Claudia L Trevino

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5879970/publications.pdf

Version: 2024-02-01

62 papers	3,397 citations	136940 32 h-index	144002 57 g-index
63 all docs	63 docs citations	63 times ranked	2211 citing authors

#	Article	IF	Citations
1	[Ca2+]i oscillations in human sperm are triggered in the flagellum by membrane potential-sensitive activity of CatSper. Human Reproduction, 2021, 36, 293-304.	0.9	17
2	Effects of Semen Processing on Sperm Function: Differences between Swim-Up and Density Gradient Centrifugation. World Journal of Men?s Health, 2021, 39, 740.	3.3	7
3	Comparative study of fertility parameters in vitrified human spermatozoa in the presence or absence of EmbryORP Â® : A novel antioxidant. Andrologia, 2021, 53, e13886.	2.1	0
4	Epac activation induces an extracellular Ca 2+ â€independent Ca 2+ wave that triggers acrosome reaction in human spermatozoa. Andrology, 2021, 9, 1227-1241.	3.5	6
5	Role of calcium oscillations in sperm physiology. BioSystems, 2021, 209, 104524.	2.0	17
6	Time-Lapse Flow Cytometry: A Robust Tool to Assess Physiological Parameters Related to the Fertilizing Capability of Human Sperm. International Journal of Molecular Sciences, 2021, 22, 93.	4.1	3
7	Capacitation-associated alkalization in human sperm is differentially controlled at the subcellular level. Journal of Cell Science, 2020, 133, .	2.0	25
8	Differences and Similarities: The Richness of Comparative Sperm Physiology. Physiology, 2020, 35, 196-208.	3.1	16
9	A cytoplasmic Slo3 isoform is expressed in somatic tissues. Molecular Biology Reports, 2019, 46, 5561-5567.	2.3	3
10	Analyzing the functional divergence of Slo1 and Slo3 channel subfamilies. Molecular Phylogenetics and Evolution, 2019, 133, 33-41.	2.7	7
11	Quantitative Intracellular pH Determinations in Single Live Mammalian Spermatozoa Using the Ratiometric Dye SNARF-5F. Frontiers in Cell and Developmental Biology, 2019, 7, 366.	3.7	18
12	pH-dependent Ca+2 oscillations prevent untimely acrosome reaction in human sperm. Biochemical and Biophysical Research Communications, 2018, 497, 146-152.	2.1	22
13	Semi-automatized segmentation method using image-based flow cytometry to study sperm physiology: the case of capacitation-induced tyrosine phosphorylation. Molecular Human Reproduction, 2018, 24, 64-73.	2.8	29
14	Acrosomal alkalization triggers Ca²⁺ release and acrosome reaction in mammalian spermatozoa. Journal of Cellular Physiology, 2018, 233, 4735-4747.	4.1	39
15	CFTR/ENaC-dependent regulation of membrane potential during human sperm capacitation is initiated by bicarbonate uptake through NBC. Journal of Biological Chemistry, 2018, 293, 9924-9936.	3.4	46
16	Luteinizing hormone modulates intracellular calcium, protein tyrosine phosphorylation and motility during human sperm capacitation. Biochemical and Biophysical Research Communications, 2017, 483, 834-839.	2.1	7
17	Premammalian origin of the spermâ€specific Slo3 channel. FEBS Open Bio, 2017, 7, 382-390.	2.3	9
18	Essential Role of CFTR in PKAâ€Dependent Phosphorylation, Alkalinization, and Hyperpolarization During Human Sperm Capacitation. Journal of Cellular Physiology, 2017, 232, 1404-1414.	4.1	61

