Jozef Samaj

List of Publications by Citations

192 papers	8,024 citations	50 h-index	83 g-index
212 ext. papers	9,674 ext. citations	6.6 avg, IF	5.81 L-index

#	Paper	IF	Citations
192	Root hair formation: F-actin-dependent tip growth is initiated by local assembly of profilin-supported F-actin meshworks accumulated within expansin-enriched bulges. *Developmental Biology*, **2000**, 227, 618-32	3.1	305
191	Endocytosis, actin cytoskeleton, and signaling. *Plant Physiology*, **2004**, 135, 1150-61	6.6	244
190	F-actin-dependent endocytosis of cell wall pectins in meristematic root cells. Insights from brefeldin A-induced compartments. *Plant Physiology*, **2002**, 130, 422-31	6.6	240
189	Cytoskeleton-plasma membrane-cell wall continuum in plants. Emerging links revisited. *Plant Physiology*, **2003**, 133, 482-91	6.6	236
188	Endocytosis of cell surface material mediates cell plate formation during plant cytokinesis. *Developmental Cell*, **2006**, 10, 137-50	10.2	226
187	Aluminum-induced 1-->3-beta-D-glucan inhibits cell-to-cell trafficking of molecules through plasmodesmata. A new mechanism of aluminum toxicity in plants. *Plant Physiology*, **2000**, 124, 991-1006	6.6	214
186	Characterization of the unconventional myosin VIII in plant cells and its localization at the post-cytokinetic cell wall. *Plant Journal*, **1999**, 19, 555-67	6.9	203
185	Vesicular trafficking, cytoskeleton and signalling in root hairs and pollen tubes. *Trends in Plant Science*, **2006**, 11, 594-600	13.1	172
184	Actin-based motility of endosomes is linked to the polar tip growth of root hairs. *European Journal of Cell Biology*, **2005**, 84, 609-21	6.1	163
183	The endocytic network in plants. *Trends in Cell Biology*, **2005**, 15, 425-33	18.3	163
182	Maize calreticulin localizes preferentially to plasmodesmata in root apex. *Plant Journal*, **1999**, 19, 481-8	6.9	155
181	GFP-FABD2 fusion construct allows in vivo visualization of the dynamic actin cytoskeleton in all cells of Arabidopsis seedlings. *European Journal of Cell Biology*, **2005**, 84, 595-608	6.1	151
180	Mrs2p is an essential component of the major electrophoretic Mg2+ influx system in mitochondria. *EMBO Journal*, **2003**, 22, 1235-44	13	149
179	Crosstalk between secondary messengers, hormones and MAPK modules during abiotic stress signalling in plants. *Biotechnology Advances*, **2014**, 32, 2-11	17.8	148
178	The LETM1/YOL027 gene family encodes a factor of the mitochondrial K+ homeostasis with a potential role in the Wolf-Hirschhorn syndrome. *Journal of Biological Chemistry*, **2004**, 279, 30307-15	5.4	144
177	A membrane microdomain-associated protein, Arabidopsis Flot1, is involved in a clathrin-independent endocytic pathway and is required for seedling development. *Plant Cell*, **2012**, 24, 2105-22	11.6	142
176	Involvement of the mitogen-activated protein kinase SIMK in regulation of root hair tip growth. *EMBO Journal*, **2002**, 21, 3296-306	13	136

175	Arabidopsis homologs of nucleus- and phragmoplast-localized kinase 2 and 3 and mitogen-activated protein kinase 4 are essential for microtubule organization. *Plant Cell*, **2010**, 22, 755-71	11.6	115
174	Lipid microdomain polarization is required for NADPH oxidase-dependent ROS signaling in Picea meyeri pollen tube tip growth. *Plant Journal*, **2009**, 60, 303-13	6.9	106
173	Actin-dependent fluid-phase endocytosis in inner cortex cells of maize root apices. *Journal of Experimental Botany*, **2004**, 55, 463-73	7	103
