

Viktor Zarsky

List of Publications by Year in descending order

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118
papers

7,338
citations

43973

48
h-index

60497

81
g-index

126
all docs

126
docs citations

126
times ranked

5465
citing authors

#	ARTICLE	IF	CITATIONS
1	Reactive oxygen species produced by NADPH oxidase are involved in pollen tube growth. <i>New Phytologist</i> , 2007, 174, 742-751.	3.5	409
2	A RhoGDP dissociation inhibitor spatially regulates growth in root hair cells. <i>Nature</i> , 2005, 438, 1013-1016.	13.7	327
3	A Mitogen-activated Protein Kinase Kinase Kinase Mediates Reactive Oxygen Species Homeostasis in Arabidopsis. <i>Journal of Biological Chemistry</i> , 2006, 281, 38697-38704.	1.6	311
4	An Exocyst Complex Functions in Plant Cell Growth in Arabidopsis and Tobacco. <i>Plant Cell</i> , 2008, 20, 1330-1345.	3.1	280
5	AtEXO70A1, a member of a family of putative exocyst subunits specifically expanded in land plants, is important for polar growth and plant development. <i>Plant Journal</i> , 2006, 48, 54-72.	2.8	234
6	The Ubiquitin Ligase PUB22 Targets a Subunit of the Exocyst Complex Required for PAMP-Triggered Responses in <i>Arabidopsis</i> . <i>Plant Cell</i> , 2012, 24, 4703-4716.	3.1	205
7	Exocyst complexes multiple functions in plant cells secretory pathways. <i>Current Opinion in Plant Biology</i> , 2013, 16, 726-733.	3.5	172
8	Phosphatidic acid produced by phospholipase Δ D is required for tobacco pollen tube growth. <i>Planta</i> , 2003, 217, 122-130.	1.6	168
9	SEC8, a Subunit of the Putative Arabidopsis Exocyst Complex, Facilitates Pollen Germination and Competitive Pollen Tube Growth. <i>Plant Physiology</i> , 2005, 138, 2005-2018.	2.3	167
10	Arabidopsis Exocyst Subcomplex Containing Subunit <i>EXO70B1</i> Is Involved in Autophagy-Related Transport to the Vacuole. <i>Traffic</i> , 2013, 14, 1155-1165.	1.3	167
11	Plant Cytokinesis: Terminology for Structures and Processes. <i>Trends in Cell Biology</i> , 2017, 27, 885-894.	3.6	155
12	The <i>Arabidopsis</i> Exocyst Complex Is Involved in Cytokinesis and Cell Plate Maturation. <i>Plant Cell</i> , 2010, 22, 3053-3065.	3.1	151
13	Exocytosis and cell polarity in plants – exocyst and recycling domains. <i>New Phytologist</i> , 2009, 183, 255-272.	3.5	145
14	The role for the exocyst complex subunits Exo70B2 and Exo70H1 in the plant-pathogen interaction. <i>Journal of Experimental Botany</i> , 2011, 62, 2107-2116.	2.4	143
15	Endosidin2 targets conserved exocyst complex subunit EXO70 to inhibit exocytosis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E41-50.	3.3	129
16	Evolution of the Land Plant Exocyst Complexes. <i>Frontiers in Plant Science</i> , 2012, 3, 159.	1.7	127
17	Arabidopsis group le formins localize to specific cell membrane domains, interact with actin-binding proteins and cause defects in cell expansion upon aberrant expression. <i>New Phytologist</i> , 2005, 168, 529-540.	3.5	122
18	The exocyst complex contributes to <i>PIN</i> auxin efflux carrier recycling and polar auxin transport in <i>A. arabidopsis</i> . <i>Plant Journal</i> , 2013, 73, 709-719.	2.8	122

