Gloria K Muday

List of Publications by Year
in descending order

94 papers	10,979 citations	38742 50 h-index	49909 87 g-index
98 all docs	98 docs citations	98 times ranked	9350 citing authors

#	Article	IF	Citations
1	Flavonoids Act as Negative Regulators of Auxin Transport in Vivo in Arabidopsis. Plant Physiology, 2001, 126, 524-535.	4.8	691
2	Inhibition of Auxin Movement from the Shoot into the Root Inhibits Lateral Root Development in Arabidopsis. Plant Physiology, 1998, 118, 1369-1378.	4.8	422
3	Auxin and ethylene: collaborators or competitors?. Trends in Plant Science, 2012, 17, 181-195.	8.8	372
4	The transparent testa4 Mutation Prevents Flavonoid Synthesis and Alters Auxin Transport and the Response of Arabidopsis Roots to Gravity and Light[W]. Plant Cell, 2004, 16, 1191-1205.	6.6	356
5	Basipetal Auxin Transport Is Required for Gravitropism in Roots of Arabidopsis. Plant Physiology, 2000, 122, 481-490.	4.8	341
6	Flavonoid Accumulation Patterns of Transparent Testa Mutants of Arabidopsis. Plant Physiology, 2001, 126, 536-548.	4.8	312
7	Brassinosteroids Interact with Auxin to Promote Lateral Root Development in Arabidopsis. Plant Physiology, 2004, 134, 1624-1631.	4.8	306
8	Reduced naphthylphthalamic acid binding in the tir3 mutant of Arabidopsis is associated with a reduction in polar auxin transport and diverse morphological defects.. Plant Cell, 1997, 9, 745-757.	6.6	303
9	Ethylene regulates lateral root formation and auxin transport in <i>Arabidopsis thaliana</i>. Plant Journal, 2008, 55, 175-187.	5.7	294
10	Nitric oxide causes root apical meristem defects and growth inhibition while reducing PIN-FORMED 1 (PIN1)-dependent acropetal auxin transport. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 18506-18511.	7.1	283
11	Auxin and Ethylene Induce Flavonol Accumulation through Distinct Transcriptional Networks Â Â Â. Plant Physiology, 2011, 156, 144-164.	4.8	271
12	Genetic and Chemical Reductions in Protein Phosphatase Activity Alter Auxin Transport, Gravity Response, and Lateral Root Growth. Plant Cell, 2001, 13, 1683-1697.	6.6	264
13	Ethyleneâ€"auxin interactions regulate lateral root initiation and emergence in <i>Arabidopsis thaliana</i>. Plant Journal, 2008, 55, 335-347.	5.7	260
14	Polar auxin transport: controlling where and how much. Trends in Plant Science, 2001, 6, 535-542.	8.8	254
15	Ethylene inhibits lateral root development, increases IAA transport and expression of PIN3 and PIN7 auxin efflux carriers. Development (Cambridge), 2011, 138, 3485-3495.	2.5	232
16	Genetic dissection of the role of ethylene in regulating auxin-dependent lateral and adventitious root formation in tomato. Plant Journal, 2010, 61, 3-15.	5.7	230
17	Flavonols control pollen tube growth and integrity by regulating ROS homeostasis during high-temperature stress. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E11188-E11197.	7.1	226
18	Flavonoids Are Differentially Taken Up and Transported Long Distances in Arabidopsis. Plant Physiology, 2007, 145, 478-490.	4.8	219

