

# Hervé Sentenac

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8924361/publications.pdf>

Version: 2024-02-01

39  
papers

5,916  
citations

136940

32  
h-index

302107

39  
g-index

42  
all docs

42  
docs citations

42  
times ranked

3746  
citing authors

#	ARTICLE	IF	CITATIONS
1	Non-autonomous stomatal control by pavement cell turgor via the K <sup>+</sup> channel subunit <i>AtKC1</i> . <i>Plant Cell</i> , 2022, 34, 2019-2037.	6.6	18
2	The outward shaker channel <i>Osk5.2</i> improves plant salt tolerance by contributing to control of both leaf transpiration and K <sup>+</sup> secretion into xylem sap. <i>Plant, Cell and Environment</i> , 2022, 45, 1734-1748.	5.7	2
3	Constitutive Contribution by the Rice <i>OshKT1;4</i> Na <sup>+</sup> Transporter to Xylem Sap Desalinization and Low Na <sup>+</sup> Accumulation in Young Leaves Under Low as High External Na <sup>+</sup> Conditions. <i>Frontiers in Plant Science</i> , 2020, 11, 1130.	3.6	22
4	Functional characterization and physiological roles of the single Shaker outward K <sup>+</sup> channel in <i>Medicago truncatula</i> . <i>Plant Journal</i> , 2020, 102, 1249-1265.	5.7	11
5	A repertoire of cationic and anionic conductances at the plasma membrane of <i>Medicago truncatula</i> root hairs. <i>Plant Journal</i> , 2019, 98, 418-433.	5.7	8
6	A Dual Role for the <i>Osk5.2</i> Ion Channel in Stomatal Movements and K <sup>+</sup> Loading into Xylem Sap. <i>Plant Physiology</i> , 2017, 174, 2409-2418.	4.8	44
7	Production of low <sup>Na</sup> rice plants by inactivation of the K <sup>+</sup> transporter <i>OsHAK1</i> with the CRISPR-Cas system. <i>Plant Journal</i> , 2017, 92, 43-56.	5.7	161
8	Nod Factor Effects on Root Hair-Specific Transcriptome of <i>Medicago truncatula</i> : Focus on Plasma Membrane Transport Systems and Reactive Oxygen Species Networks. <i>Frontiers in Plant Science</i> , 2016, 7, 794.	3.6	55
9	Characterization of Two <i>HKT1;4</i> Transporters from <i>Triticum monococcum</i> to Elucidate the Determinants of the Wheat Salt Tolerance <i>Nax1</i> QTL. <i>Plant and Cell Physiology</i> , 2016, 57, 2047-2057.	3.1	40
10	Roles and Transport of Sodium and Potassium in Plants. <i>Metal Ions in Life Sciences</i> , 2016, 16, 291-324.	2.8	86
11	Acetylated 1,3-diaminopropane antagonizes abscisic acid-mediated stomatal closing in <i>Arabidopsis</i> . <i>Plant Journal</i> , 2014, 79, 322-333.	5.7	43
12	Distinct Amino Acids in the C-Linker Domain of the Arabidopsis K <sup>+</sup> Channel <i>KAT2</i> Determine Its Subcellular Localization and Activity at the Plasma Membrane. <i>Plant Physiology</i> , 2014, 164, 1415-1429.	4.8	31
13	Molecular biology of K <sup>+</sup> transport across the plant cell membrane: What do we learn from comparison between plant species?. <i>Journal of Plant Physiology</i> , 2014, 171, 748-769.	3.5	264
14	Potassium transport in developing fleshy fruits: the grapevine inward K <sup>+</sup> channel <i>VvK1.2</i> is activated by <i>CIPK</i> - <i>CBL</i> complexes and induced in ripening berry flesh cells. <i>Plant Journal</i> , 2013, 73, 1006-1018.	5.7	80
15	The Rice Monovalent Cation Transporter <i>OshKT2;4</i> : Revisited Ionic Selectivity. <i>Plant Physiology</i> , 2012, 160, 498-510.	4.8	80
16	<i>HKT2;2/1</i> , a K <sup>+</sup> -permeable transporter identified in a salt-tolerant rice cultivar through surveys of natural genetic polymorphism. <i>Plant Journal</i> , 2012, 71, 750-762.	5.7	94
17	<i>AtKC1</i> is a general modulator of Arabidopsis inward Shaker channel activity. <i>Plant Journal</i> , 2011, 67, 570-582.	5.7	83
18	Overexpression of an Na <sup>+</sup> - and K <sup>+</sup> -permeable HKT transporter in barley improves salt tolerance. <i>Plant Journal</i> , 2011, 68, 468-479.	5.7	256