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19	The exocyst complex in plants. <i>Cell Biology International</i> , 2003, 27, 199-201.	1.4	121
20	Regulation of cytoskeletal dynamics by phospholipase D and phosphatidic acid. <i>Trends in Plant Science</i> , 2013, 18, 496-504.	4.3	120
21	<i>Arabidopsis</i> exocyst subunits <i>SEC8</i> and <i>EXO70A1</i> and exocyst interactor <i>ROH1</i> are involved in the localized deposition of seed coat pectin. <i>New Phytologist</i> , 2010, 188, 615-625.	3.5	117
22	The plant formin AtFH4 interacts with both actin and microtubules, and contains a newly identified microtubule-binding domain. <i>Journal of Cell Science</i> , 2010, 123, 1209-1215.	1.2	117
23	Multiple Exocytotic Markers Accumulate at the Sites of Perifungal Membrane Biogenesis in Arbuscular Mycorrhizas. <i>Plant and Cell Physiology</i> , 2012, 53, 244-255.	1.5	107
24	Visualization of the exocyst complex dynamics at the plasma membrane of <i>Arabidopsis thaliana</i> . <i>Molecular Biology of the Cell</i> , 2013, 24, 510-520.	0.9	107
25	NADPH oxidase activity in pollen tubes is affected by calcium ions, signaling phospholipids and Rac/Rop GTPases. <i>Journal of Plant Physiology</i> , 2012, 169, 1654-1663.	1.6	106
26	The expression of a small heat shock gene is activated during induction of tobacco pollen embryogenesis by starvation*. <i>Plant, Cell and Environment</i> , 1995, 18, 139-147.	2.8	98
27	Molecular diversity of phospholipase D in angiosperms. <i>BMC Genomics</i> , 2002, 3, 2.	1.2	97
28	Plant Cytokinesis Is Orchestrated by the Sequential Action of the TRAPP II and Exocyst Tethering Complexes. <i>Developmental Cell</i> , 2014, 29, 607-620.	3.1	97
29	Formin homology 2 domains occur in multiple contexts in angiosperms. <i>BMC Genomics</i> , 2004, 5, 44.	1.2	92
30	Mutual regulation of plant phospholipase D and the actin cytoskeleton. <i>Plant Journal</i> , 2010, 62, 494-507.	2.8	92
31	Tethering Complexes in the <i>Arabidopsis</i> Endomembrane System. <i>Frontiers in Cell and Developmental Biology</i> , 2016, 4, 46.	1.8	89
32	Cell Wall Maturation of <i>Arabidopsis</i> Trichomes Is Dependent on Exocyst Subunit EXO70H4 and Involves Callose Deposition. <i>Plant Physiology</i> , 2015, 168, 120-131.	2.3	84
33	Roots of angiosperm formins: The evolutionary history of plant FH2 domain-containing proteins. <i>BMC Evolutionary Biology</i> , 2008, 8, 115.	3.2	80
34	Live-cell imaging of phosphatidic acid dynamics in pollen tubes visualized by <i>S</i> -derived biosensor. <i>New Phytologist</i> , 2014, 203, 483-494.	3.5	80
35	Exocyst Subunit EXO70H4 Has a Specific Role in Callose Synthase Secretion and Silica Accumulation. <i>Plant Physiology</i> , 2018, 176, 2040-2051.	2.3	79
36	Exocyst SEC3 and phosphoinositides define sites of exocytosis in pollen tube initiation and growth. <i>Plant Physiology</i> , 2016, 172, pp.00690.2016.	2.3	75

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37	AtFH1 formin mutation affects actin filament and microtubule dynamics in <i>Arabidopsis thaliana</i> . <i>Journal of Experimental Botany</i> , 2013, 64, 585-597.	2.4	68
38	Microtubule-dependent targeting of the exocyst complex is necessary for xylem development in <i>Arabidopsis</i> . <i>New Phytologist</i> , 2017, 213, 1052-1067.	3.5	68
39	Derepression of the cell cycle by starvation is involved in the induction of tobacco pollen embryogenesis. <i>Sexual Plant Reproduction</i> , 1992, 5, 189-194.	2.2	63
40	Turnover of Phosphatidic Acid through Distinct Signaling Pathways Affects Multiple Aspects of Pollen Tube Growth in Tobacco. <i>Frontiers in Plant Science</i> , 2012, 3, 54.	1.7	63
41	Phospholipase D1 α 2 Drives Vesicular Secretion of Auxin for Its Polar Cell-Cell Transport in the Transition Zone of the Root Apex. <i>Plant Signaling and Behavior</i> , 2007, 2, 240-244.	1.2	62
42	Analysis of Exocyst Subunit EXO70 Family Reveals Distinct Membrane Polar Domains in Tobacco Pollen Tubes. <i>Plant Physiology</i> , 2017, 173, 1659-1675.	2.3	58
43	Exocyst and autophagy-related membrane trafficking in plants. <i>Journal of Experimental Botany</i> , 2018, 69, 47-57.	2.4	57
44	Sporophytes of polysporangiate land plants from the early Silurian period may have been photosynthetically autonomous. <i>Nature Plants</i> , 2018, 4, 269-271.	4.7	56
45	Production of fertile tobacco pollen from microspores in suspension culture and its storage for in situ pollination. <i>Sexual Plant Reproduction</i> , 1991, 4, 284-287.	2.2	54
46	RIN4 recruits the exocyst subunit EXO70B1 to the plasma membrane. <i>Journal of Experimental Botany</i> , 2017, 68, 3253-3265.	2.4	54
47	A homolog of the mammalian GTPase Rab2 is present in <i>Arabidopsis</i> and is expressed predominantly in pollen grains and seedlings. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1997, 94, 762-767.	3.3	52
48	Subcellular Localization of <i>Arabidopsis</i> Pathogenesis-Related 1 (PR1) Protein. <i>International Journal of Molecular Sciences</i> , 2017, 18, 825.	1.8	52
49	Structural Insights into the Inhibition of Actin-Capping Protein by Interactions with Phosphatidic Acid and Phosphatidylinositol (4,5)-Bisphosphate. <i>PLoS Computational Biology</i> , 2012, 8, e1002765.	1.5	51
50	EXO70C2 Is a Key Regulatory Factor for Optimal Tip Growth of Pollen. <i>Plant Physiology</i> , 2017, 174, 223-240.	2.3	50
51	Membrane targeting of the yeast exocyst complex. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2015, 1848, 1481-1489.	1.4	48
52	Chaperone activity of tobacco HSP18, a small heat-shock protein, is inhibited by ATP. <i>Plant Journal</i> , 2000, 23, 703-713.	2.8	45
53	<i>Arabidopsis</i> FH1 Formin Affects Cotyledon Pavement Cell Shape by Modulating Cytoskeleton Dynamics. <i>Plant and Cell Physiology</i> , 2016, 57, 488-504.	1.5	45
54	Plasma membrane phospholipid signature recruits the plant exocyst complex via the EXO70A1 subunit. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	40