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19	<i>Arabidopsis SMALL AUXIN UP RNA63</i> promotes hypocotyl and stamen filament elongation. Plant Journal, 2012, 71, 684-697.	5.7	219
20	RBOH-Dependent ROS Synthesis and ROS Scavenging by Plant Specialized Metabolites To Modulate Plant Development and Stress Responses. Chemical Research in Toxicology, 2019, 32, 370-396.	3.3	210
21	Ethylene Modulates Flavonoid Accumulation and Gravitropic Responses in Roots of Arabidopsis. Plant Physiology, 2006, 140, 1384-1396.	4.8	190
22	Auxin Transport. , 1995, , 509-530.		188
23	Opposite Root Growth Phenotypes of hy5 versus hy5 hyh Mutants Correlate with Increased Constitutive Auxin Signaling. PLoS Genetics, 2006, 2, e202.	3.5	186
24	Transcription factor WRKY23 assists auxin distribution patterns during <i>Arabidopsis</i> root development through local control on flavonol biosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 1554-1559.	7.1	184
25	Ethylene-Induced Flavonol Accumulation in Guard Cells Suppresses Reactive Oxygen Species and Moderates Stomatal Aperture. Plant Physiology, 2014, 164, 1707-1717.	4.8	180
26	Genetic and Chemical Reductions in Protein Phosphatase Activity Alter Auxin Transport, Gravity Response, and Lateral Root Growth. Plant Cell, 2001, 13, 1683-1697.	6.6	169
27	Abscisic Acid-Induced Reactive Oxygen Species Are Modulated by Flavonols to Control Stomata Aperture. Plant Physiology, 2017, 175, 1807-1825.	4.8	168
28	An Emerging Model of Auxin Transport Regulation. Plant Cell, 2002, 14, 293-299.	6.6	167
29	Auxins and Tropisms. Journal of Plant Growth Regulation, 2001, 20, 226-243.	5.1	165
30	A Universal Role for Inositol 1,4,5-Trisphosphate-Mediated Signaling in Plant Gravitropism. Plant Physiology, 2006, 140, 746-760.	4.8	157
31	A Kinetic Analysis of the Auxin Transcriptome Reveals Cell Wall Remodeling Proteins That Modulate Lateral Root Development in<i>Arabidopsis</i>Â Â. Plant Cell, 2013, 25, 3329-3346.	6.6	147
32	Localized Induction of the ATP-Binding Cassette B19 Auxin Transporter Enhances Adventitious Root Formation in Arabidopsis. Plant Physiology, 2013, 162, 1392-1405.	4.8	141
33	PINOID Kinase Regulates Root Gravitropism through Modulation of PIN2-Dependent Basipetal Auxin Transport in Arabidopsis Â Â. Plant Physiology, 2009, 150, 722-735.	4.8	132
34	Measurement of auxin transport in Arabidopsis thaliana. Nature Protocols, 2009, 4, 437-451.	12.0	130
35	Endosidin2 targets conserved exocyst complex subunit EXO70 to inhibit exocytosis. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E41-50.	7.1	129
36	SCARFACE Encodes an ARF-GAP That Is Required for Normal Auxin Efflux and Vein Patterning in Arabidopsis. Plant Cell, 2006, 18, 1396-1411.	6.6	128

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37	Extracellular ATP Inhibits Root Gravitropism at Concentrations That Inhibit Polar Auxin Transport. Plant Physiology, 2003, 131, 147-154.	4.8	122
38	Transport of the Two Natural Auxins, Indole-3-Butyric Acid and Indole-3-Acetic Acid, in Arabidopsis. Plant Physiology, 2003, 133, 761-772.	4.8	118
39	The anthocyanin reduced Tomato Mutant Demonstrates the Role of Flavonols in Tomato Lateral Root and Root Hair Development. Plant Physiology, 2014, 166, 614-631.	4.8	114
40	Nitric Oxide Plays a Role in Stem Cell Niche Homeostasis through Its Interaction with Auxin. Plant Physiology, 2014, 166, 1972-1984.	4.8	114
41	Two Seven-Transmembrane Domain MILDEW RESISTANCE LOCUS O Proteins Cofunction in<i>Arabidopsis</i>Root Thigmomorphogenesis Â. Plant Cell, 2009, 21, 1972-1991.	6.6	94
42	The Role of ROS Homeostasis in ABA-Induced Guard Cell Signaling. Frontiers in Plant Science, 2020, 11, 968.	3.6	94
43	Transcriptional and Hormonal Regulation of Gravitropism of Woody Stems in<i>Populus</i>. Plant Cell, 2015, 27, tpc.15.00531.	6.6	93
44	NPA binding activity is peripheral to the plasma membrane and is associated with the cytoskeleton.. Plant Cell, 1994, 6, 1941-1953.	6.6	84
45	Characterization of the growth and auxin physiology of roots of the tomato mutant, diageotropica. Planta, 1995, 195, 548-53.	3.2	80
46	Early Embryo Development in Fucus distichusIs Auxin Sensitive. Plant Physiology, 2002, 130, 292-302.	4.8	77
47	In vitro and in vivo evidence for actin association of the naphthylphthalamic acid-binding protein from zucchini hypocotyls. Plant Journal, 1998, 13, 291-301.	5.7	69
48	Gravity-Stimulated Changes in Auxin and Invertase Gene Expression in Maize Pulvinal Cells. Plant Physiology, 2002, 128, 591-602.	4.8	66
49	Vesicular cycling mechanisms that control auxin transport polarity. Trends in Plant Science, 2003, 8, 301-304.	8.8	66
50	Mutations in the Gravity Persistence Signal Loci in Arabidopsis Disrupt the Perception and/or Signal Transduction of Gravitropic Stimuli. Plant Physiology, 2002, 130, 1426-1435.	4.8	65
51	Interactions between Auxin Transport and the Actin Cytoskeleton in Developmental Polarity of Fucus distichus Embryos in Response to Light and Gravity. Plant Physiology, 2004, 135, 266-278.	4.8	63
52	RCN1-Regulated Phosphatase Activity and EIN2 Modulate Hypocotyl Gravitropism by a Mechanism That Does Not Require Ethylene Signaling. Plant Physiology, 2006, 141, 1617-1629.	4.8	51
53	Implications of long-distance flavonoid movement in<i>Arabidopsis thaliana</i>. Plant Signaling and Behavior, 2008, 3, 415-417.	2.4	49
54	Identification of plant actin-binding proteins by F-actin affinity chromatography. Plant Journal, 2000, 24, 127-137.	5.7	48