#	ARTICLE	IF	CITATIONS
19	Arachidonic acid triggers [Ca2+]i increases in rat round spermatids by a likely GPR activation, ERK signalling and ER/acidic compartments Ca2+ release. PLoS ONE, 2017, 12, e0172128.	2.5	15
20	Regulation of Spermatogenic Cell Tâ€Type Ca²⁺ Currents by Zn²⁺: Implications in Male Reproductive Physiology. Journal of Cellular Physiology, 2016, 231, 659-667.	4.1	5
21	Role of Ion Channels in the Sperm Acrosome Reaction. Advances in Anatomy, Embryology and Cell Biology, 2016, 220, 35-69.	1.6	30
22	A Specific Transitory Increase in Intracellular Calcium Induced by Progesterone Promotes Acrosomal Exocytosis in Mouse Sperm1. Biology of Reproduction, 2016, 94, 63.	2.7	33
23	Human sperm degradation of zona pellucida proteins contributes to fertilization. Reproductive Biology and Endocrinology, 2015, 13, 99.	3.3	16
24	Pharmacology of hSlo3 channels and their contribution in the capacitation-associated hyperpolarization of human sperm. Biochemical and Biophysical Research Communications, 2015, 466, 554-559.	2.1	26
25	Carbonic anhydrases and their functional differences in human and mouse sperm physiology. Biochemical and Biophysical Research Communications, 2015, 468, 713-718.	2.1	18
26	SLO3 K+ Channels Control Calcium Entry through CATSPER Channels in Sperm. Journal of Biological Chemistry, 2014, 289, 32266-32275.	3.4	84
27	Characterization of NAADP-mediated calcium signaling in human spermatozoa. Biochemical and Biophysical Research Communications, 2014, 443, 531-536.	2.1	14
28	Membrane hyperpolarization during human sperm capacitation. Molecular Human Reproduction, 2014, 20, 619-629.	2.8	93
29	The transcription factors Sox5 and Sox9 regulate <i>Catsper1</i> gene expression. FEBS Letters, 2014, 588, 3352-3360.	2.8	21
30	Intracellular pH in sperm physiology. Biochemical and Biophysical Research Communications, 2014, 450, 1149-1158.	2.1	144
31	Measuring Intracellular Ca²⁺ Changes in Human Sperm using Four Techniques: Conventional Fluorometry, Stopped Flow Fluorometry, Flow Cytometry and Single Cell Imaging. Journal of Visualized Experiments, 2013, , e50344.	0.3	16
32	Ion Permeabilities in Mouse Sperm Reveal an External Trigger for SLO3-Dependent Hyperpolarization. PLoS ONE, 2013, 8, e60578.	2.5	53
33	Participation of the Clâˆ’/HCO3âˆ’ Exchangers SLC26A3 and SLC26A6, the Clâˆ’ Channel CFTR, and the Regulatory Factor SLC9A3R1 in Mouse Sperm Capacitation1. Biology of Reproduction, 2012, 86, 1-14.	2.7	64
34	Are TRP channels involved in sperm development and function?. Cell and Tissue Research, 2012, 349, 749-764.	2.9	36
35	Mouse Sperm Membrane Potential Hyperpolarization Is Necessary and Sufficient to Prepare Sperm for the Acrosome Reaction. Journal of Biological Chemistry, 2012, 287, 44384-44393.	3.4	102
36	Human spermatozoa possess a calciumâ€dependent chloride channel that may participate in the acrosomal reaction. Journal of Physiology, 2012, 590, 2659-2675.	2.9	53