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55	Plant intelligence. <i>Plant Signaling and Behavior</i> , 2009, 4, 394-399.	1.2	38
56	Formins: Linking Cytoskeleton and Endomembranes in Plant Cells. <i>International Journal of Molecular Sciences</i> , 2015, 16, 1-18.	1.8	38
57	The exocyst at the interface between cytoskeleton and membranes in eukaryotic cells. <i>Frontiers in Plant Science</i> , 2014, 4, 543.	1.7	37
58	Phospholipase D family interactions with the cytoskeleton: isoform delta promotes plasma membrane anchoring of cortical microtubules. <i>Functional Plant Biology</i> , 2009, 36, 600.	1.1	36
59	Signal transduction: GABA receptor found in plants. <i>Nature Plants</i> , 2015, 1, 15115.	4.7	36
60	The <i>Physcomitrella patens</i> exocyst subunit EXO70.3d has distinct roles in growth and development, and is essential for completion of the moss life cycle. <i>New Phytologist</i> , 2017, 216, 438-454.	3.5	36
61	Invasive cells in animals and plants: searching for LECA machineries in later eukaryotic life. <i>Biology Direct</i> , 2013, 8, 8.	1.9	34
62	Autophagy-Related Direct Membrane Import from ER/Cytoplasm into the Vacuole or Apoplast: A Hidden Gateway also for Secondary Metabolites and Phytohormones?. <i>International Journal of Molecular Sciences</i> , 2014, 15, 7462-7474.	1.8	33
63	At-GDI1 from <i>Arabidopsis thaliana</i> encodes a rab-specific GDP dissociation inhibitor that complements the <i>sec19</i> mutation of <i>Saccharomyces cerevisiae</i> . <i>FEBS Letters</i> , 1997, 403, 303-308.	1.3	30
64	<i>Arabidopsis</i> RAB geranylgeranyl transferase $\hat{1}^2$ -subunit mutant is constitutively photomorphogenic, and has shoot growth and gravitropic defects. <i>Plant Journal</i> , 2010, 62, 615-627.	2.8	30
65	Dissecting a Hidden Gene Duplication: The <i>Arabidopsis thaliana</i> SEC10 Locus. <i>PLoS ONE</i> , 2014, 9, e94077.	1.1	29
66	Generation of Superoxide by OeRbohH, a NADPH Oxidase Activity During Olive (<i>Olea europaea</i> L.) Pollen Development and Germination. <i>Frontiers in Plant Science</i> , 2019, 10, 1149.	1.7	28
67	Three subfamilies of exocyst EXO70 family subunits in land plants: early divergence and ongoing functional specialization. <i>Journal of Experimental Botany</i> , 2020, 71, 49-62.	2.4	28
68	<i>Arabidopsis</i> Trichome Contains Two Plasma Membrane Domains with Different Lipid Compositions Which Attract Distinct EXO70 Subunits. <i>International Journal of Molecular Sciences</i> , 2019, 20, 3803.	1.8	28
69	A Specific Feature of the Angiosperm Rab Escort Protein (REP) and Evolution of the REP/GDI Superfamily. <i>Journal of Molecular Biology</i> , 2005, 348, 1299-1313.	2.0	27
70	Protein changes during pollen development in <i>Nicotiana tabacum</i> L.. <i>Biologia Plantarum</i> , 1985, 27, 438-444.	1.9	26
71	The song of lipids and proteins: dynamic lipid-protein interfaces in the regulation of plant cell polarity at different scales. <i>Journal of Experimental Botany</i> , 2015, 66, 1587-1598.	2.4	26
72	Early <i>Arabidopsis</i> root hair growth stimulation by pathogenic strains of <i>Pseudomonas syringae</i> . <i>Annals of Botany</i> , 2017, 120, 437-446.	1.4	26

