC4 Channels Play Complementary Roles in Alveolar Epithelial Repair. FASEB Journal, 2015, 29, 927.14.	0.2	0
50	A multiplexed microfluidic and microscopy study of vasodilation signaling pathways using microbubble and ultrasound therapy. , 2020, , .		0