Frantisek Baluska

List of Publications by Year
in descending order

261 papers	15,694 citations	10389 72 h-index	24258 110 g-index
275 all docs	275 docs citations	275 times ranked	11154 citing authors

#	Article	IF	Citations
1	Plant neurobiology: an integrated view of plant signaling. Trends in Plant Science, 2006, 11, 413-419.	8.8	344
2	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, 618-632.	2.0	331
3	Endocytosis, Actin Cytoskeleton, and Signaling. Plant Physiology, 2004, 135, 1150-1161.	4.8	274
4	Cytoskeleton-Plasma Membrane-Cell Wall Continuum in Plants. Emerging Links Revisited. Plant Physiology, 2003, 133, 482-491.	4.8	262
5	F-Actin-Dependent Endocytosis of Cell Wall Pectins in Meristematic Root Cells. Insights from Brefeldin A-Induced Compartments. Plant Physiology, 2002, 130, 422-431.	4.8	257
6	The Root Apex of<i>Arabidopsis thaliana</i>Consists of Four Distinct Zones of Growth Activities. Plant Signaling and Behavior, 2006, 1, 296-304.	2.4	257
7	Endocytosis of Cell Surface Material Mediates Cell Plate Formation during Plant Cytokinesis. Developmental Cell, 2006, 10, 137-150.	7.0	254
8	Aluminum-Induced 1â†’3-Î²-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.	4.8	247
9	Root apex transition zone: a signallingâ€“response nexus in the root. Trends in Plant Science, 2010, 15, 402-408.	8.8	245
10	Aluminum stress signaling in plants. Plant Signaling and Behavior, 2009, 4, 592-597.	2.4	241
11	Aluminum-Induced Gene Expression and Protein Localization of a Cell Wall-Associated Receptor Kinase in Arabidopsis. Plant Physiology, 2003, 132, 2256-2266.	4.8	231
12	Characterization of the unconventional myosin VIII in plant cells and its localization at the post-cytokinetic cell wall. Plant Journal, 1999, 19, 555-567.	5.7	217
13	On Having No Head: Cognition throughout Biological Systems. Frontiers in Psychology, 2016, 7, 902.	2.1	209
14	<i>Arabidopsis</i> Synaptotagmin 1 Is Required for the Maintenance of Plasma Membrane Integrity and Cell Viability. Plant Cell, 2009, 20, 3374-3388.	6.6	206
15	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.	3.6	204
16	Ammonium stress in Arabidopsis: signaling, genetic loci, and physiological targets. Trends in Plant Science, 2014, 19, 107-114.	8.8	204
17	A Membrane Microdomain-Associated Protein, <i>Arabidopsis</i> Flot1, Is Involved in a Clathrin-Independent Endocytic Pathway and Is Required for Seedling Development. Plant Cell, 2012, 24, 2105-2122.	6.6	200
18	Latrunculin B-Induced Plant Dwarfism: Plant Cell Elongation Is F-Actin-Dependent. Developmental Biology, 2001, 231, 113-124.	2.0	187

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19	Nitric oxide-induced saltÂstress tolerance in plants: ROS metabolism, signaling, and molecular interactions. Plant Biotechnology Reports, 2018, 12, 77-92.	1.5	184
20	The endocytic network in plants. Trends in Cell Biology, 2005, 15, 425-433.	7.9	178
21	Aluminium toxicity in plants: internalization of aluminium into cells of the transition zone in Arabidopsis root apices related to changes in plasma membrane potential, endosomal behaviour, and nitric oxide production. Journal of Experimental Botany, 2006, 57, 4201-4213.	4.8	174
22	Maize calreticulin localizes preferentially to plasmodesmata in root apex. Plant Journal, 1999, 19, 481-488.	5.7	171
23	Actin-based motility of endosomes is linked to the polar tip growth of root hairs. European Journal of Cell Biology, 2005, 84, 609-621.	3.6	170
24	Plant synapses: actin-based domains for cell-to-cell communication. Trends in Plant Science, 2005, 10, 106-111.	8.8	167
