Frantisek Baluska

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1803404/publications.pdf

Version: 2024-02-01

261 papers

15,694 citations

72 h-index

10389

24258 110 g-index

275 all docs

275 docs citations

times ranked

275

11154 citing authors

#	Article	IF	CITATIONS
1	Cellular and evolutionary perspectives on organismal cognition: from unicellular to multicellular organisms. Biological Journal of the Linnean Society, 2023, 139, 503-513.	1.6	18
2	Auxin-mediated molecular mechanisms of heavy metal and metalloid stress regulation in plants. Environmental and Experimental Botany, 2022, 196, 104796.	4.2	34
3	Cellular sentience as the primary source of biological order and evolution. BioSystems, 2022, 218, 104694.	2.0	14
4	Integrated information as a possible basis for plant consciousness. Biochemical and Biophysical Research Communications, 2021, 564, 158-165.	2.1	15
5	Cognition in some surprising places. Biochemical and Biophysical Research Communications, 2021, 564, 150-157.	2.1	24
6	Individuality, self and sociality of vascular plants. Philosophical Transactions of the Royal Society B: Biological Sciences, 2021, 376, 20190760.	4.0	20
7	Potential Plant–Plant Communication Induced by Infochemical Methyl Jasmonate in Sorghum (Sorghum bicolor). Plants, 2021, 10, 485.	3.5	8
8	Biomolecular Basis of Cellular Consciousness via Subcellular Nanobrains. International Journal of Molecular Sciences, 2021, 22, 2545.	4.1	28
9	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
10	Barbara G. Pickard - Queen of Plant Electrophysiology. Plant Signaling and Behavior, 2021, 16, 1911400.	2.4	3
11	Archaeal Origins of Eukaryotic Cell and Nucleus. BioSystems, 2021, 203, 104375.	2.0	13
12	An Antisense Circular RNA Regulates Expression of RuBisCO Small Subunit Genes in Arabidopsis. Frontiers in Plant Science, 2021, 12, 665014.	3.6	10
13	CBCâ€Clock Theory of Life – Integration of cellular circadian clocks and cellular sentience is essential for cognitive basis of life. BioEssays, 2021, 43, e2100121.	2.5	7
14	Anaesthetics and plants: from sensory systems to cognition-based adaptive behaviour. Protoplasma, 2021, 258, 449-454.	2.1	12
15	Cellular and organismal agency – Not based on genes: A comment on Baverstock. Progress in Biophysics and Molecular Biology, 2021, 167, 161-162.	2.9	6
16	Our sisters the plants? notes from phylogenetics and botany on plant kinship blindness. Plant Signaling and Behavior, 2021, 16, 2004769.	2.4	6
17	The N-space Episenome unifies cellular information space-time withinÂcognition-based evolution. Progress in Biophysics and Molecular Biology, 2020, 150, 112-139.	2.9	18
18	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

#	Article	IF	CITATIONS
19	Consciousness Facilitates Plant Behavior. Trends in Plant Science, 2020, 25, 216-217.	8.8	31
20	The Tetracentron genome provides insight into the early evolution of eudicots and the formation of vessel elements. Genome Biology, 2020, 21, 291.	8.8	23
21	Cellular senomic measurements in Cognition-Based Evolution. Progress in Biophysics and Molecular Biology, 2020, 156, 20-33.	2.9	16
22	Endosidin 2 accelerates PIN2 endocytosis and disturbs intracellular trafficking of PIN2, PIN3, and PIN4 but not of SYT1. PLoS ONE, 2020, 15, e0237448.	2.5	6
23	Comparative analysis reveals gravity is involved in the MIZ1-regulated root hydrotropism. Journal of Experimental Botany, 2020, 71, 7316-7330.	4.8	12
24	Root-Apex Proton Fluxes at the Centre of Soil-Stress Acclimation. Trends in Plant Science, 2020, 25, 794-804.	8.8	35
25	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
26	Plants, climate and humans. EMBO Reports, 2020, 21, e50109.	4.5	34
27	Plants are alive: with all behavioural and cognitive consequences. EMBO Reports, 2020, 21, e50495.	4.5	4
28	Arabidopsis Roots and Light: Complex Interactions. Molecular Plant, 2019, 12, 1428-1430.	8.3	14
29	Sugarcane glycoproteins control dynamics of cytoskeleton during teliospore germination of Sporisorium scitamineum. Mycological Progress, 2019, 18, 1121-1134.	1.4	1
30	Sentience and Consciousness in Single Cells: How the First Minds Emerged in Unicellular Species. BioEssays, 2019, 41, e1800229.	2.5	55
31	The botanical multiverse of Peter Barlow. Communicative and Integrative Biology, 2019, 12, 14-30.	1.4	5
32	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
33	Why control an experiment?. EMBO Reports, 2019, 20, e49110.	4.5	13
34	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
35	Secretion of Phospholipase Dδ Functions as a Regulatory Mechanism in Plant Innate Immunity. Plant Cell, 2019, 31, 3015-3032.	6.6	55
36	Anesthetics, Anesthesia, and Plants. Trends in Plant Science, 2019, 24, 12-14.	8.8	22