172	Polar transport of auxin: carrier-mediated flux across the plasma membrane or neurotransmitter-like secretion?. *Trends in Cell Biology*, **2003**, 13, 282-5	18.3	103
171	Transient plant transformation mediated by Agrobacterium tumefaciens: Principles, methods and applications. *Biotechnology Advances*, **2015**, 33, 1024-42	17.8	97
170	Improvement of stress tolerance in plants by genetic manipulation of mitogen-activated protein kinases. *Biotechnology Advances*, **2013**, 31, 118-28	17.8	96
169	Arabidopsis MPK6 is involved in cell division plane control during early root development, and localizes to the pre-prophase band, phragmoplast, trans-Golgi network and plasma membrane. *Plant Journal*, **2010**, 61, 234-48	6.9	96
168	Mitogen-activated protein kinase 4 is involved in the regulation of mitotic and cytokinetic microtubule transitions in Arabidopsis thaliana. *New Phytologist*, **2011**, 189, 1069-1083	9.8	94
167	Plant Cytokinesis: Terminology for Structures and Processes. *Trends in Cell Biology*, **2017**, 27, 885-894	18.3	88
166	Effects of myosin ATPase inhibitor 2,3-butanedione 2-monoxime on distributions of myosins, F-actin, microtubules, and cortical endoplasmic reticulum in maize root apices. *Plant and Cell Physiology*, **2000**, 41, 571-82	4.9	87
165	Disruption of actin filaments by latrunculin B affects cell wall construction in Picea meyeri pollen tube by disturbing vesicle trafficking. *Plant and Cell Physiology*, **2007**, 48, 19-30	4.9	81
164	Spatiotemporal Dynamics of the BRI1 Receptor and its Regulation by Membrane Microdomains in Living Arabidopsis Cells. *Molecular Plant*, **2015**, 8, 1334-49	14.4	79
163	Effects of brefeldin A on pollen germination and tube growth. Antagonistic effects on endocytosis and secretion. *Plant Physiology*, **2005**, 139, 1692-703	6.6	78
162	Nitric oxide modulates the influx of extracellular Ca2+ and actin filament organization during cell wall construction in Pinus bungeana pollen tubes. *New Phytologist*, **2009**, 182, 851-862	9.8	77
161	Involvement of YODA and mitogen activated protein kinase 6 in Arabidopsis post-embryogenic root development through auxin up-regulation and cell division plane orientation. *New Phytologist*, **2014**, 203, 1175-1193	9.8	74
160	Extracellular matrix surface network of embryogenic units of friable maize callus contains arabinogalactan-proteins recognized by monoclonal antibody JIM4. *Plant Cell Reports*, **1999**, 18, 369-374	5.1	74
159	Imaging of dynamic secretory vesicles in living pollen tubes of Picea meyeri using evanescent wave microscopy. *Plant Physiology*, **2006**, 141, 1591-603	6.6	71
158	A mitogen-activated protein kinase signals to programmed cell death induced by self-incompatibility in Papaver pollen. *Plant Physiology*, **2007**, 145, 236-45	6.6	69

157	Super-resolution Microscopy in Plant Cell Imaging. *Trends in Plant Science*, **2015**, 20, 834-843	13.1	68
156	Microtubules and mitogen-activated protein kinase signalling. *Current Opinion in Plant Biology*, **2011**, 14, 650-7	9.9	66
155	From signal to cell polarity: mitogen-activated protein kinases as sensors and effectors of cytoskeleton dynamicity. *Journal of Experimental Botany*, **2004**, 55, 189-98	7	66
154	Differential display proteomic analysis of Picea meyeri pollen germination and pollen-tube growth after inhibition of actin polymerization by latrunculin B. *Plant Journal*, **2006**, 47, 174-95	6.9	64
153	Cinnamyl Alcohol Dehydrogenase: Identification of New Sites of Promoter Activity in Transgenic Poplar. *Plant Physiology*, **1997**, 113, 321-325	6.6	62