25	Salt stressâ€induced seedling growth inhibition coincides with differential distribution of serotonin and melatonin in sunflower seedling roots and cotyledons. Physiologia Plantarum, 2014, 152, 714-728.	5.2	163
26	Rapid response reactions of roots to boron deprivation. Journal of Plant Nutrition and Soil Science, 2001, 164, 173-181.	1.9	156
27	Sink Plasmodesmata as Gateways for Phloem Unloading. Myosin VIII and Calreticulin as Molecular Determinants of Sink Strength?. Plant Physiology, 2001, 126, 39-46.	4.8	155
28	Plant Cytokinesis: Terminology for Structures and Processes. Trends in Cell Biology, 2017, 27, 885-894.	7.9	155
29	Noninvasive and continuous recordings of auxin fluxes in intact root apex with a carbon nanotube-modified and self-referencing microelectrode. Analytical Biochemistry, 2005, 341, 344-351.	2.4	153
30	Involvement of the mitogen-activated protein kinase SIMK in regulation of root hair tip growth. EMBO Journal, 2002, 21, 3296-3306.	7.8	152
31	The Arabidopsis homolog of trithorax, ATX1, binds phosphatidylinositol 5-phosphate, and the two regulate a common set of target genes. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 6049-6054.	7.1	151
32	Actin cytoskeleton in plants: From transport networks to signaling networks. Microscopy Research and Technique, 1999, 47, 135-154.	2.2	145
33	The â€˜root-brainâ€™ hypothesis of Charles and Francis Darwin. Plant Signaling and Behavior, 2009, 4, 1121-1127.	2.4	138
34	Redistribution of actin, profilin and phosphatidylinositol-4,5-bisphosphate in growing and maturing root hairs. Planta, 1999, 209, 435-443.	3.2	134
35	Spatiotemporal Dynamics of the BRI1 Receptor and its Regulation by Membrane Microdomains in Living Arabidopsis Cells. Molecular Plant, 2015, 8, 1334-1349.	8.3	131
36	Lipid microdomain polarization is required for NADPH oxidaseâ€dependent ROS signaling in <i>Picea meyeri</i> pollen tube tip growth. Plant Journal, 2009, 60, 303-313.	5.7	122

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37	Beneficial Roles of Melatonin on Redox Regulation of Photosynthetic Electron Transport and Synthesis of D1 Protein in Tomato Seedlings under Salt Stress. Frontiers in Plant Science, 2016, 7, 1823.	3.6	121
38	The Subcellular Localization and Blue-Light-Induced Movement of Phototropin 1-GFP in Etiolated Seedlings of Arabidopsis thalianaw. Molecular Plant, 2008, 1, 103-117.	8.3	114
39	Actin-dependent fluid-phase endocytosis in inner cortex cells of maize root apices. Journal of Experimental Botany, 2004, 55, 463-473.	4.8	113
40	The Signal Transducer NPH3 Integrates the Phototropin1 Photosensor with PIN2-Based Polar Auxin Transport in <i>Arabidopsis</i> Root Phototropism. Plant Cell, 2012, 24, 551-565.	6.6	113
41	Eukaryotic Cells and their Cell Bodies: Cell Theory Revised. Annals of Botany, 2004, 94, 9-32.	2.9	112
42	Polar transport of auxin: carrier-mediated flux across the plasma membrane or neurotransmitter-like secretion?. Trends in Cell Biology, 2003, 13, 282-285.	7.9	109
43	Root Apex Transition Zone As Oscillatory Zone. Frontiers in Plant Science, 2013, 4, 354.	3.6	108
44	Regulatory roles of serotonin and melatonin in abiotic stress tolerance in plants. Plant Signaling and Behavior, 2015, 10, e1049788.	2.4	102
45	Illumination of Arabidopsis roots induces immediate burst of ROS production. Plant Signaling and Behavior, 2011, 6, 1460-1464.	2.4	99
46	Autophagy-related approaches for improving nutrient use efficiency and crop yield protection. Journal of Experimental Botany, 2018, 69, 1335-1353.	4.8	97
47	Syntaxin of Plant Proteins SYP123 and SYP132 Mediate Root Hair Tip Growth in Arabidopsis thaliana. Plant and Cell Physiology, 2014, 55, 790-800.	3.1	94
48	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.	3.1	93