#	Article	IF	CITATIONS
37	Biological evolution as defense of 'self'. Progress in Biophysics and Molecular Biology, 2019, 142, 54-74.	2.9	36
38	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
39	Autophagy-related approaches for improving nutrient use efficiency and crop yield protection. Journal of Experimental Botany, 2018, 69, 1335-1353.	4.8	97
40	Symbiotic Origin of Eukaryotic Nucleus: From Cell Body to Neo-Energide. Plant Cell Monographs, 2018, , 39-66.	0.4	23
41	Plant Cell Biology: When, How, and Why?. Plant Cell Monographs, 2018, , 1-6.	0.4	0
42	Plant Cognition and Behavior: From Environmental Awareness to Synaptic Circuits Navigating Root Apices. Signaling and Communication in Plants, 2018, , 51-77.	0.7	7
43	Substantial Evidence for Auxin Secretory Vesicles. Plant Physiology, 2018, 176, 2586-2587.	4.8	7
44	OsGLO4 is involved in the formation of iron plaques on surface of rice roots grown under alternative wetting and drying condition. Plant and Soil, 2018, 423, 111-123.	3.7	9
45	Slime mould: The fundamental mechanisms of biological cognition. BioSystems, 2018, 165, 57-70.	2.0	67
46	Arabidopsis Blue Light Receptor Phototropin 1 Undergoes Blue Light-Induced Activation in Membrane Microdomains. Molecular Plant, 2018, 11, 846-859.	8.3	44
47	Sense of space: Tactile sense for exploratory behavior of roots. Communicative and Integrative Biology, 2018, 11, 1-5.	1.4	7
48	Nitric oxide-induced saltÂstress tolerance in plants: ROS metabolism, signaling, and molecular interactions. Plant Biotechnology Reports, 2018, 12, 77-92.	1.5	184
49	Energide–cell body as smallest unit of eukaryotic life. Annals of Botany, 2018, 122, 741-745.	2.9	13
50	Myotubularins, PtdIns5P, and ROS in ABA-mediated stomatal movements in dehydrated Arabidopsis seedlings. Functional Plant Biology, 2018, 45, 259.	2.1	7
51	Boron Alleviates Aluminum Toxicity by Promoting Root Alkalization in Transition Zone via Polar Auxin Transport. Plant Physiology, 2018, 177, 1254-1266.	4.8	65
52	Senomic view of the cell: Senome <i>versus</i> Genome. Communicative and Integrative Biology, 2018, 11, 1-9.	1.4	39
53	Computers from Plants We Never Made: Speculations. Emergence, Complexity and Computation, 2018, , 357-387.	0.3	13
54	Nanosheets for Delivery of Biomolecules into Plant Cells. Trends in Plant Science, 2017, 22, 445-447.	8.8	26