152	A plastid-localized glycogen synthase kinase 3 modulates stress tolerance and carbohydrate metabolism. *Plant Journal*, **2007**, 49, 1076-90	6.9	62
151	Structural sterols are involved in both the initiation and tip growth of root hairs in Arabidopsis thaliana. *Plant Cell*, **2010**, 22, 2999-3019	11.6	59
150	Differential proteomics of plant development. *Journal of Proteomics*, **2011**, 74, 577-88	3.9	57
149	A novel aromatic alcohol dehydrogenase in higher plants: molecular cloning and expression. *Plant Molecular Biology*, **1998**, 36, 755-65	4.6	57
148	The role of electrical and jasmonate signalling in the recognition of captured prey in the carnivorous sundew plant Drosera capensis. *New Phytologist*, **2017**, 213, 1818-1835	9.8	54
147	Superresolution live imaging of plant cells using structured illumination microscopy. *Nature Protocols*, **2015**, 10, 1248-63	18.8	53
146	Actin turnover is required for myosin-dependent mitochondrial movements in Arabidopsis root hairs. *PLoS ONE*, **2009**, 4, e5961	3.7	53
145	Maize proteomics: an insight into the biology of an important cereal crop. *Proteomics*, **2013**, 13, 637-62	4.8	52
144	Roles of the ubiquitin/proteasome pathway in pollen tube growth with emphasis on MG132-induced alterations in ultrastructure, cytoskeleton, and cell wall components. *Plant Physiology*, **2006**, 141, 1578-90	6.6	51
143	Multiscale imaging of plant development by light-sheet fluorescence microscopy. *Nature Plants*, **2018**, 4, 639-650	11.5	51
142	Emerging topics in the cell biology of mitogen-activated protein kinases. *Trends in Plant Science*, **2013**, 18, 140-8	13.1	49
141	New signalling molecules regulating root hair tip growth. *Trends in Plant Science*, **2004**, 9, 217-20	13.1	49
140	Combined proteomic and cytological analysis of Ca2+-calmodulin regulation in Picea meyeri pollen tube growth. *Plant Physiology*, **2009**, 149, 1111-26	6.6	47

139	Preparation of plants for developmental and cellular imaging by light-sheet microscopy. *Nature Protocols*, **2015**, 10, 1234-47	18.8	46
138	Molecular dissection of endosomal compartments in plants. *Plant Physiology*, **2007**, 145, 293-304	6.6	46
137	Advances in Imaging Plant Cell Dynamics. *Plant Physiology*, **2018**, 176, 80-93	6.6	46
136	Immunological evidence for the presence of plant homologues of the actin- related protein Arp3 in tobacco and maize: subcellular localization to actin-enriched pit fields and emerging root hairs. *Protoplasma*, **2003**, 222, 45-52	3.4	45
135	Cell and Developmental Biology of Plant Mitogen-Activated Protein Kinases. *Annual Review of Plant Biology*, **2018**, 69, 237-265	30.7	44
134	Specific Localization of Arabinogalactan-Protein Epitopes at the Surface of Maize Root Hairs. *Plant and Cell Physiology*, **1999**, 40, 874-883	4.9	44
133	Cell-type-specific disruption and recovery of the cytoskeleton in Arabidopsis thaliana epidermal root cells upon heat shock stress. *Protoplasma*, **2007**, 230, 231-42	3.4	43
132	Katanin Effects on Dynamics of Cortical Microtubules and Mitotic Arrays in Revealed by Advanced Live-Cell Imaging. *Frontiers in Plant Science*, **2017**, 8, 866	6.2	42
131	Immunolocalization of LM2 arabinogalactan protein epitope associated with endomembranes of plant cells. *Protoplasma*, **2000**, 212, 186-196	3.4	42
130	Phosphorylation-Mediated Dynamics of Nitrate Transceptor NRT1.1 Regulate Auxin Flux and Nitrate Signaling in Lateral Root Growth. *Plant Physiology*, **2019**, 181, 480-498	6.6	42