49	A Polarity Crossroad in the Transition Growth Zone of Maize Root Apices: Cytoskeletal and Developmental Implications. Journal of Plant Growth Regulation, 2001, 20, 170-181.	5.1	92
50	PIN2 is required for the adaptation of Arabidopsis roots to alkaline stress by modulating proton secretion. Journal of Experimental Botany, 2012, 63, 6105-6114.	4.8	92
51	A Pseudomonas strain isolated from date-palm rhizospheres improves root growth and promotes root formation in maize exposed to salt and aluminum stress. Journal of Plant Physiology, 2016, 191, 111-119.	3.5	92
52	Auxin Immunolocalization Implicates Vesicular Neurotransmitter-Like Mode of Polar Auxin Transport in Root Apices. Plant Signaling and Behavior, 2006, 1, 122-133.	2.4	91
53	An improved agar-plate method for studying root growth and response of Arabidopsis thaliana. Scientific Reports, 2013, 3, 1273.	3.3	91
54	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, 571-582.	3.1	89

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55	Alleviation of aluminium-induced cell rigidity by overexpression of OsPIN2 in rice roots. Journal of Experimental Botany, 2014, 65, 5305-5315.	4.8	89
56	Structural Sterols Are Involved in Both the Initiation and Tip Growth of Root Hairs in<i>Arabidopsis thaliana</i>Â. Plant Cell, 2010, 22, 2999-3019.	6.6	87
57	Indoleâ€3â€butyric acid induces lateral root formation via peroxisomeâ€derived indoleâ€3â€acetic acid and nitric oxide. New Phytologist, 2013, 200, 473-482.	7.3	87
58	Effects of Brefeldin A on Pollen Germination and Tube Growth. Antagonistic Effects on Endocytosis and Secretion. Plant Physiology, 2005, 139, 1692-1703.	4.8	86
59	Phosphorylation-Mediated Dynamics of Nitrate Transceptor NRT1.1 Regulate Auxin Flux and Nitrate Signaling in Lateral Root Growth. Plant Physiology, 2019, 181, 480-498.	4.8	86
60	Short-Term Boron Deprivation Inhibits Endocytosis of Cell Wall Pectins in Meristematic Cells of Maize and Wheat Root Apices. Plant Physiology, 2002, 130, 415-421.	4.8	85
61	From signal to cell polarity: mitogen-activated protein kinases as sensors and effectors of cytoskeleton dynamicity. Journal of Experimental Botany, 2003, 55, 189-198.	4.8	85
62	Light as stress factor to plant roots Ã¢â,¬â€œ case of root halotropism. Frontiers in Plant Science, 2014, 5, 718.	3.6	85
63	Signalling via glutamate and GLRs in Arabidopsis thaliana. Functional Plant Biology, 2016, 43, 1.	2.1	85
64	Different Effects of Aluminum on the Actin Cytoskeleton and Brefeldin A-Sensitive Vesicle Recycling in Root Apex Cells of Two Maize Varieties Differing in Root Elongation Rate and Aluminum Tolerance. Plant and Cell Physiology, 2009, 50, 528-540.	3.1	84
65	Arabidopsis SYT1 maintains stability of cortical endoplasmic reticulum networks and VAP27-1-enriched endoplasmic reticulumâ€“plasma membrane contact sites. Journal of Experimental Botany, 2016, 67, 6161-6171.	4.8	84
66	Nitric oxide modulates dynamic actin cytoskeleton and vesicle trafficking in a cell type-specific manner in root apices. Journal of Experimental Botany, 2009, 60, 1605-1617.	4.8	83
67	The ubiquity of consciousness. EMBO Reports, 2011, 12, 1221-1225.	4.5	83
68	Nitric oxide modulates the influx of extracellular Ca²⁺ and actin filament organization during cell wall construction in <i>Pinus bungeana </i>pollen tubes. New Phytologist, 2009, 182, 851-862.	7.3	82
69	Rice G-protein subunits<i>qPE9-1</i>and<i>RGB1</i>play distinct roles in abscisic acid responses and drought adaptation. Journal of Experimental Botany, 2015, 66, 6371-6384.	4.8	80
70	Cytokinesis in plant and animal cells: Endosomes â€˜shut the doorâ€™. Developmental Biology, 2006, 294, 1-10.	2.0	79