#	Article	IF	CITATIONS
55	On plant roots logical gates. BioSystems, 2017, 156-157, 40-45.	2.0	13
56	Plant Ocelli for Visually Guided Plant Behavior. Trends in Plant Science, 2017, 22, 5-6.	8.8	15
57	Plant Cytokinesis: Terminology for Structures and Processes. Trends in Cell Biology, 2017, 27, 885-894.	7.9	155
58	Root phonotropism: Early signalling events following sound perception in Arabidopsis roots. Plant Science, 2017, 264, 9-15.	3.6	37
59	Immunogold-EM analysis reveal brefeldin a-sensitive clusters of auxin in Arabidopsis root apex cells. Communicative and Integrative Biology, 2017, 10, e1327105.	1.4	17
60	Plant Roots as Excellent Pathfinders: RootÂNavigation Based on Plant Specific Sensory Systems and Sensorimotor Circuits. Emergence, Complexity and Computation, 2017, , 677-685.	0.3	0
61	Expression of Root Genes in Arabidopsis Seedlings Grown by Standard and Improved Growing Methods. International Journal of Molecular Sciences, 2017, 18, 951.	4.1	18
62	Understanding and exploiting autophagy signaling in plants. Essays in Biochemistry, 2017, 61, 675-685.	4.7	32
63	MES Buffer Affects Arabidopsis Root Apex Zonation and Root Growth by Suppressing Superoxide Generation in Root Apex. Frontiers in Plant Science, 2016, 7, 79.	3.6	19
64	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
65	On Having No Head: Cognition throughout Biological Systems. Frontiers in Psychology, 2016, 7, 902.	2.1	209
66	"Feature Detection―vs. "Predictive Coding―Models of Plant Behavior. Frontiers in Psychology, 2016, 7, 1505.	2.1	17
67	Subcellular localizations of Arabidopsis myotubularins MTM1 and MTM2 suggest possible functions in vesicular trafficking between ER and cis-Golgi. Journal of Plant Physiology, 2016, 200, 45-52.	3.5	3
68	Plant shoots exhibit synchronized oscillatory motions. Communicative and Integrative Biology, 2016, 9, e1238117.	1.4	7
69	Understanding of anesthesia – Why consciousness is essential for life and not based on genes. Communicative and Integrative Biology, 2016, 9, e1238118.	1.4	37
70	Arabidopsis SYT1 maintains stability of cortical endoplasmic reticulum networks and VAP27-1-enriched endoplasmic reticulum–plasma membrane contact sites. Journal of Experimental Botany, 2016, 67, 6161-6171.	4.8	84
71	<i>Actin3</i> promoter reveals undulating F-actin bundles at shanks and dynamic F-actin meshworks at tips of tip-growing pollen tubes. Plant Signaling and Behavior, 2016, 11, e1146845.	2.4	10
72	Vision in Plants via Plant-Specific Ocelli?. Trends in Plant Science, 2016, 21, 727-730.	8.8	32