129	Wortmannin treatment induces changes in Arabidopsis root proteome and post-Golgi compartments. *Journal of Proteome Research*, **2012**, 11, 3127-42	5.6	41
128	Proteomics on brefeldin A-treated Arabidopsis roots reveals profilin 2 as a new protein involved in the cross-talk between vesicular trafficking and the actin cytoskeleton. *Journal of Proteome Research*, **2011**, 10, 488-501	5.6	38
127	Developmental SEM observations on an extracellular matrix in embryogenic calli ofDrosera rotundifolia andZea mays. *Protoplasma*, **1995**, 186, 45-49	3.4	38
126	Trans-Golgi network localized small GTPase RabA1d is involved in cell plate formation and oscillatory root hair growth. *BMC Plant Biology*, **2014**, 14, 252	5.3	36
125	Immunogold localization of plant surface arabinogalactan-proteins using glycerol liquid substitution and scanning electron microscopy. *Journal of Microscopy*, **1999**, 193, 150-7	1.9	36
124	Dynamics and organization of cortical microtubules as revealed by superresolution structured illumination microscopy. *Plant Physiology*, **2014**, 165, 129-48	6.6	35
123	Direct plant regeneration from leaf explants of Drosera rotundifolia cultured in vitro. *Plant Cell, Tissue and Organ Culture*, **1995**, 43, 43-49	2.7	35
122	Vesicular trafficking and stress response coupled to PI3K inhibition by LY294002 as revealed by proteomic and cell biological analysis. *Journal of Proteome Research*, **2013**, 12, 4435-48	5.6	34

121	YODA-HSP90 Module Regulates Phosphorylation-Dependent Inactivation of SPEECHLESS to Control Stomatal Development under Acute Heat Stress in Arabidopsis. *Molecular Plant*, **2020**, 13, 612-633	14.4	34
120	Proteomic and biochemical analysis of maize anthers after cold pretreatment and induction of androgenesis reveals an important role of anti-oxidative enzymes. *Journal of Proteomics*, **2012**, 75, 1886-94	3.9	32
119	Immunolocalization of cinnamyl alcohol dehydrogenase 2 (CAD 2) indicates a good correlation with cell-specific activity of CAD 2 promoter in transgenic poplar shoots. *Planta*, **1998**, 204, 437-43	4.7	32
118	Integrative proteomic and cytological analysis of the effects of extracellular Ca(2+) influx on Pinus bungeana pollen tube development. *Journal of Proteome Research*, **2008**, 7, 4299-312	5.6	31
117	Comparison of cryofixation and aldehyde fixation for plant actin immunocytochemistry: aldehydes do not destroy F-actin. *The Histochemical Journal*, **2000**, 32, 457-66		31
116	Developmental localization and the role of hydroxyproline rich glycoproteins during somatic embryogenesis of banana (Musa spp. AAA). *BMC Plant Biology*, **2011**, 11, 38	5.3	30
115	Salt-induced subcellular kinase relocation and seedling susceptibility caused by overexpression of Medicago SIMKK in Arabidopsis. *Journal of Experimental Botany*, **2014**, 65, 2335-50	7	29
114	Disruption of actin filaments induces mitochondrial Ca2+ release to the cytoplasm and [Ca2+]c changes in Arabidopsis root hairs. *BMC Plant Biology*, **2010**, 10, 53	5.3	29
113	Cell-specific expression of two arabinogalactan protein epitopes recognized by monoclonal antobodies JIM8 and JIM13 in maize roots. *Protoplasma*, **1998**, 204, 1-12	3.4	29
112	Somatic embryogenesis and plant regeneration in Catharanthus roseus. *Biologia Plantarum*, **2007**, 51, 641-646	2.1	29
111	Arabinogalactan-protein epitope Gal4 is differentially regulated and localized in cell lines of hybrid fir (Abies alba x Abies cephalonica) with different embryogenic and regeneration potential. *Plant Cell Reports*, **2008**, 27, 221-9	5.1	29