71	Recent surprising similarities between plant cells and neurons. Plant Signaling and Behavior, 2010, 5, 87-89.	2.4	78
72	Actin Turnover Is Required for Myosin-Dependent Mitochondrial Movements in Arabidopsis Root Hairs. PLoS ONE, 2009, 4, e5961.	2.5	78

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73	Root photomorphogenesis in laboratory-maintained Arabidopsis seedlings. Trends in Plant Science, 2013, 18, 117-119.	8.8	76
74	Imaging of Dynamic Secretory Vesicles in Living Pollen Tubes of Picea meyeri Using Evanescent Wave Microscopy. Plant Physiology, 2006, 141, 1591-1603.	4.8	75
75	Immunofluorescence Detection of F-actin on Low Melting Point Wax Sections from Plant Tissues. Journal of Histochemistry and Cytochemistry, 1997, 45, 89-95.	2.5	71
76	Deep evolutionary origins of neurobiology: Turning the essence of 'neural' upside-down. Communicative and Integrative Biology, 2009, 2, 60-65.	1.4	71
77	A plastid-localized glycogen synthase kinaseâ€ƒ3 modulates stress tolerance and carbohydrate metabolism. Plant Journal, 2007, 49, 1076-1090.	5.7	70
78	Differential display proteomic analysis ofPicea meyeripollen germination and pollen-tube growth after inhibition of actin polymerization by latrunculin B. Plant Journal, 2006, 47, 174-195.	5.7	68
79	Slime mould: The fundamental mechanisms of biological cognition. BioSystems, 2018, 165, 57-70.	2.0	67
80	The Tomato 14-3-3 Protein TFT4 Modulates H+ Efflux, Basipetal Auxin Transport, and the PKS5-J3 Pathway in the Root Growth Response to Alkaline Stress Â Â. Plant Physiology, 2013, 163, 1817-1828.	4.8	66
81	Boron Alleviates Aluminum Toxicity by Promoting Root Alkalization in Transition Zone via Polar Auxin Transport. Plant Physiology, 2018, 177, 1254-1266.	4.8	65
82	Gravitropism of the primary root of maize: a complex pattern of differential cellular growth in the cortex independent of the microtubular cytoskeleton. Planta, 1996, 198, 310-318.	3.2	62
83	Plasma membrane H+ -ATPase in the root apex: Evidence for strong expression in xylem parenchyma and asymmetric localization within cortical and epidermal cells. Physiologia Plantarum, 1998, 104, 311-316.	5.2	62
84	Phospholipase DÎ¶2 Drives Vesicular Secretion of Auxin for Its Polar Cell-Cell Transport in the Transition Zone of the Root Apex. Plant Signaling and Behavior, 2007, 2, 240-244.	2.4	62
85	Aluminium toxicity targets PIN2 in Arabidopsis root apices: Effects on PIN2 endocytosis, vesicular recycling, and polar auxin transport. Science Bulletin, 2008, 53, 2480-2487.	9.0	62
86	The architecture of polarized cell growth: The unique status of elongating plant cells. BioEssays, 2003, 25, 569-576.	2.5	61
87	Cell bodies in a cage. Nature, 2004, 428, 371-371.	27.8	59
88	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, 1578-1590.	4.8	59
89	Involvement of 14-3-3 protein GRF9 in root growth and response under polyethylene glycol-induced water stress. Journal of Experimental Botany, 2015, 66, 2271-2281.	4.8	58
90	CYTOSKELETALPERSPECTIVES ONROOTGROWTH ANDMORPHOGENESIS. Annual Review of Plant Biology, 2000, 51, 289-322.	14.3	56

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91	How and why do root apices sense light under the soil surface?. Frontiers in Plant Science, 2015, 6, 775.	3.6	56
92	Importance of the post-mitotic isodiametric growth (PIG) region for growth and development of roots. Plant and Soil, 1994, 167, 31-41.	3.7	55
93	Neutral Red as a Probe for Confocal Laser Scanning Microscopy Studies of Plant Roots. Annals of Botany, 2006, 97, 1127-1138.	2.9	55
94	Combined Proteomic and Cytological Analysis of Ca2+-Calmodulin Regulation in Picea meyeri Pollen Tube Growth Â Â. Plant Physiology, 2009, 149, 1111-1126.	4.8	55