#	Article	IF	Citations
73	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
74	Defence sugarcane glycoproteins disorganize microtubules and prevent nuclear polarization and germination of Sporisorium scitamineum teliospores. Journal of Plant Physiology, 2016, 200, 111-123.	3.5	11
75	The TOR Complex: An Emergency Switch for Root Behavior. Plant and Cell Physiology, 2016, 57, 14-18.	3.1	20
76	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
77	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
78	Signalling via glutamate and GLRs in Arabidopsis thaliana. Functional Plant Biology, 2016, 43, 1.	2.1	85
79	Dynamic Regulation of Endocytic Vesicle Recycling and PIN2 Localization in <i>Arabidopsis</i> localization in <i>Arabidopsis localiza</i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i>	0.7	1
80	Julius Sachs (1832–1897) and the Unity of Life. Plant Signaling and Behavior, 2015, 10, e1079679.	2.4	8
81	Heterologous DNA Uptake in Cultured Symbiodinium spp. Aided by Agrobacterium tumefaciens. PLoS ONE, 2015, 10, e0132693.	2.5	26
82	How and why do root apices sense light under the soil surface?. Frontiers in Plant Science, 2015, 6, 775.	3.6	56
83	Mapping of Membrane Lipid Order in Root Apex Zones of Arabidopsis thaliana. Frontiers in Plant Science, 2015, 6, 1151.	3.6	16
84	Conditions for minimal intelligence across eukaryota: a cognitive science perspective. Frontiers in Psychology, 2015, 6, 1329.	2.1	26
85	<i>C. elegans</i> and <i>Arabidopsis thaliana</i> show similar behavior: ROS induce escape tropisms both in illuminated nematodes and roots. Plant Signaling and Behavior, 2015, 10, e1073870.	2.4	4
86	Can subcellular organization be explained only by physical principles?. Communicative and Integrative Biology, 2015, 8, e1009796.	1.4	4
87	Production and removal of superoxide anion radical by artificial metalloenzymes and redox-active metals. Communicative and Integrative Biology, 2015, 8, e1000710.	1.4	4
88	Regulatory roles of serotonin and melatonin in abiotic stress tolerance in plants. Plant Signaling and Behavior, 2015, 10, e1049788.	2.4	102
89	Arabidopsis Synaptotagmin 2 Participates in Pollen Germination and Tube Growth and Is Delivered to Plasma Membrane via Conventional Secretion. Molecular Plant, 2015, 8, 1737-1750.	8.3	23
90	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

#	Article	IF	Citations
91	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
92	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
93	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
94	The Electrical Network of Maize Root Apex is Gravity Dependent. Scientific Reports, 2015, 5, 7730.	3.3	24
95	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
96	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
97	Pectins, ROS homeostasis and UV-B responses in plant roots. Phytochemistry, 2015, 112, 80-83.	2.9	50
98	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
99	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
100	Aluminum Signaling and Potential Links with Safener-Induced Detoxification in Plants. Signaling and Communication in Plants, 2015, , 1-35.	0.7	10
101	Plant anesthesia supports similarities between animals and plants. Plant Signaling and Behavior, 2014, 9, e27886.	2.4	37
102	Alleviation of aluminium-induced cell rigidity by overexpression of OsPIN2 in rice roots. Journal of Experimental Botany, 2014, 65, 5305-5315.	4.8	89
103	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
104	Light-dependent control of redox balance and auxin biosynthesis in plants. Plant Signaling and Behavior, 2014, 9, e29522.	2.4	18
105	Light as stress factor to plant roots ââ,¬â€œ case of root halotropism. Frontiers in Plant Science, 2014, 5, 718.	3.6	85
106	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
107	Evolution: viruses are key players. Nature, 2014, 515, 343-343.	27.8	10
108	Synaptic view of eukaryotic cell. International Journal of General Systems, 2014, 43, 740-756.	2.5	10

#	Article	IF	CITATIONS
109	Ammonium stress in Arabidopsis: signaling, genetic loci, and physiological targets. Trends in Plant Science, 2014, 19, 107-114.	8.8	204
110	Immunofluorescent Localization of MAPKs in Steedman's Wax Sections. Methods in Molecular Biology, 2014, 1171, 117-130.	0.9	6
111	Life is more than a computer running DNA software. World Journal of Biological Chemistry, 2014, 5, 275.	4.3	8
112	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
113	<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
114	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
115	Root photomorphogenesis in laboratory-maintained Arabidopsis seedlings. Trends in Plant Science, 2013, 18, 117-119.	8.8	76
116	Ion channels in plants. Plant Signaling and Behavior, 2013, 8, e23009.	2.4	26
117	Root Apex Transition Zone As Oscillatory Zone. Frontiers in Plant Science, 2013, 4, 354.	3.6	108
118	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. Plant Physiology, 2013, 163, 1817-1828.	4.8	66
119	An improved agar-plate method for studying root growth and response of Arabidopsis thaliana. Scientific Reports, 2013, 3, 1273.	3.3	91
120	At the dawn of a new revolution in life sciences. World Journal of Biological Chemistry, 2013, 4, 3.	4.3	10
121	PIN2 Turnover in Arabidopsis Root Epidermal Cells Explored by the Photoconvertible Protein Dendra2. PLoS ONE, 2013, 8, e61403.	2.5	37
122	Microorganism and filamentous fungi drive evolution of plant synapses. Frontiers in Cellular and Infection Microbiology, 2013, 3, 44.	3.9	19
123	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
124	Physical Control Over Endocytosis. , 2012, , 123-149.		27
125	Rapid endocytosis is triggered upon imbibition in Arabidopsis seeds. Plant Signaling and Behavior, 2012, 7, 416-421.	2.4	7
126	Photophobic behavior of maize roots. Plant Signaling and Behavior, 2012, 7, 874-878.	2.4	42