110	Cytokinin fluoroprobe reveals multiple sites of cytokinin perception at plasma membrane and endoplasmic reticulum. *Nature Communications*, **2020**, 11, 4285	17.4	29
109	What is apical and what is basal in plant root development?. *Trends in Plant Science*, **2005**, 10, 409-11	13.1	28
108	Signaling Toward Reactive Oxygen Species-Scavenging Enzymes in Plants. *Frontiers in Plant Science*, **2020**, 11, 618835	6.2	28
107	Ultrastructural changes and the distribution of arabinogalactan proteins during somatic embryogenesis of banana (Musa spp. AAA cv. Yueyoukang 1). *Physiologia Plantarum*, **2011**, 142, 372-89	4.6	27
106	Secretion of Phospholipase D Functions as a Regulatory Mechanism in Plant Innate Immunity. *Plant Cell*, **2019**, 31, 3015-3032	11.6	27
105	Wound-induced pectin methylesterases enhance banana (Musa spp. AAA) susceptibility to Fusarium oxysporum f. sp. cubense. *Journal of Experimental Botany*, **2013**, 64, 2219-29	7	26
104	Developmental localization and methylesterification of pectin epitopes during somatic embryogenesis of banana (Musa spp. AAA). *PLoS ONE*, **2011**, 6, e22992	3.7	26

103	Immunohistochemical analysis of cell wall hydroxyproline-rich glycoproteins in the roots of resistant and susceptible wax gourd cultivars in response to Fusarium oxysporum f. sp. Benincasae infection and fusaric acid treatment. *Plant Cell Reports*, **2011**, 30, 1555-69	5.1	26
102	Auxin deprivation induces a developmental switch in maize somatic embryogenesis involving redistribution of microtubules and actin filaments from endoplasmic to cortical cytoskeletal arrays. *Plant Cell Reports*, **2003**, 21, 940-5	5.1	26
101	Katanin: A Sword Cutting Microtubules for Cellular, Developmental, and Physiological Purposes. *Frontiers in Plant Science*, **2017**, 8, 1982	6.2	24
100	Gene Expression Pattern and Protein Localization of Arabidopsis Phospholipase D Alpha 1 Revealed by Advanced Light-Sheet and Super-Resolution Microscopy. *Frontiers in Plant Science*, **2018**, 9, 371	6.2	22
99	Recent Advances in the Cellular and Developmental Biology of Phospholipases in Plants. *Frontiers in Plant Science*, **2019**, 10, 362	6.2	21
98	Shoots and embryo-like structures regenerated from cultured flax (Linum usitatissimum L.) hypocotyl segments. *Journal of Plant Physiology*, **2000**, 157, 327-334	3.6	21
97	Expression and distribution of extensins and AGPs in susceptible and resistant banana cultivars in response to wounding and Fusarium oxysporum. *Scientific Reports*, **2017**, 7, 42400	4.9	20
96	The dynamics and endocytosis of Flot1 protein in response to flg22 in Arabidopsis. *Journal of Plant Physiology*, **2017**, 215, 73-84	3.6	20
95	Histological changes and differences in activities of some antioxidant enzymes and hydrogen peroxide content during somatic embryogenesis of Musa AAA cv. Yueyoukang 1. *Scientia Horticulturae*, **2012**, 144, 87-92	4.1	20
94	Isolation of de-exined pollen and cytological studies of the pollen intines of Pinus bungeana Zucc. Ex Endl. and Picea wilsonii Mast. *Flora: Morphology, Distribution, Functional Ecology of Plants*, **2008**, 203, 332-340	1.9	20
93	Comparative proteomic study of Arabidopsis mutants mpk4 and mpk6. *Scientific Reports*, **2016**, 6, 28306	4.9	20
92	Improvement of adventitious root formation in flax using hydrogen peroxide. *New Biotechnology*, **2016**, 33, 728-734	6.4	19
91	The speed of mitochondrial movement is regulated by the cytoskeleton and myosin in Picea wilsonii pollen tubes. *Planta*, **2010**, 231, 779-91	4.7	19