95	Local Root Apex Hypoxia Induces NO-Mediated Hypoxic Acclimation of the Entire Root. Plant and Cell Physiology, 2012, 53, 912-920.	3.1	55
96	Sentience and Consciousness in Single Cells: How the First Minds Emerged in Unicellular Species. BioEssays, 2019, 41, e1800229.	2.5	55
97	Secretion of Phospholipase DÎ´ Functions as a Regulatory Mechanism in Plant Innate Immunity. Plant Cell, 2019, 31, 3015-3032.	6.6	55
98	Actin-Based Domains of the "Cell Periphery Complex" and their Associations with Polarized "Cell Bodies" in Higher Plants. Plant Biology, 2000, 2, 253-267.	3.8	53
99	Getting connected: actin-based cell-to-cell channels in plants and animals. Trends in Cell Biology, 2004, 14, 404-408.	7.9	52
100	New signalling molecules regulating root hair tip growth. Trends in Plant Science, 2004, 9, 217-220.	8.8	51
101	Plant neurobiology: from sensory biology, via plant communication, to social plant behavior. Cognitive Processing, 2009, 10, 3-7.	1.4	51
102	Swarm intelligence in plant roots. Trends in Ecology and Evolution, 2010, 25, 682-683.	8.7	51
103	Pectins, ROS homeostasis and UV-B responses in plant roots. Phytochemistry, 2015, 112, 80-83.	2.9	50
104	Response to Alpi et al.: Plant neurobiology: the gain is more than the name. Trends in Plant Science, 2007, 12, 285-286.	8.8	48
105	Nuclear Components with Microtubule-Organizing Properties in Multicellular Eukaryotes: Functional and Evolutionary Considerations. International Review of Cytology, 1997, 175, 91-135.	6.2	47
106	Cell-Cell Channels and Their Implications for Cell Theory. , 2006, , 1-18.		45
107	Swarming Behavior in Plant Roots. PLoS ONE, 2012, 7, e29759.	2.5	45
108	Arabidopsis Blue Light Receptor Phototropin 1 Undergoes Blue Light-Induced Activation in Membrane Microdomains. Molecular Plant, 2018, 11, 846-859.	8.3	44

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109	Dâ€™orenone blocks polarized tip growth of root hairs by interfering with the PIN2â€mediated auxin transport network in the root apex. Plant Journal, 2008, 55, 709-717.	5.7	43
110	Plants and Animals: Convergent Evolution in Action?. Signaling and Communication in Plants, 2009, , 285-301.	0.7	43
111	An extracellular lipid transfer protein is relocalized intracellularly during seed germination. Journal of Experimental Botany, 2012, 63, 6555-6563.	4.8	43
112	Actin Turnover-Mediated Gravity Response in Maize Root Apices. Plant Signaling and Behavior, 2006, 1, 52-58.	2.4	42
113	Photophobic behavior of maize roots. Plant Signaling and Behavior, 2012, 7, 874-878.	2.4	42
114	Life's code script does not code itself. EMBO Reports, 2012, 13, 1054-1056.	4.5	42
115	Short-term boron deprivation enhances levels of cytoskeletal proteins in maize, but not zucchini, root apices. Physiologia Plantarum, 2003, 117, 270-278.	5.2	41
116	Mosaic, self-similarity logic and biological attraction principles. Communicative and Integrative Biology, 2009, 2, 552-563.	1.4	40
117	UV-B Induced Generation of Reactive Oxygen Species Promotes Formation of BFA-Induced Compartments in Cells of Arabidopsis Root Apices. Frontiers in Plant Science, 2015, 6, 1162.	3.6	40
118	Recruitment of myosin VIII towards plastid surfaces is root-cap specific and provides the evidence for actomyosin involvement in root osmosensing. Functional Plant Biology, 2005, 32, 721.	2.1	39
119	Shootward and rootward: peak terminology for plant polarity. Trends in Plant Science, 2010, 15, 593-594.	8.8	39
120	Senomic view of the cell: Senome <i>versus</i> Genome. Communicative and Integrative Biology, 2018, 11, 1-9.	1.4	39
121	Steedmanâ€™s Wax for F-Actin Visualization. , 2000, , 619-636.		39