#	Article	IF	Citations
127	Response to Olsson and Forkman. EMBO Reports, 2012, 13, 289-290.	4.5	O
128	An extracellular lipid transfer protein is relocalized intracellularly during seed germination. Journal of Experimental Botany, 2012, 63, 6555-6563.	4.8	43
129	Turing: A formal clash of codes. Nature, 2012, 483, 541-541.	27.8	7
130	Local Root Apex Hypoxia Induces NO-Mediated Hypoxic Acclimation of the Entire Root. Plant and Cell Physiology, 2012, 53, 912-920.	3.1	55
131	Life's code script does not code itself. EMBO Reports, 2012, 13, 1054-1056.	4.5	42
132	Rethinking origins of multicellularity: Convergent evolution of epithelia in plants. BioEssays, 2012, 34, 1085-1085.	2.5	5
133	Strasburger's legacy to mitosis and cytokinesis and its relevance for the Cell Theory. Protoplasma, 2012, 249, 1151-1162.	2.1	17
134	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
135	Swarming Behavior in Plant Roots. PLoS ONE, 2012, 7, e29759.	2.5	45
136	Eduard Strasburger (1844–1912): founder of modern plant cell biology. Protoplasma, 2012, 249, 1163-1172.	2.1	7
137	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
138	Actin, Myosin VIII and ABP1 as Central Organizers of Auxin-Secreting Synapses., 2012,, 303-321.		1
139	The ubiquity of consciousness. EMBO Reports, 2011, 12, 1221-1225.	4.5	83
140	Illumination of Arabidopsis roots induces immediate burst of ROS production. Plant Signaling and Behavior, 2011, 6, 1460-1464.	2.4	99
141	A new theoretical approach to the functional meaning of sleep and dreaming in humans based on the maintenance of †predictive psychic homeostasis'. Communicative and Integrative Biology, 2011, 4, 640-654.	1.4	15
142	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
143	Mechanical Aspects of Gravity-Controlled Growth, Development and Morphogenesis. Signaling and Communication in Plants, 2011, , 195-223.	0.7	9
144	AGD5 is a GTPase-activating protein at the trans-Golgi network. Plant Journal, 2010, 64, 790-799.	5.7	33

