Gerhard Obermeyer

List of Publications by Year
in descending order

58 papers	2,224 citations	279798 23 h-index	223800 46 g-index
58 all docs	58 docs citations	58 times ranked	2171 citing authors

#	Article	IF	Citations
1	Glutamate Receptorâ€“Like Genes Form Ca ²⁺ Channels in Pollen Tubes and Are Regulated by Pistil <scp> d </scp> -Serine. Science, 2011, 332, 434-437.	12.6	372
2	Ion dynamics and its possible role during in vitro pollen germination and tube growth. Protoplasma, 1995, 187, 155-167.	2.1	164
3	The turgor pressure of growing lily pollen tubes. Protoplasma, 1997, 198, 1-8.	2.1	153
4	Immunological and Biological Properties of Bet v 4, a Novel Birch Pollen Allergen with Two EF-hand Calcium-binding Domains. Journal of Biological Chemistry, 1997, 272, 28630-28637.	3.4	115
5	Under pressure, cell walls set the pace. Trends in Plant Science, 2010, 15, 363-369.	8.8	106
6	Sucrose-induced Receptor Kinase SIRK1 Regulates a Plasma Membrane Aquaporin in Arabidopsis. Molecular and Cellular Proteomics, 2013, 12, 2856-2873.	3.8	94
7	Biology of weed pollen allergens. Current Allergy and Asthma Reports, 2004, 4, 391-400.	5.3	81
8	Dynamic Adaption of Metabolic Pathways during Germination and Growth of Lily Pollen Tubes after Inhibition of the Electron Transport Chain Â Â. Plant Physiology, 2013, 162, 1822-1833.	4.8	79
9	Pollen tubes and the physical world. Trends in Plant Science, 2011, 16, 353-355.	8.8	65
10	Electrophysiological Analysis of the Yeast V-Type Proton Pump: Variable Coupling Ratio and Proton Shunt. Biophysical Journal, 2003, 85, 3730-3738.	0.5	62
11	Molecular and physiological characterisation of a 14-3-3 protein from lily pollen grains regulating the activity of the plasma membrane H + ATPase during pollen grain germination and tube growth. Planta, 2001, 213, 132-141.	3.2	57
12	Boric acid stimulates the plasma membrane H+-ATPase of ungerminated lily pollen grains. Physiologia Plantarum, 2008, 98, 281-290.	5.2	57
13	Reversible protein phosphorylation regulates the dynamic organization of the pollen tube cytoskeleton: effects of calyculin A and okadaic acid. Protoplasma, 2002, 220, 1-15.	2.1	53
14	Immunolocalization of H+-ATPases in the plasma membrane of pollen grains and pollen tubes ofLilium longiflorum. Protoplasma, 1992, 171, 55-63.	2.1	52
15	The Pollen Organelle Membrane Proteome Reveals Highly Spatialâˆ'Temporal Dynamics during Germination and Tube Growth of Lily Pollen. Journal of Proteome Research, 2009, 8, 5142-5152.	3.7	49
16	Electrical properties of intact pollen grains ofLilium longiflorum: characteristics of the non-germinatingpollen grain. Journal of Experimental Botany, 1995, 46, 803-813.	4.8	48
17	Osmoregulation in Lilium Pollen Grains Occurs via Modulation of the Plasma Membrane H+ ATPase Activity by 14-3-3 Proteins. Plant Physiology, 2010, 154, 1921-1928.	4.8	45
18	Ectopic expression of <i>Arabidopsis thaliana</i> plasma membrane intrinsic protein 2 aquaporins in lily pollen increases the plasma membrane water permeability of grain but not of tube protoplasts. New Phytologist, 2008, 180, 787-797.	7.3	38

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19	K⁺ Channels in the Plasma Membrane of Lily Pollen Protoplasts. Botanica Acta, 1993, 106, 26-31.	1.6	32
20	Characterization of whole-cell k+ currents across the plasma membrane of pollen grain and tube protoplasts of Lilium longiflorum. Journal of Membrane Biology, 2003, 193, 99-108.	2.1	32
21	Pump up the volume - a central role for the plasma membrane H+ pump in pollen germination and tube growth. Protoplasma, 2014, 251, 477-488.	2.1	28
22	Disturbance of endomembrane trafficking by brefeldin A and calyculin A reorganizes the actin cytoskeleton of Lilium longiflorum pollen tubes. Protoplasma, 2005, 227, 25-36.	2.1	26
23	Sucrose-induced Receptor Kinase 1 is Modulated by an Interacting Kinase with Short Extracellular Domain*. Molecular and Cellular Proteomics, 2019, 18, 1556-1571.	3.8	24
24	Release of an acid phosphatase activity during lily pollen tube growth involves components of the secretory pathway. Protoplasma, 2002, 219, 176-183.	2.1	23
25	NH4 Â+ Currents across the Peribacteroid Membrane of Soybean. Macroscopic and Microscopic Properties, Inhibition by Mg2+, and Temperature Dependence Indicate a SubpicoSiemens Channel Finely Regulated by Divalent Cations. Plant Physiology, 2005, 139, 1015-1029.	4.8	23
26	De novo sequencing and analysis of the lily pollen transcriptome: an open access data source for an orphan plant species. Plant Molecular Biology, 2015, 87, 69-80.	3.9	23
27	Potassium and voltage dependence of the inorganic pyrophosphatase of intact vacuoles from Chenopodium rubrum. Biochimica Et Biophysica Acta - Biomembranes, 1996, 1284, 203-212.	2.6	20
28	In-vitro germination and growth of lily pollen tubes is affected by protein phosphatase inhibitors. Planta, 1998, 207, 303-312.	3.2	20
29	Localization and release of allergens from tapetum and pollen grains ofBetula pendula. Protoplasma, 1999, 208, 37-46.	2.1	19
30	Measuring the Osmotic Water Permeability of the Plant Protoplast Plasma Membrane: Implication of the Nonosmotic Volume. Journal of Membrane Biology, 2007, 215, 111-123.	2.1	19
31	A novel FRET peptide assay reveals efficient Helicobacter pylori HtrA inhibition through zinc and copper binding. Scientific Reports, 2020, 10, 10563.	3.3	19
32	First patch, then catch: measuring the activity and the mRNA transcripts of a proton pump in individualLiliumpollen protoplasts1. FEBS Letters, 2002, 512, 152-156.	2.8	18
33	In vivo cross-linking combined with mass spectrometry analysis reveals receptor-like kinases and Ca2+ signalling proteins as putative interaction partners of pollen plasma membrane H+ ATPases. Journal of Proteomics, 2014, 108, 17-29.	2.4	18
34	Identification of Cargo for Adaptor Protein (AP) Complexes 3 and 4 by Sucrose Gradient Profiling. Molecular and Cellular Proteomics, 2016, 15, 2877-2889.	3.8	18
35	Dissecting the subcellular membrane proteome reveals enrichment of H+ (co-)transporters and vesicle trafficking proteins in acidic zones of Chara internodal cells. PLoS ONE, 2018, 13, e0201480.	2.5	18
36	The Distribution of Membraneâ€Bound 14â€3â€3 Proteins in Organelleâ€Enriched Fractions of Germinating Lily Pollen. Plant Biology, 2005, 7, 140-147.	3.8	17