122	Plant formins come of age: something special about crossâ€walls. New Phytologist, 2005, 168, 499-503.	7.3	38
123	Rapid auxin-induced nitric oxide accumulation and subsequent tyrosine nitration of proteins during adventitious root formation in sunflower hypocotyls. Plant Signaling and Behavior, 2013, 8, e23196.	2.4	38
124	Nitric Oxide-Mediated Maize Root Apex Responses to Nitrate are Regulated by Auxin and Strigolactones. Frontiers in Plant Science, 2015, 6, 1269.	3.6	38
125	PIN2 Turnover in Arabidopsis Root Epidermal Cells Explored by the Photoconvertible Protein Dendra2. PLoS ONE, 2013, 8, e61403.	2.5	37
126	Plant anesthesia supports similarities between animals and plants. Plant Signaling and Behavior, 2014, 9, e27886.	2.4	37

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127	Understanding of anesthesia â€“ Why consciousness is essential for life and not based on genes. Communicative and Integrative Biology, 2016, 9, e1238118.	1.4	37
128	Root phonotropism: Early signalling events following sound perception in Arabidopsis roots. Plant Science, 2017, 264, 9-15.	3.6	37
129	Algerian Sahara PGPR confers maize root tolerance to salt and aluminum toxicity via ACC deaminase and IAA. Acta Physiologiae Plantarum, 2019, 41, 1.	2.1	37
130	Cellâ€Cell Channels, Viruses, and Evolution. Annals of the New York Academy of Sciences, 2009, 1178, 106-119.	3.8	36
131	Biological evolution as defense of 'self'. Progress in Biophysics and Molecular Biology, 2019, 142, 54-74.	2.9	36
132	Growth and aluminum tolerance of maize roots mediated by auxin- and cytokinin-producing Bacillus toyonensis requires polar auxin transport. Environmental and Experimental Botany, 2020, 176, 104064.	4.2	36
133	<scp>GSA</scp>â€1/<scp>ARG</scp>1 protects root gravitropism in <i>Arabidopsis</i> under ammonium stress. New Phytologist, 2013, 200, 97-111.	7.3	35
134	Root-Apex Proton Fluxes at the Centre of Soil-Stress Acclimation. Trends in Plant Science, 2020, 25, 794-804.	8.8	35
135	Profilin is associated with the plasma membrane in microspores and pollen. European Journal of Cell Biology, 1998, 77, 303-312.	3.6	34
136	Statoliths motions in gravityâ€perceiving plant cells: does actomyosin counteract gravity?. FASEB Journal, 1999, 13, S143-7.	0.5	34
137	Plant Neurobiology as a Paradigm Shift Not Only in the Plant Sciences. Plant Signaling and Behavior, 2007, 2, 205-207.	2.4	34
138	Integrative Proteomic and Cytological Analysis of the Effects of Extracellular Ca²⁺ Influx on <i>Pinus bungeana</i> Pollen Tube Development. Journal of Proteome Research, 2008, 7, 4299-4312.	3.7	34
139	Plants, climate and humans. EMBO Reports, 2020, 21, e50109.	4.5	34
140	Auxin-mediated molecular mechanisms of heavy metal and metalloid stress regulation in plants. Environmental and Experimental Botany, 2022, 196, 104796.	4.2	34
141	Comparison of cryofixation and aldehyde fixation for plant actin immunocytochemistry: aldehydes do not destroy F-actin. The Histochemical Journal, 2000, 32, 457-466.	0.6	33
142	AGD5 is a GTPase-activating protein at the trans-Golgi network. Plant Journal, 2010, 64, 790-799.	5.7	33
143	Overexpressing<i>OsPIN2</i>enhances aluminium internalization by elevating vesicular trafficking in rice root apex. Journal of Experimental Botany, 2015, 66, 6791-6801.	4.8	33
144	Nitric oxide accumulation and protein tyrosine nitration as a rapid and long distance signalling response to salt stress in sunflower seedlings. Nitric Oxide - Biology and Chemistry, 2015, 50, 28-37.	2.7	33

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145	Low-amplitude, high-frequency electromagnetic field exposure causes delayed and reduced growth in Rosa hybrida. Journal of Plant Physiology, 2016, 190, 44-53.	3.5	33