90	The block of intracellular calcium release affects the pollen tube development of Picea wilsonii by changing the deposition of cell wall components. *Protoplasma*, **2008**, 233, 39-49	3.4	19
89	Feedback Microtubule Control and Microtubule-Actin Cross-talk in Revealed by Integrative Proteomic and Cell Biology Analysis of Mutants. *Molecular and Cellular Proteomics*, **2017**, 16, 1591-1609	7.6	18
88	Developmental Nuclear Localization and Quantification of GFP-Tagged EB1c in Arabidopsis Root Using Light-Sheet Microscopy. *Frontiers in Plant Science*, **2015**, 6, 1187	6.2	18
87	Immunofluorescent localization of MAPKs and colocalization with microtubules in Arabidopsis seedling whole-mount probes. *Methods in Molecular Biology*, **2014**, 1171, 107-15	1.4	17
86	KATANIN 1 Is Essential for Embryogenesis and Seed Formation in Arabidopsis. *Frontiers in Plant Science*, **2017**, 8, 728	6.2	17

85	A unifying new model of cytokinesis for the dividing plant and animal cells. *BioEssays*, **2007**, 29, 371-81	4.1	17
84	Flax anther culture: effect of genotype, cold treatment and media. *Plant Cell, Tissue and Organ Culture*, **2004**, 79, 233-238	2.7	17
83	Expression of tomato prosystemin gene in Arabidopsis reveals systemic translocation of its mRNA and confers necrotrophic fungal resistance. *New Phytologist*, **2018**, 217, 799-812	9.8	17
82	A comparative structural analysis of direct and indirect shoot regeneration of Papaver somniferum L. in vitro. *Journal of Plant Physiology*, **2000**, 157, 281-289	3.6	16
81	Proteomic and biochemical analyses show a functional network of proteins involved in antioxidant defense of the Arabidopsis anp2anp3 double mutant. *Journal of Proteome Research*, **2014**, 13, 5347-61	5.6	15
80	Cytokinin and Ethylene Affect Auxin Transport-Dependent Rhizogenesis in Hypocotyls of Common Ice Plant (Mesembryanthemum crystallinum L.). *Journal of Plant Growth Regulation*, **2009**, 28, 331-340	4.7	15
79	Arabidopsis profilin isoforms, PRF1 and PRF2 show distinctive binding activities and subcellular distributions. *Journal of Integrative Plant Biology*, **2009**, 51, 113-21	8.3	15
78	Fine Structural Analysis of Brefeldin A-Induced Compartment Formation After High-Pressure Freeze Fixation of Maize Root Epidermis: Compound Exocytosis Resembling Cell Plate Formation during Cytokinesis. *Plant Signaling and Behavior*, **2006**, 1, 134-9	2.5	15
77	Multifaceted roles of HEAT SHOCK PROTEIN 90 molecular chaperones in plant development. *Journal of Experimental Botany*, **2020**, 71, 3966-3985	7	15
76	Comparative Digital Gene Expression Analysis of Tissue-Cultured Plantlets of Highly Resistant and Susceptible Banana Cultivarsin Response to Fusarium oxysporum. *International Journal of Molecular Sciences*, **2018**, 19,	6.3	14
75	Doubled haploid production in Flax (Linum usitatissimum L.). *Biotechnology Advances*, **2009**, 27, 371-5	17.8	14
74	Calreticulin mRNA and protein are localized to protein bodies in storage maize callus cells. *Plant Cell Reports*, **2008**, 27, 231-9	5.1	14
73	Studies of Organogenesis from the Callus Culture of the Sundew (Drosera spathulata Labill.). *Journal of Plant Physiology*, **1993**, 142, 251-253	3.6	14
72	Monitoring protein phosphorylation by acrylamide pendant Phos-Tag□n various plants. *Frontiers in Plant Science*, **2015**, 6, 336	6.2	13
71	The histological analysis of indirect somatic embryogenesis on Drosera spathulata Labill. *Acta Physiologiae Plantarum*, **2004**, 26, 353-361	2.6	13
70	Importance of Cytoskeleton and Cell Wall in Somatic Embryogenesis35-50		12
