

# Timo StrÄ¼nker

## List of Publications by Year in descending order

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Version: 2024-02-01

38  
papers

2,611  
citations

257450

24  
h-index

330143

37  
g-index

43  
all docs

43  
docs citations

43  
times ranked

2260  
citing authors

#	ARTICLE	IF	CITATIONS
1	The CatSper channel mediates progesterone-induced Ca <sup>2+</sup> influx in human sperm. <i>Nature</i> , 2011, 471, 382-386.	27.8	500
2	Fast manipulation of cellular cAMP level by light in vivo. <i>Nature Methods</i> , 2007, 4, 39-42.	19.0	237
3	The CatSper channel: a polymodal chemosensor in human sperm. <i>EMBO Journal</i> , 2012, 31, 1654-1665.	7.8	202
4	Molecular and functional characterization of an octopamine receptor from honeybee ( <i>Apis mellifera</i> ) brain. <i>Journal of Neurochemistry</i> , 2003, 86, 725-735.	3.9	162
5	A family of octopamine receptors that specifically induce cyclic AMP production or Ca <sup>2+</sup> release in <i>Drosophila melanogaster</i> . <i>Journal of Neurochemistry</i> , 2005, 93, 440-451.	3.9	155
6	Direct action of endocrine disrupting chemicals on human sperm. <i>EMBO Reports</i> , 2014, 15, 758-765.	4.5	137
7	A K <sup>+</sup> -selective cGMP-gated ion channel controls chemosensation of sperm. <i>Nature Cell Biology</i> , 2006, 8, 1149-1154.	10.3	106
8	Controlling fertilization and cAMP signaling in sperm by optogenetics. <i>ELife</i> , 2015, 4, .	6.0	99
9	The Ca <sup>2+</sup> -activated K <sup>+</sup> current of human sperm is mediated by Slo3. <i>ELife</i> , 2014, 3, e01438.	6.0	94
10	The C <sub>1</sub> per channel controls chemosensation in sea urchin sperm. <i>EMBO Journal</i> , 2015, 34, 379-392.	7.8	93
11	A novel biosensor to study cAMP dynamics in cilia and flagella. <i>ELife</i> , 2016, 5, .	6.0	79
12	An Atypical CNG Channel Activated by a Single cGMP Molecule Controls Sperm Chemotaxis. <i>Science Signaling</i> , 2009, 2, ra68.	3.6	66
13	Signaling in Sperm: More Different than Similar. <i>Trends in Cell Biology</i> , 2017, 27, 101-109.	7.9	66
14	A novel cross-species inhibitor to study the function of CatSper Ca <sup>2+</sup> channels in sperm. <i>British Journal of Pharmacology</i> , 2018, 175, 3144-3161.	5.4	60
15	Post-translational cleavage of Hv1 in human sperm tunes pH- and voltage-dependent gating. <i>Journal of Physiology</i> , 2017, 595, 1533-1546.	2.9	48
16	CRISPR-A Novel cAMP-Binding Protein Controlling Spermiogenesis and the Development of Flagellar Bending. <i>PLoS Genetics</i> , 2013, 9, e1003960.	3.5	45
17	CRISP2 Is a Regulator of Multiple Aspects of Sperm Function and Male Fertility. <i>Endocrinology</i> , 2019, 160, 915-924.	2.8	43
18	Synergistic activation of CatSper Ca <sup>2+</sup> channels in human sperm by oviductal ligands and endocrine disrupting chemicals. <i>Human Reproduction</i> , 2018, 33, 1915-1923.	0.9	42

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19	Rotational motion and rheotaxis of human sperm do not require functional CatSper channels and transmembrane Ca <sup>2+</sup> signaling. <i>EMBO Journal</i> , 2020, 39, e102363.	7.8	42
20	Motility of efferent duct cilia aids passage of sperm cells through the male reproductive system. <i>Molecular Human Reproduction</i> , 2021, 27, .	2.8	37
21	CFAP45 deficiency causes situs abnormalities and asthenospermia by disrupting an axonemal adenine nucleotide homeostasis module. <i>Nature Communications</i> , 2020, 11, 5520.	12.8	36
22	High density and ligand affinity confer ultrasensitive signal detection by a guanylyl cyclase chemoreceptor. <i>Journal of Cell Biology</i> , 2014, 206, 541-557.	5.2	35
23	Action of steroids and plant triterpenoids on CatSper Ca <sup>2+</sup> channels in human sperm. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E344-E346.	7.1	33
24	At the physical limit of chemosensation in sperm. <i>Current Opinion in Neurobiology</i> , 2015, 34, 110-116.	4.2	28
25	The Ca <sup>2+</sup> channel CatSper is not activated by cAMP/PKA signaling but directly affected by chemicals used to probe the action of cAMP and PKA. <i>Journal of Biological Chemistry</i> , 2020, 295, 13181-13193.	3.4	27
26	Absolute proteomic quantification reveals design principles of sperm flagellar chemosensation. <i>EMBO Journal</i> , 2020, 39, e102723.	7.8	22
27	The Natural Plant Product Rottlerin Activates Kv7.1/KCNE1 Channels. <i>Cellular Physiology and Biochemistry</i> , 2016, 40, 1549-1558.	1.6	20
28	Molecular Mechanism Underlying the Action of Zona-pellucida Glycoproteins on Mouse Sperm. <i>Frontiers in Cell and Developmental Biology</i> , 2020, 8, 572735.	3.7	19
29	Kinetic and photonic techniques to study chemotactic signaling in sea urchin sperm. <i>Methods in Cell Biology</i> , 2019, 151, 487-517.	1.1	15
30	The Action of Reproductive Fluids and Contained Steroids, Prostaglandins, and Zn <sup>2+</sup> on CatSper Ca <sup>2+</sup> Channels in Human Sperm. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 699554.	3.7	15
31	The antidepressant Sertraline inhibits CatSper Ca <sup>2+</sup> channels in human sperm. <i>Human Reproduction</i> , 2021, 36, 2638-2648.	0.9	15
32	Cyclic Nucleotide-Specific Optogenetics Highlights Compartmentalization of the Sperm Flagellum into cAMP Microdomains. <i>Cells</i> , 2019, 8, 648.	4.1	14
33	4,4'-Diisothiocyanato-2,2'-Stilbenedisulfonic Acid (DIDS) Modulates the Activity of KCNQ1/KCNE1 Channels by an Interaction with the Central Pore Region. <i>Cellular Physiology and Biochemistry</i> , 2020, 54, 321-332.	1.6	6
34	A family of octopamine receptors that specifically induce cyclic AMP production or Ca <sup>2+</sup> release in <i>Drosophila melanogaster</i> . <i>Journal of Neurochemistry</i> , 2005, 94, 1168-1168.	3.9	3
35	An Assay to Determine Mechanisms of Rapid Autoantibody-Induced Neurotransmitter Receptor Endocytosis and Vesicular Trafficking in Autoimmune Encephalitis. <i>Frontiers in Neurology</i> , 2019, 10, 178.	2.4	2
36	Non-Genomic Progesterone Signalling in Human Sperm. <i>Biophysical Journal</i> , 2013, 104, 611a.	0.5	0

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37	Larry Cohenâ€™50 ways to DYE your science. Neurophotonics, 2015, 2, 021004.	3.3	0
38	High density and ligand affinity confer ultrasensitive signal detection by a guanylyl cyclase chemoreceptor. Journal of General Physiology, 2014, 144, 1443OIA35.	1.9	0