#	ARTICLE	IF	CITATIONS
19	A grapevine Shaker inward K <sup>+</sup> channel activated by the calcineurin B-like calcium sensor 1Å protein kinase CIPK23 network is expressed in grape berries under drought stress conditions. <i>Plant Journal</i> , 2010, 61, 58-69.	5.7	135
20	Diversity in Expression Patterns and Functional Properties in the Rice HKT Transporter Family Å. <i>Plant Physiology</i> , 2009, 150, 1955-1971.	4.8	175
21	AtKC1, a conditionally targeted Shaker-type subunit, regulates the activity of plant K <sup>+</sup> channels. <i>Plant Journal</i> , 2008, 53, 115-123.	5.7	107
22	Plant adaptation to fluctuating environment and biomass production are strongly dependent on guard cell potassium channels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 5271-5276.	7.1	138
23	Nomenclature for HKT transporters, key determinants of plant salinity tolerance. <i>Trends in Plant Science</i> , 2006, 11, 372-374.	8.8	329
24	External K <sup>+</sup> modulates the activity of the Arabidopsis potassium channel SKOR via an unusual mechanism. <i>Plant Journal</i> , 2006, 46, 269-281.	5.7	138
25	Inward rectification of the AKT2 channel abolished by voltage-dependent phosphorylation. <i>Plant Journal</i> , 2005, 44, 783-797.	5.7	81
26	A Unique Voltage Sensor Sensitizes the Potassium Channel AKT2 to Phosphoregulation. <i>Journal of General Physiology</i> , 2005, 126, 605-617.	1.9	54
27	Regulation by External K <sup>+</sup> in a Maize Inward Shaker Channel Targets Transport Activity in the High Concentration Range. <i>Plant Cell</i> , 2005, 17, 1532-1548.	6.6	33
28	Functional analysis of AtHKT1 in Arabidopsis shows that Na <sup>+</sup> recirculation by the phloem is crucial for salt tolerance. <i>EMBO Journal</i> , 2003, 22, 2004-2014.	7.8	512
29	Regulated expression of Arabidopsis shaker K <sup>+</sup> channel genes involved in K <sup>+</sup> uptake and distribution in the plant. <i>Plant Molecular Biology</i> , 2003, 51, 773-787.	3.9	221
30	MOLECULAR MECHANISMS AND REGULATION OF K <sup>+</sup> TRANSPORT IN HIGHER PLANTS. <i>Annual Review of Plant Biology</i> , 2003, 54, 575-603.	18.7	530
31	Five-Group Distribution of the Shaker-like K <sup>+</sup> Channel Family in Higher Plants. <i>Journal of Molecular Evolution</i> , 2003, 56, 418-434.	1.8	98
32	The Arabidopsis outward K <sup>+</sup> channel GORK is involved in regulation of stomatal movements and plant transpiration. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 5549-5554.	7.1	388
33	Cation channels in the Arabidopsis plasma membrane. <i>Trends in Plant Science</i> , 2002, 7, 168-175.	8.8	181
34	Guard Cell Inward K <sup>+</sup> Channel Activity in Arabidopsis Involves Expression of the Twin Channel Subunits KAT1 and KAT2. <i>Journal of Biological Chemistry</i> , 2001, 276, 3215-3221.	3.4	217
35	Biochemical characterization of the Arabidopsis K <sup>+</sup> channels KAT1 and AKT1 expressed or co-expressed in insect cells. <i>Plant Journal</i> , 2000, 23, 527-538.	5.7	39
36	A Shaker-like K <sup>+</sup> Channel with Weak Rectification Is Expressed in Both Source and Sink Phloem Tissues of Arabidopsis. <i>Plant Cell</i> , 2000, 12, 837-851.	6.6	196

#	ARTICLE	IF	CITATIONS
37	A Shaker-Like K <sup>+</sup> Channel with Weak Rectification Is Expressed in Both Source and Sink Phloem Tissues of Arabidopsis. <i>Plant Cell</i> , 2000, 12, 837.	6.6	120
38	Identification and Disruption of a Plant Shaker-like Outward Channel Involved in K <sup>+</sup> Release into the Xylem Sap. <i>Cell</i> , 1998, 94, 647-655.	28.9	676
39	Expression of a cloned plant K <sup>+</sup> channel in <i>Xenopus</i> oocytes: analysis of macroscopic currents. <i>Plant Journal</i> , 1995, 7, 321-332.	5.7	167