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55	Maintenance of Asymmetric Cellular Localization of an Auxin Transport Protein through Interaction with the Actin Cytoskeleton. Journal of Plant Growth Regulation, 2000, 19, 385-396.	5.1	46
56	Role for Apyrases in Polar Auxin Transport in Arabidopsis Â Â Â. Plant Physiology, 2012, 160, 1985-1995.	4.8	45
57	Evidence for a Single Naphthylphthalamic Acid Binding Site on the Zucchini Plasma Membrane. Plant Physiology, 1993, 103, 449-456.	4.8	43
58	Auxin Transport and the Interaction of Phytotropins. Plant Physiology, 1992, 98, 101-107.	4.8	41
59	Sex Steroid Hormones Regulate Leptin Transcript Accumulation and Protein Secretion in 3T3-L1 Cells. Scientific Reports, 2017, 7, 8232.	3.3	41
60	Identification of Transcriptional and Receptor Networks That Control Root Responses to Ethylene. Plant Physiology, 2018, 176, 2095-2118.	4.8	41
61	Evidence for altered polar and lateral auxin transport in the gravity persistent signal (gps) mutants of Arabidopsis. Plant, Cell and Environment, 2006, 29, 682-690.	5.7	40
62	Shootward and rootward: peak terminology for plant polarity. Trends in Plant Science, 2010, 15, 593-594.	8.8	39
63	Flavonols modulate lateral root emergence by scavenging reactive oxygen species in Arabidopsis thaliana. Journal of Biological Chemistry, 2021, 296, 100222.	3.4	39
64	AUXIN UP-REGULATED F-BOX PROTEIN1 Regulates the Cross Talk between Auxin Transport and Cytokinin Signaling during Plant Root Growth Â Â. Plant Physiology, 2011, 156, 1878-1893.	4.8	36
65	Cytoplasmic Orientation of the Naphthylphthalamic Acid-Binding Protein in Zucchini Plasma Membrane Vesicles. Plant Physiology, 1996, 112, 421-432.	4.8	35
66	The rib1 Mutant of Arabidopsis Has Alterations in Indole-3-Butyric Acid Transport, Hypocotyl Elongation, and Root Architecture. Plant Physiology, 2005, 139, 1460-1471.	4.8	35
67	Wounding Induces One of Two Isoenzymes of 3-Deoxy-d-arabino-Heptulosonate 7-Phosphate Synthase in Solanum tuberosum L.. Plant Physiology, 1992, 98, 496-500.	4.8	31
68	What is apical and what is basal in plant root development?. Trends in Plant Science, 2005, 10, 409-411.	8.8	30
69	Flavonols regulate root hair development by modulating accumulation of reactive oxygen species in the root epidermis. Development (Cambridge), 2020, 147, .	2.5	30
70	ROSY1, a novel regulator of gravitropic response is a stigmasterol binding protein. Journal of Plant Physiology, 2016, 196-197, 28-40.	3.5	27
71	Light Modulates Ethylene Synthesis, Signaling, and Downstream Transcriptional Networks to Control Plant Development. Frontiers in Plant Science, 2019, 10, 1094.	3.6	26
72	Influence of Weight Loss, Body Composition, and Lifestyle Behaviors on Plasma Adipokines: A Randomized Weight Loss Trial in Older Men and Women with Symptomatic Knee Osteoarthritis. Journal of Obesity, 2012, 2012, 1-14.	2.7	24