#	Article	IF	Citations
37	The opening of maitotoxin-sensitive calcium channels induces the acrosome reaction in human spermatozoa: differences from the zona pellucida. Asian Journal of Andrology, 2011, 13, 159-165.	1.6	7
38	TRPM8 in mouse sperm detects temperature changes and may influence the acrosome reaction. Journal of Cellular Physiology, 2011, 226, 1620-1631.	4.1	49
39	Calcium Channels in the Development, Maturation, and Function of Spermatozoa. Physiological Reviews, 2011, 91, 1305-1355.	28.8	295
40	Glucose and lactate regulate maitotoxinâ€activated Ca²⁺ entry in spermatogenic cells: The role of intracellular [Ca²⁺]. FEBS Letters, 2010, 584, 3111-3115.	2.8	9
41	Recombinant human ZP3-induced sperm acrosome reaction: Evidence for the involvement of T- and L-type voltage-gated calcium channels. Biochemical and Biophysical Research Communications, 2010, 395, 530-534.	2.1	33
42	TRPM8, a Versatile Channel in Human Sperm. PLoS ONE, 2009, 4, e6095.	2.5	86
43	Epac Activates the Small G Proteins Rap1 and Rab3A to Achieve Exocytosis. Journal of Biological Chemistry, 2009, 284, 24825-24839.	3.4	84
44	Mouse sperm K+ currents stimulated by pH and cAMP possibly coded by Slo3 channels. Biochemical and Biophysical Research Communications, 2009, 381, 204-209.	2.1	68
45	Chloride Is Essential for Capacitation and for the Capacitation-associated Increase in Tyrosine Phosphorylation. Journal of Biological Chemistry, 2008, 283, 35539-35550.	3.4	57
46	Involvement of Cystic Fibrosis Transmembrane Conductance Regulator in Mouse Sperm Capacitation. Journal of Biological Chemistry, 2007, 282, 24397-24406.	3.4	96
47	KATP channels in mouse spermatogenic cells and sperm, and their role in capacitation. Developmental Biology, 2006, 289, 395-405.	2.0	48
48	T-type Ca2+ channels in sperm function. Cell Calcium, 2006, 40, 241-252.	2.4	63
49	Maitotoxin potently promotes Ca2+ influx in mouse spermatogenic cells and sperm, and induces the acrosome reaction. Journal of Cellular Physiology, 2006, 206, 449-456.	4.1	28
50	Sperm channel diversity and functional multiplicity. Reproduction, 2006, 131, 977-988.	2.6	166
51	Calcium Channels and Ca2+ Fluctuations in Sperm Physiology. International Review of Cytology, 2005, 243, 79-172.	6.2	146
52	Expression and differential cell distribution of lowâ€threshold Ca²⁺ channels in mammalian male germ cells and sperm. FEBS Letters, 2004, 563, 87-92.	2.8	68
53	ZD7288 inhibits low-threshold Ca2+ channel activity and regulates sperm function. Biochemical and Biophysical Research Communications, 2003, 311, 187-192.	2.1	72
54	Transient receptor potential (TRPC) channels in human sperm: expression, cellular localization and involvement in the regulation of flagellar motility. FEBS Letters, 2003, 541, 69-74.	2.8	109

#	Article	IF	Citations
55	The Intraacrosomal Calcium Pool Plays a Direct Role in Acrosomal Exocytosis. Journal of Biological Chemistry, 2002, 277, 49326-49331.	3.4	117
56	Identification of distinct K+ channels in mouse spermatogenic cells and sperm. Zygote, 2002, 10, 183-188.	1.1	28
57	Ion Transport in Sperm Signaling. Developmental Biology, 2001, 240, 1-14.	2.0	176
58	Identification of mouse trp homologs and lipid rafts from spermatogenic cells and sperm. FEBS Letters, 2001, 509, 119-125.	2.8	159
59	Voltage-dependent Ca2+channel subunit expression and immunolocalization in mouse spermatogenic cells and sperm. FEBS Letters, 1999, 462, 171-176.	2.8	64
60	Localisation of inositol trisphosphate and ryanodine receptors during mouse spermatogenesis: possible functional implications. Zygote, 1998, 6, 159-172.	1.1	55
61	T-type Ca2+channels andÎ±1Eexpression in spermatogenic cells, and their possible relevance to the sperm acrosome reaction. FEBS Letters, 1996, 388, 150-154.	2.8	154
62	Evidence that deprotonation of Serine-55 is responsible for the pH-dependence of the parvalbumin Eu3+7F0â†'5D0Spectrum. FEBS Letters, 1992, 314, 130-134.	2.8	5