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73	Arabidopsis Class I Formin FH1 Relocates between Membrane Compartments during Root Cell Ontogeny and Associates with Plasmodesmata. <i>Plant and Cell Physiology</i> , 2019, 60, 1855-1870.	1.5	26
74	Recycling domains in plant cell morphogenesis: small GTPase effectors, plasma membrane signalling and the exocyst. <i>Biochemical Society Transactions</i> , 2010, 38, 723-728.	1.6	23
75	Plant Studies May Lead Us to Rethink the Concept of Behavior. <i>Frontiers in Psychology</i> , 2016, 7, 622.	1.1	22
76	Old AIMs of the exocyst: evidence for an ancestral association of exocyst subunits with autophagy-associated Atg8 proteins. <i>Plant Signaling and Behavior</i> , 2013, 8, e27099.	1.2	20
77	EXO70A2 Is Critical for Exocyst Complex Function in Pollen Development. <i>Plant Physiology</i> , 2020, 184, 1823-1839.	2.3	20
78	Synergy among Exocyst and SNARE Interactions Identifies a Functional Hierarchy in Secretion during Vegetative Growth. <i>Plant Cell</i> , 2020, 32, 2951-2963.	3.1	19
79	Notes on the sexual reproduction of <i>Chlamydomonas geitleri</i> Ettl. <i>Archiv für Protistenkunde</i> , 1985, 130, 343-353.	0.8	17
80	The phosphomimetic mutation of an evolutionarily conserved serine residue affects the signaling properties of Rho of plants (ROPs). <i>Plant Journal</i> , 2011, 66, 669-679.	2.8	17
81	Developmental plasticity of <i>Arabidopsis</i> hypocotyl is dependent on exocyst complex function. <i>Journal of Experimental Botany</i> , 2019, 70, 1255-1265.	2.4	17
82	Functional analysis of phospholipase D γ family in tobacco pollen tubes. <i>Plant Journal</i> , 2020, 103, 212-226.	2.8	17
83	<i>Arabidopsis</i> EXO70B2 exocyst subunit contributes to papillae and encasement formation in antifungal defence. <i>Journal of Experimental Botany</i> , 2022, 73, 742-755.	2.4	17
84	Immunity functions of <i>Arabidopsis</i> pathogenesis-related 1 are coupled but not confined to its C-terminus processing and trafficking. <i>Molecular Plant Pathology</i> , 2022, 23, 664-678.	2.0	17
85	On growth and formins. <i>Plant Signaling and Behavior</i> , 2016, 11, e1155017.	1.2	16
86	Jan Evangelista Purkyně/Purkinje (1787–1869) and the establishment of cellular physiology in Wrocław/Breslau as a central European cradle for a new science. <i>Protoplasma</i> , 2012, 249, 1173-1179.	1.0	15
87	Computational identification of root hair-specific genes in <i>Arabidopsis</i> . <i>Plant Signaling and Behavior</i> , 2010, 5, 1407-1418.	1.2	13
88	Exocyst functions in plants: secretion and autophagy. <i>FEBS Letters</i> , 2022, 596, 2324-2334.	1.3	12
89	A missed anniversary: 300 years after Rudolf Jacob Camerarius' "De sexu plantarum epistola". <i>Sexual Plant Reproduction</i> , 1995, 8, 375-376.	2.2	11
90	Microinjection of Guanine Nucleotide Analogues into Lily Pollen Tubes Results in Isodiametric Tip Expansion. <i>Plant Biology</i> , 2001, 3, 489-492.	1.8	11