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73	The tyrosine repressor negatively regulates aroH expression in Escherichia coli. Journal of Bacteriology, 1991, 173, 3930-3932.	2.2	23
74	Block of ATP-Binding Cassette B19 Ion Channel Activity by 5-Nitro-2-(3-Phenylpropylamino)-Benzoic Acid Impairs Polar Auxin Transport and Root Gravitropism. Plant Physiology, 2014, 166, 2091-2099.	4.8	20
75	Nervous system-like signaling in plant defense. Science, 2018, 361, 1068-1069.	12.6	18
76	Regulation of the Salmonella typhimurium aroF gene in Escherichia coli. Journal of Bacteriology, 1990, 172, 2259-2266.	2.2	16
77	The dynamic response of the Arabidopsis root metabolome to auxin and ethylene is not predicted by changes in the transcriptome. Scientific Reports, 2020, 10, 679.	3.3	16
78	Auxin Transport and the Integration of Gravitropic Growth. , 0, , 47-77.		15
79	Genetic and Chemical Reductions in Protein Phosphatase Activity Alter Auxin Transport, Gravity Response, and Lateral Root Growth. Plant Cell, 2001, 13, 1683.	6.6	13
80	GRAVITY PERSISTENT SIGNAL 1 (GPS1) Reveals Novel Cytochrome P450s Involved in Gravitropism. American Journal of Botany, 2013, 100, 183-193.	1.7	13
81	Transcriptional sequencing and analysis of major genes involved in the adventitious root formation of mango cotyledon segments. Planta, 2017, 245, 1193-1213.	3.2	13
82	Ethylene signaling increases reactive oxygen species accumulation to drive root hair initiation in <i>Arabidopsis</i>. Development (Cambridge), 2022, 149, .	2.5	13
83	Control of Auxin Transport by Reactive Oxygen and Nitrogen Species. Signaling and Communication in Plants, 2013, , 103-117.	0.7	11
84	Interactions Between the Actin Cytoskeleton and an Auxin Transport Protein. , 2000, , 541-556.		10
85	Undergraduates Achieve Learning Gains in Plant Genetics through Peer Teaching of Secondary Students. CBE Life Sciences Education, 2014, 13, 641-652.	2.3	9
86	Peer Teaching Increases Knowledge and Changes Perceptions about Genetically Modified Crops in Nonâ€"Science Major Undergraduates. CBE Life Sciences Education, 2019, 18, ar14.	2.3	5
87	A Conditional Mutation in SCD1 Reveals Linkage Between PIN Protein Trafficking, Auxin Transport, Gravitropism, and Lateral Root Initiation. Frontiers in Plant Science, 2020, 11, 910.	3.6	5
88	Integration of Ethylene and Auxin Signaling and the Developmental Consequences of Their Crosstalk. , 2015, , 175-204.		4
89	A new tool for discovering transcriptional regulators of co-expressed genes predicts gene regulatory networks that mediate ethylene-controlled root development. In Silico Plants, 2020, 2, .	1.9	4
90	Hierarchical Probabilistic Interaction Modeling for Multiple Gene Expression Replicates. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2014, 11, 336-346.	3.0	3

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91	That's a Tomato? Using a Familiar Food to Explore Genetic Variation. Science Activities, 2014, 51, 1-16.	0.6	2
92	First and second order Markov posterior probabilities on multiple time-course data sets. , 2015, , .		1
93	A BCHC genetic algorithm model of cotemporal hierarchical Arabidopsis thaliana gene interactions. , 2018, , .		1
94	Time Series Adjustment Enhancement of Hierarchical Modeling of Arabidopsis Thaliana Gene Interactions. Lecture Notes in Computer Science, 2020, , 143-154.	1.3	0