69	Effect of Trifluralin and Colchicine on the Extracellular Matrix Surface Networks during Early Stages of Direct Somatic Embryogenesis of Drosera rotundifolia L.. *Journal of Plant Physiology*, **1999**, 155, 387-392	3.6	12
68	Phosphorylation of Plant Microtubule-Associated Proteins During Cell Division. *Frontiers in Plant Science*, **2019**, 10, 238	6.2	11

67	Biotechnological aspects of cytoskeletal regulation in plants. *Biotechnology Advances*, **2015**, 33, 1043-62	17.8	11
66	Variable content and distribution of arabinogalactan proteins in banana (Musa spp.) under low temperature stress. *Frontiers in Plant Science*, **2015**, 6, 353	6.2	11
65	Proteins reacting with cadherin and catenin antibodies are present in maize showing tissue-, domain-, and development-specific associations with endoplasmic-reticulum membranes and actin microfilaments in root cells. *Protoplasma*, **1999**, 206, 174-187	3.4	11
64	Integrating cell biology and proteomic approaches in plants. *Journal of Proteomics*, **2017**, 169, 165-175	3.9	10
63	Single-point ACT2 gene mutation in the Arabidopsis root hair mutant der1-3 affects overall actin organization, root growth and plant development. *Annals of Botany*, **2018**, 122, 889-901	4.1	10
62	Alfalfa Root Growth Rate Correlates with Progression of Microtubules during Mitosis and Cytokinesis as Revealed by Environmental Light-Sheet Microscopy. *Frontiers in Plant Science*, **2017**, 8, 1870	6.2	10
61	Stable transformation of Mesembryanthemum crystallinum (L.) with Agrobacterium rhizogenes harboring the green fluorescent protein targeted to the endoplasmic reticulum. *Journal of Plant Physiology*, **2011**, 168, 722-9	3.6	10
60	Occurrence of osmiophilic particles is correlated to elongation growth of higher plants. *Protoplasma*, **1998**, 202, 185-191	3.4	10
59	Endosomal Interactions during Root Hair Growth. *Frontiers in Plant Science*, **2015**, 6, 1262	6.2	10
58	Biochemical and Genetic Interactions of Phospholipase D Alpha 1 and Mitogen-Activated Protein Kinase 3 Affect Arabidopsis Stress Response. *Frontiers in Plant Science*, **2019**, 10, 275	6.2	9
57	Spatiotemporal Pattern of Ectopic Cell Divisions Contribute to Mis-Shaped Phenotype of Primary and Lateral Roots of Mutant. *Frontiers in Plant Science*, **2020**, 11, 734	6.2	9
56	MAP65 in tubulin/colchicine paracrystals of Vigna sinensis root cells: possible role in the assembly and stabilization of atypical tubulin polymers. *Cytoskeleton*, **2010**, 67, 152-60	2.4	9
55	Instability of Alien Chromosome Introgressions in Wheat Associated with Improper Positioning in the Nucleus. *International Journal of Molecular Sciences*, **2019**, 20,	6.3	8
54	Advanced microscopy methods for bioimaging of mitotic microtubules in plants. *Methods in Cell Biology*, **2018**, 145, 129-158	1.8	8
53	Probing and tracking organelles in living plant cells. *Protoplasma*, **2012**, 249 Suppl 2, S157-67	3.4	8
52	In vivo light-sheet microscopy resolves localisation patterns of FSD1, a superoxide dismutase with function in root development and osmoprotection. *Plant, Cell and Environment*, **2021**, 44, 68-87	8.4	8
51	Actin and Myosin VIII in Plant Cell-Cell Channels **2006**, 119-134		8
50	Advantages and limitations of shot-gun proteomic analyses on Arabidopsis plants with altered MAPK signaling. *Frontiers in Plant Science*, **2015**, 6, 107	6.2	7

49	Genome-wide analysis of the barley MAPK gene family and its expression patterns in relation to Puccinia hordei infection. *Acta Physiologiae Plantarum*, **2015**, 37, 1	2.6	7