#	Article	IF	CITATIONS
145	Structural Sterols Are Involved in Both the Initiation and Tip Growth of Root Hairs in <i> Arabidopsis thaliana < i > \hat{A}. Plant Cell, 2010, 22, 2999-3019.</i>	6.6	87
146	Recent surprising similarities between plant cells and neurons. Plant Signaling and Behavior, 2010, 5, 87-89.	2.4	78
147	Cyclic monoterpene mediated modulations of <i> Arabidopsis thaliana </i>) phenotype. Plant Signaling and Behavior, 2010, 5, 832-838.	2.4	28
148	Root apex transition zone: a signalling–response nexus in the root. Trends in Plant Science, 2010, 15, 402-408.	8.8	245
149	Shootward and rootward: peak terminology for plant polarity. Trends in Plant Science, 2010, 15, 593-594.	8.8	39
150	Swarm intelligence in plant roots. Trends in Ecology and Evolution, 2010, 25, 682-683.	8.7	51
151	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
152	Are maternal mitochondria the selfish entities that are masters of the cells of eukaryotic multicellular organisms?. Communicative and Integrative Biology, 2009, 2, 194-200.	1.4	2
153	The â€~root-brain' hypothesis of Charles and Francis Darwin. Plant Signaling and Behavior, 2009, 4, 1121-1127.	2.4	138
154	Deep evolutionary origins of neurobiology: Turning the essence of 'neural' upside-down. Communicative and Integrative Biology, 2009, 2, 60-65.	1.4	71
155	Aluminum stress signaling in plants. Plant Signaling and Behavior, 2009, 4, 592-597.	2.4	241
156	Plant neurobiology. Plant Signaling and Behavior, 2009, 4, 475-476.	2.4	25
157	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
158	Plants and Animals: Convergent Evolution in Action?. Signaling and Communication in Plants, 2009, , 285-301.	0.7	43
159	<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
160	Combined Proteomic and Cytological Analysis of Ca2+-Calmodulin Regulation in Picea meyeri Pollen Tube Growth Â. Plant Physiology, 2009, 149, 1111-1126.	4.8	55
161	Plant neurobiology: from sensory biology, via plant communication, to social plant behavior. Cognitive Processing, 2009, 10, 3-7.	1.4	51
162	Dynamics and roles of phragmoplast microfilaments in cell plate formation during cytokinesis of tobacco BY-2 cells. Science Bulletin, 2009, 54, 2051-2061.	9.0	7

#	Article	IF	Citations
163	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
164	Cellâ€Cell Channels, Viruses, and Evolution. Annals of the New York Academy of Sciences, 2009, 1178, 106-119.	3.8	36
165	Nitric oxide modulates the influx of extracellular Ca ²⁺ and actin filament organization during cell wall construction in <i>Pinus bungeana </i> pollen tubes. New Phytologist, 2009, 182, 851-862.	7.3	82
166	Mosaic, self-similarity logic and biological attraction principles. Communicative and Integrative Biology, 2009, 2, 552-563.	1.4	40
167	Actin Turnover Is Required for Myosin-Dependent Mitochondrial Movements in Arabidopsis Root Hairs. PLoS ONE, 2009, 4, e5961.	2.5	78
168	Calreticulin mRNA and protein are localized to protein bodies in storage maize callus cells. Plant Cell Reports, 2008, 27, 231-239.	5.6	17
169	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
170	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.	2.1	23
171	Nonâ€invasive microscopy of tipâ€growing root hairs as a tool for study of dynamic and cytoskeletonâ€based vesicle trafficking. Cell Biology International, 2008, 32, 549-553.	3.0	9
172	D'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
173	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.	1.2	23
174	Integrative Proteomic and Cytological Analysis of the Effects of Extracellular Ca ²⁺ Influx on <i>Pinus bungeana</i> Pollen Tube Development. Journal of Proteome Research, 2008, 7, 4299-4312.	3.7	34
175	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
176	Vesicular secretion of auxin. Plant Signaling and Behavior, 2008, 3, 254-256.	2.4	29
177	Regulation Of Root Hair Tip Growth: Can Mitogen-Activated Protein Kinases Be Taken Into Account?. NATO Science for Peace and Security Series C: Environmental Security, 2008, , 91-128.	0.2	0
178	Plant Myosins: Do They Have Roles In Gravi- And Mechanosensing?. NATO Science for Peace and Security Series C: Environmental Security, 2008, , 161-172.	0.2	0
179	Phospholipase Dζ2 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
180	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