146	Vision in Plants via Plant-Specific Ocelli?. Trends in Plant Science, 2016, 21, 727-730.	8.8	32
147	Understanding and exploiting autophagy signaling in plants. Essays in Biochemistry, 2017, 61, 675-685.	4.7	32
148	Dynamic spatial reorganization of BSK1 complexes in the plasma membrane underpins signal-specific activation for growth and immunity. Molecular Plant, 2021, 14, 588-603.	8.3	32
149	Neurobiological View of Plants and Their Body Plan. , 2006, , 19-35.		32
150	Actin and Myosin VIII in Developing Root Apex Cells. , 2000, , 457-476.		32
151	Consciousness Facilitates Plant Behavior. Trends in Plant Science, 2020, 25, 216-217.	8.8	31
152	What is apical and what is basal in plant root development?. Trends in Plant Science, 2005, 10, 409-411.	8.8	30
153	Vesicular secretion of auxin. Plant Signaling and Behavior, 2008, 3, 254-256.	2.4	29
154	Di-4-ANEPPDHQ, a fluorescent probe for the visualisation of membrane microdomains in living Arabidopsis thaliana cells. Plant Physiology and Biochemistry, 2015, 87, 53-60.	5.8	29
155	Motile plant cell body: a â€˜bugâ€™ within a â€˜cageâ€™. Trends in Plant Science, 2001, 6, 104-111.	8.8	28
156	Cyclic monoterpene mediated modulations of<i>Arabidopsis thaliana</i>phenotype. Plant Signaling and Behavior, 2010, 5, 832-838.	2.4	28
157	Root cap-dependent gravitropic U-turn of maize root requires light-induced auxin biosynthesis via the YUC pathway in the root apex. Journal of Experimental Botany, 2016, 67, 4581-4591.	4.8	28
158	Biomolecular Basis of Cellular Consciousness via Subcellular Nanobrains. International Journal of Molecular Sciences, 2021, 22, 2545.	4.1	28
159	Physical Control Over Endocytosis. , 2012, , 123-149.		27
160	Lilliputian Mutant of Maize Lacks Cell Elongation and Shows Defects in Organization of Actin Cytoskeleton. Developmental Biology, 2001, 236, 478-491.	2.0	26
161	Ion channels in plants. Plant Signaling and Behavior, 2013, 8, e23009.	2.4	26
162	Heterologous DNA Uptake in Cultured Symbiodinium spp. Aided by Agrobacterium tumefaciens. PLoS ONE, 2015, 10, e0132693.	2.5	26

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163	Conditions for minimal intelligence across eukaryota: a cognitive science perspective. Frontiers in Psychology, 2015, 6, 1329.	2.1	26
164	Nanosheets for Delivery of Biomolecules into Plant Cells. Trends in Plant Science, 2017, 22, 445-447.	8.8	26
165	Mastoparan Alters Subcellular Distribution of Profilin and Remodels F-Actin Cytoskeleton in Cells of Maize Root Apices. Plant and Cell Physiology, 2001, 42, 912-922.	3.1	25
166	Domain-specific mechanosensory transmission of osmotic and enzymatic cell wall disturbances to the actin cytoskeleton. Protoplasma, 2007, 230, 217-230.	2.1	25
167	Plant neurobiology. Plant Signaling and Behavior, 2009, 4, 475-476.	2.4	25
168	Immunohistochemical observation of indole-3-acetic acid at the IAA synthetic maize coleoptile tips. Plant Signaling and Behavior, 2011, 6, 2013-2022.	2.4	25
169	Arabidopsis thaliana plants lacking the ARP2/3 complex show defects in cell wall assembly and auxin distribution. Annals of Botany, 2018, 122, 777-789.	2.9	25
170	The Electrical Network of Maize Root Apex is Gravity Dependent. Scientific Reports, 2015, 5, 7730.	3.3	24
171	Anaesthesia with diethyl ether impairs jasmonate signalling in the carnivorous plant Venus flytrap (Dionaea muscipula). Annals of Botany, 2020, 125, 173-183.	2.9	24
172	Cognition in some surprising places. Biochemical and Biophysical Research Communications, 2021, 564, 150-157.	2.1	24
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