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91	Clathrin in plant defense signaling and execution. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10745-10747.	3.3	11
92	Redundant and Diversified Roles Among Selected Arabidopsis thaliana EXO70 Paralogs During Biotic Stress Responses. Frontiers in Plant Science, 2020, 11, 960.	1.7	11
93	Division of Labor Between Two Actin Nucleators—the Formin FH1 and the ARP2/3 Complex—in Arabidopsis Epidermal Cell Morphogenesis. Frontiers in Plant Science, 2020, 11, 148.	1.7	11
94	Protein Prenylation in Plant Stress Responses. Molecules, 2019, 24, 3906.	1.7	10
95	Dynamics of Silurian Plants as Response to Climate Changes. Life, 2021, 11, 906.	1.1	10
96	Expression of GFP-mTalin reveals an actin-related role for the Arabidopsis Class II formin AtFH12. Biologia Plantarum, 2012, 56, 431-440.	1.9	9
97	Constitutive Negative Regulation of R Proteins in Arabidopsis also via Autophagy Related Pathway?. Frontiers in Plant Science, 2016, 7, 260.	1.7	9
98	Visualizing and Quantifying In Vivo Cortical Cytoskeleton Structure and Dynamics. Methods in Molecular Biology, 2019, 1992, 135-149.	0.4	9
99	Dynamic membranes—the indispensable platform for plant growth, signaling, and development. Plant Physiology, 2021, 185, 547-549.	2.3	8
100	Interference of pollen diffusible substances with peroxidase catalyzed reaction. Plant Science, 1987, 52, 29-32.	1.7	7
101	SEC6 exocyst subunit contributes to multiple steps of growth and development of Physcomitrella () Tj ETQq1 1 0.784314 rgBT /Overloc 2.8	2.8	7
102	Functional Specialization within the EXO70 Gene Family in Arabidopsis. International Journal of Molecular Sciences, 2021, 22, 7595.	1.8	6
103	Complex, non-monotonic dose-response curves with multiple maxima: Do we (ever) sample densely enough?. Plant Signaling and Behavior, 2015, 10, e1062198.	1.2	5
104	Visualizing and Quantifying the In Vivo Structure and Dynamics of the Arabidopsis Cortical Cytoskeleton Using CLSM and VAEM. Methods in Molecular Biology, 2014, 1080, 87-97.	0.4	5
105	Higher flower bud formation in haploid tobacco is connected with higher peroxidase/IAA-oxidase activity, lower IAA content and ethylene production. Biologia Plantarum, 1990, 32, 288-293.	1.9	4
106	Small G-proteins in Arabidopsis thaliana. Biochemical Society Transactions, 1997, 25, 1001-1005.	1.6	4
107	Plant antigens cross-react with rat polyclonal antibodies against KLH-conjugated peptides. Cell Biology International, 2009, 33, 113-118.	1.4	4
108	Regulation of Exocyst Function in Pollen Tube Growth by Phosphorylation of Exocyst Subunit EXO70C2. Frontiers in Plant Science, 2020, 11, 609600.	1.7	4

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109	Antisense Oligodeoxynucleotide-Mediated Gene Knockdown in Pollen Tubes. <i>Methods in Molecular Biology</i> , 2014, 1080, 231-236.	0.4	4
110	Diversification of <scp>SEC15a</scp> and <scp>SEC15b</scp> isoforms of an exocyst subunit in seed plants is manifested in their specific roles in <i>Arabidopsis</i> sporophyte and male gametophyte. <i>Plant Journal</i> , 2022, 110, 1382-1396.	2.8	3
111	Multiple, concentration-dependent effects of sucrose, auxins and cytokinins in explant cultures of kale and tobacco. <i>Acta Physiologiae Plantarum</i> , 2014, 36, 1981-1991.	1.0	2
112	Exocyst complex functions in plant development. <i>Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology</i> , 2008, 150, S189.	0.8	1
113	180 Years of the Cell: From Matthias Jakob Schleiden to the Cell Biology of the Twenty-First Century. <i>Plant Cell Monographs</i> , 2018, , 7-37.	0.4	1
114	Auxin does not inhibit endocytosis of PIN1 and PIN2 auxin efflux carriers. <i>Plant Physiology</i> , 2021, 186, 808-811.	2.3	1
115	Stylar water potential and unilateral interspecific incompatibility in <i>Solanaceae</i> . <i>Biologia Plantarum</i> , 1994, 36, 575.	1.9	0
116	Alcohol dehydrogenase isoenzymes from <i>Nicotiana tabacum</i> include ADH of both <i>N. sylvestris</i> and <i>N. tomentosiformis</i> . <i>Biologia Plantarum</i> , 1994, 36, 53-57.	1.9	0
117	Towards in vivo characterization of selected <i>Arabidopsis</i> forms. <i>Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology</i> , 2007, 146, S267-S268.	0.8	0
118	Editorial overview: Cell biology. <i>Current Opinion in Plant Biology</i> , 2014, 22, v-viii.	3.5	0