#	Article	IF	Citations
181	Plant Neurobiology as a Paradigm Shift Not Only in the Plant Sciences. Plant Signaling and Behavior, 2007, 2, 205-207.	2.4	34
182	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
183	A unifying new model of cytokinesis for the dividing plant and animal cells. BioEssays, 2007, 29, 371-381.	2.5	18
184	A plastid-localized glycogen synthase kinase $\hat{a} \in f3$ modulates stress tolerance and carbohydrate metabolism. Plant Journal, 2007, 49, 1076-1090.	5.7	70
185	Domain-specific mechanosensory transmission of osmotic and enzymatic cell wall disturbances to the actin cytoskeleton. Protoplasma, 2007, 230, 217-230.	2.1	25
186	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
187	Cell-Cell Channels and Their Implications for Cell Theory. , 2006, , 1-18.		45
188	Endocytosis of Cell Surface Material Mediates Cell Plate Formation during Plant Cytokinesis. Developmental Cell, 2006, 10, 137-150.	7.0	254
189	Cytokinesis in plant and animal cells: Endosomes  shut the door'. Developmental Biology, 2006, 294, 1-10.	2.0	79
190	Differential display proteomic analysis of Picea meyeripollen germination and pollen-tube growth after inhibition of actin polymerization by latrunculin B. Plant Journal, 2006, 47, 174-195.	5.7	68
191	Plant neurobiology: an integrated view of plant signaling. Trends in Plant Science, 2006, 11, 413-419.	8.8	344
192	Actin Turnover-Mediated Gravity Response in Maize Root Apices. Plant Signaling and Behavior, 2006, 1, 52-58.	2.4	42
193	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
194	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
195	Intercellular communication in plants. Annual Plant Reviews Vol 16†Fleming AJ. (ed). 2005. Oxford/Boca Raton: Blackwell Publishing/CRC Press. £105.00 (hardback). 280 pp. Annals of Botany, 2006, 97, 675-676.	2.9	1
196	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
197	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
198	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

#	Article	IF	Citations
199	Neutral Red as a Probe for Confocal Laser Scanning Microscopy Studies of Plant Roots. Annals of Botany, 2006, 97, 1127-1138.	2.9	55
200	Cell-Cell Channels., 2006,,.		16
201	Actin and Myosin VIII in Plant Cell-Cell Channels. , 2006, , 119-134.		8
202	Neurobiological View of Plants and Their Body Plan. , 2006, , 19-35.		32
203	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
204	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
205	Plant formins come of age: something special about crossâ€walls. New Phytologist, 2005, 168, 499-503.	7.3	38
206	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
207	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
208	The endocytic network in plants. Trends in Cell Biology, 2005, 15, 425-433.	7.9	178
209	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
210	Plant synapses: actin-based domains for cell-to-cell communication. Trends in Plant Science, 2005, 10, 106-111.	8.8	167
211	What is apical and what is basal in plant root development?. Trends in Plant Science, 2005, 10, 409-411.	8.8	30
212	Actin-dependent fluid-phase endocytosis in inner cortex cells of maize root apices. Journal of Experimental Botany, 2004, 55, 463-473.	4.8	113
213	Endocytosis, Actin Cytoskeleton, and Signaling. Plant Physiology, 2004, 135, 1150-1161.	4.8	274
214	Cell bodies in a cage. Nature, 2004, 428, 371-371.	27.8	59
215	Getting connected: actin-based cell-to-cell channels in plants and animals. Trends in Cell Biology, 2004, 14, 404-408.	7.9	52
216	Eukaryotic Cells and their Cell Bodies: Cell Theory Revised. Annals of Botany, 2004, 94, 9-32.	2.9	112

#	Article	IF	Citations
217	New signalling molecules regulating root hair tip growth. Trends in Plant Science, 2004, 9, 217-220.	8.8	51
218	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
219	The architecture of polarized cell growth: The unique status of elongating plant cells. BioEssays, 2003, 25, 569-576.	2.5	61
220	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
221	Involvement of MAP kinase SIMK and actin cytoskeleton in the regulation of root hair tip growth. Cell Biology International, 2003, 27, 257-259.	3.0	9
222	Cytoskeleton-Plasma Membrane-Cell Wall Continuum in Plants. Emerging Links Revisited. Plant Physiology, 2003, 133, 482-491.	4.8	262
223	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
224	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
225	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
226	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
227	Actin-driven polar growth of plant cells. Trends in Cell Biology, 2002, 12, 14.	7.9	20
228	Involvement of the mitogen-activated protein kinase SIMK in regulation of root hair tip growth. EMBO Journal, 2002, 21, 3296-3306.	7.8	152
229	Rapid Responses of Plants to Boron Deprivation. , 2002, , 167-180.		8
230	Latrunculin B-Induced Plant Dwarfism: Plant Cell Elongation Is F-Actin-Dependent. Developmental Biology, 2001, 231, 113-124.	2.0	187
231	Lilliputian Mutant of Maize Lacks Cell Elongation and Shows Defects in Organization of Actin Cytoskeleton. Developmental Biology, 2001, 236, 478-491.	2.0	26
232	Motile plant cell body: a  bug' within a  cage'. Trends in Plant Science, 2001, 6, 104-111.	8.8	28
233	Rapid response reactions of roots to boron deprivation. Journal of Plant Nutrition and Soil Science, 2001, 164, 173-181.	1.9	156
234	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