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37	Inhibition of the yeast V-type ATPase by cytosolic ADP. FEBS Letters, 2003, 535, 119-124.	2.8	15
38	Production of recombinant allergens in plants. Phytochemistry Reviews, 2008, 7, 539-552.	6.5	14
39	AC fields of low frequency and amplitude stimulate pollen tube growth possibly via stimulation of the plasma membrane proton pump. Bioelectrochemistry, 1997, 44, 95-102.	1.0	12
40	Over-expression and production of plant allergens by molecular farming strategies. Methods, 2004, 32, 235-240.	3.8	11
41	Nondiffusional Release of Allergens from Pollen Grains of <i>Artemisia vulgaris</i> and <i>Lilium longiflorum</i> Depends Mainly on the Type of the Allergen. International Archives of Allergy and Immunology, 2005, 137, 27-36.	2.1	11
42	Identification of lily pollen 14-3-3 isoforms and their subcellular and time-dependent expression profile. Biological Chemistry, 2011, 392, 249-62.	2.5	11
43	Electrorotation of Isolated Generative and Vegetative Cells, and of Intact Pollen Grains of Lilium longiflorum. Journal of Membrane Biology, 1998, 161, 21-32.	2.1	9
44	Introduction of impermeable molecules into pollen grains by electroporation. Protoplasma, 1995, 187, 132-137.	2.1	8
45	Expression of the major mugwort pollen allergen Art v 1 in tobacco plants and cell cultures: problems and perspectives for allergen production in plants. Plant Cell Reports, 2012, 31, 561-571.	5.6	7
46	Lost in traffic? The K+ channel of lily pollen, LilKT1, is detected at the endomembranes inside yeast cells, tobacco leaves, and lily pollen. Frontiers in Plant Science, 2015, 6, 47.	3.6	7
47	pH modulates interaction of 14-3-3 proteins with pollen plasma membrane H+ ATPases independently from phosphorylation. Journal of Experimental Botany, 2022, 73, 168-181.	4.8	7
48	Can we Predict or Avoid the Allergenic Potential of Genetically Modified Organisms?. International Archives of Allergy and Immunology, 2005, 137, 151-152.	2.1	6
49	Pollen Cultivation and Preparation for Proteomic Studies. Methods in Molecular Biology, 2014, 1072, 435-449.	0.9	6
50	The Pollen Plasma Membrane Permeome Converts Transmembrane Ion Transport Into Speed. Advances in Botanical Research, 2018, 87, 215-265.	1.1	4
51	Water Transport in Pollen. , 2017, , 13-34.		4
52	In Vivo Cross-Linking to Analyze Transient Proteinâ€"Protein Interactions. Methods in Molecular Biology, 2020, 2139, 273-287.	0.9	3
53	Isolation and Characterization of cDNA Clones Coding for Mugwort <i>(Artemisia vulgaris)</i> Pollen Allergens. International Archives of Allergy and Immunology, 2001, 124, 77-79.	2.1	1
54	From sequence to antibody: Genetic immunisation is suitable to generate antibodies against a rare plant membrane protein, the KAT 1 channel. FEBS Letters, 2007, 581, 448-452.	2.8	1

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55	Friedrich-Wilhelm Bentrup â€“ on the occasion of his retirement. Protoplasma, 2005, 227, 1-1.	2.1	0
56	Pollenschlauchwachstum. Need for speed oder: im Rausch der Geschwindigkeit. Biologie in Unserer Zeit, 2008, 38, 304-310.	0.2	0
57	Das Membranpotenzial. Biophysik im Experiment. Biologie in Unserer Zeit, 2011, 41, 206-211.	0.2	0
58	Pollen Tubes and Tip Growth: of Biophysics and Tipomics. , 2017, , 3-10.		0