48	Cytoskeleton in the Parasitic Plant During Germination and Prehaustorium Formation. *Frontiers in Plant Science*, **2018**, 9, 794	6.2	7
47	Isoperoxidase and isopolyphenol oxidase spectra in male and female tissues ofActinidia deliciosa in vitro. *Biologia Plantarum*, **1994**, 36, 535	2.1	7
46	Histological-anatomical studies of the structure of the organogenic callus inPapaver somniferum L.. *Biologia Plantarum*, **1990**, 32, 14-18	2.1	7
45	Advanced Microscopy Reveals Complex Developmental and Subcellular Localization Patterns of ANNEXIN 1 in. *Frontiers in Plant Science*, **2020**, 11, 1153	6.2	7
44	Proteomic Analysis of Arabidopsis Mutants Revealed an Important Role of Phospholipase D Alpha 1 in Chloroplast Biogenesis. *Frontiers in Plant Science*, **2019**, 10, 89	6.2	6
43	Complementary Superresolution Visualization of Composite Plant Microtubule Organization and Dynamics. *Frontiers in Plant Science*, **2020**, 11, 693	6.2	6
42	ER disruption and GFP degradation during non-regenerable transformation of flax with Agrobacterium tumefaciens. *Protoplasma*, **2012**, 249, 53-63	3.4	6
41	A systematic comparison of embryogenic and non-embryogenic cells of banana (Musa spp. AAA): Ultrastructural, biochemical and cell wall component analyses. *Scientia Horticulturae*, **2013**, 159, 178-185	4.1	6
40	Involvement of MAP kinase SIMK and actin cytoskeleton in the regulation of root hair tip growth. *Cell Biology International*, **2003**, 27, 257-9	4.5	6
39	Methods and Molecular Tools for Studying Endocytosis in Plants---an Overview1-17		6
38	A Dual Strategy of Breeding for Drought Tolerance and Introducing Drought-Tolerant, Underutilized Crops into Production Systems to Enhance Their Resilience to Water Deficiency. *Plants*, **2020**, 9,	4.5	6
37	Imaging plant cells and organs with light-sheet and super-resolution microscopy.. *Plant Physiology*, **2022**, 188, 683-702	6.6	6
36	Actin depolymerization-induced changes in proteome of Arabidopsis roots. *Journal of Proteomics*, **2017**, 153, 89-99	3.9	5
35	Nuclear Disposition of Alien Chromosome Introgressions into Wheat and Rye Using 3D-FISH. *International Journal of Molecular Sciences*, **2019**, 20,	6.3	5
34	Biotechnological Perspectives of Omics and Genetic Engineering Methods in Alfalfa. *Frontiers in Plant Science*, **2020**, 11, 592	6.2	5
33	Immunofluorescent localization of MAPKs in Steedman wax sections. *Methods in Molecular Biology*, **2014**, 1171, 117-30	1.4	5
32	Affinity-based SDS PAGE identification of phosphorylated Arabidopsis MAPKs and substrates by acrylamide pendant Phos-Tag *Methods in Molecular Biology*, **2014**, 1171, 47-63	1.4	5

31	The Tetracentron genome provides insight into the early evolution of eudicots and the formation of vessel elements. *Genome Biology*, **2020**, 21, 291	18.3	5
30	Super-resolution imaging of microtubules in Medicago sativa. *Methods in Cell Biology*, **2020**, 160, 237-251	1.8	4
29	Morphology and ultrastructure of isolated gemmae of Drosera pygmaea and their in vitro germination. *Biologia Plantarum*, **1998**, 41, 169-176	2.1	4
28	HSP90 chaperones regulate stomatal differentiation under normal and heat stress conditions. *Plant Signaling and Behavior*, **2020**, 15, 1789817	2.5	4
27	Tissue culture, genetic transformation, interaction with beneficial microbes, and modern bio-imaging techniques in alfalfa research. *Critical Reviews in Biotechnology*, **2020**, 40, 1265-1280	9.4	4
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