#	Article	IF	CITATIONS
235	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
236	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
237	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
238	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
239	Tissue-specific subcellular immunolocalization of a myosin-like protein in maize root apices. Protoplasma, 2000, 212, 137-145.	2.1	14
240	Aluminum-Induced $1\hat{a}^{3}\cdot\hat{l}^{2}$ -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
241	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
242	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
243	CYTOSKELETALPERSPECTIVES ONROOTGROWTH ANDMORPHOGENESIS. Annual Review of Plant Biology, 2000, 51, 289-322.	14.3	56
244	Actin and Myosin VIII in Developing Root Apex Cells. , 2000, , 457-476.		32
245			
240	Actin Cytoskeleton Related to Gravisensing in Higher Plants., 2000, , 557-571.		8
246	Actin Cytoskeleton Related to Gravisensing in Higher Plants. , 2000, , 557-571. Steedman's Wax for F-Actin Visualization. , 2000, , 619-636.		39
		0.5	
246	Steedman's Wax for F-Actin Visualization. , 2000, , 619-636. Statoliths motions in gravityâ€perceiving plant cells: does actomyosin counteract gravity?. FASEB	0.5 5.7	39
246	Steedman's Wax for F-Actin Visualization. , 2000, , 619-636. Statoliths motions in gravityâ€perceiving plant cells: does actomyosin counteract gravity?. FASEB Journal, 1999, 13, S143-7. Maize calreticulin localizes preferentially to plasmodesmata in root apex. Plant Journal, 1999, 19,		39 34
246 247 248	Steedman's Wax for F-Actin Visualization. , 2000, , 619-636. Statoliths motions in gravityâ€perceiving plant cells: does actomyosin counteract gravity?. FASEB Journal, 1999, 13, S143-7. Maize calreticulin localizes preferentially to plasmodesmata in root apex. Plant Journal, 1999, 19, 481-488. Characterization of the unconventional myosin VIII in plant cells and its localization at the	5.7	39 34 171
246 247 248 249	Steedman's Wax for F-Actin Visualization. , 2000, , 619-636. Statoliths motions in gravityâ€perceiving plant cells: does actomyosin counteract gravity?. FASEB Journal, 1999, 13, S143-7. Maize calreticulin localizes preferentially to plasmodesmata in root apex. Plant Journal, 1999, 19, 481-488. Characterization of the unconventional myosin VIII in plant cells and its localization at the post-cytokinetic cell wall. Plant Journal, 1999, 19, 555-567. Redistribution of actin, profilin and phosphatidylinositol-4,5-bisphosphate in growing and maturing	5.7 5.7	39 34 171 217

#	Article	IF	CITATIONS
253	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
254	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
255	Nuclear Components with Microtubule-Organizing Properties in Multicellular Eukaryotes: Functional and Evolutionary Considerations. International Review of Cytology, 1997, 175, 91-135.	6.2	47
256	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
257	Tissue-6. Journal of Experimental Botany, 1996, 47, 819-829.	4.8	16
258	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
259	Endocytic Uptake of Nutrients, Cell Wall Molecules and Fluidized Cell Wall Portions into Heterotrophic Plant Cells., 0,, 19-35.		5
260	Endocytosis and Actomyosin Cytoskeleton. , 0, , 233-244.		0
261	Benzoxazolinone Detoxification and Degradation – A Molecule Ìs Journey. , 0, , .		1