Anna N Stepanova

List of Publications by Year
in descending order

62 papers	12,278 citations	185998 28 h-index	128067 60 g-index
69 all docs	69 docs citations	69 times ranked	12366 citing authors

#	Article	IF	Citations
1	Genome-Wide Insertional Mutagenesis of Arabidopsis thaliana. Science, 2003, 301, 653-657.	6.0	4,667
2	Nuclear events in ethylene signaling: a transcriptional cascade mediated by ETHYLENE-INSENSITIVE3 and ETHYLENE-RESPONSE-FACTOR1. Genes and Development, 1998, 12, 3703-3714.	2.7	1,144
3	TAA1-Mediated Auxin Biosynthesis Is Essential for Hormone Crosstalk and Plant Development. Cell, 2008, 133, 177-191.	13.5	1,065
4	Multilevel Interactions between Ethylene and Auxin in<i>Arabidopsis</i>Roots. Plant Cell, 2007, 19, 2169-2185.	3.1	498
5	A Link between Ethylene and Auxin Uncovered by the Characterization of Two Root-Specific Ethylene-Insensitive Mutants in Arabidopsis. Plant Cell, 2005, 17, 2230-2242.	3.1	452
6	Five components of the ethylene-response pathway identified in a screen for weak ethylene-insensitive mutants in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 2992-2997.	3.3	380
7	A Small-Molecule Screen Identifies<scp>l</scp>-Kynurenine as a Competitive Inhibitor of TAA1/TAR Activity in Ethylene-Directed Auxin Biosynthesis and Root Growth in<i>Arabidopsis</i>Â Â. Plant Cell, 2011, 23, 3944-3960.	3.1	364
8	The <i>Arabidopsis</i> YUCCA1 Flavin Monooxygenase Functions in the Indole-3-Pyruvic Acid Branch of Auxin Biosynthesis. Plant Cell, 2011, 23, 3961-3973.	3.1	320
9	Gene-Specific Translation Regulation Mediated by the Hormone-Signaling Molecule EIN2. Cell, 2015, 163, 684-697.	13.5	306
10	Convergence of Signaling Pathways in the Control of Differential Cell Growth in Arabidopsis. Developmental Cell, 2004, 7, 193-204.	3.1	289
11	Ethylene signaling: simple ligand, complex regulation. Current Opinion in Plant Biology, 2013, 16, 554-560.	3.5	261
12	Ethylene signaling and response: where different regulatory modules meet. Current Opinion in Plant Biology, 2009, 12, 548-555.	3.5	250
13	Local Auxin Biosynthesis Is a Key Regulator of Plant Development. Developmental Cell, 2018, 47, 306-318.e5.	3.1	243
14	The Ethylene Signaling Pathway. Science, 2004, 306, 1513-1515.	6.0	192
15	Local Auxin Sources Orient the Apical-Basal Axis in Arabidopsis Embryos. Current Biology, 2013, 23, 2506-2512.	1.8	182
16	Translation regulation in plants: an interesting past, an exciting present and a promising future. Plant Journal, 2017, 90, 628-653.	2.8	167
17	Ethylene signaling: from mutants to molecules. Current Opinion in Plant Biology, 2000, 3, 353-360.	3.5	166
18	Local auxin biosynthesis modulates gradient-directed planar polarity in Arabidopsis. Nature Cell Biology, 2009, 11, 731-738.	4.6	153

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19	A mechanistic framework for auxin dependent Arabidopsis root hair elongation to low external phosphate. Nature Communications, 2018, 9, 1409.	5.8	146
20	Short-Term Growth Responses to Ethylene in Arabidopsis Seedlings Are EIN3/EIL1 Independent. Plant Physiology, 2004, 136, 2921-2927.	2.3	140
21	Genetic aspects of auxin biosynthesis and its regulation. Physiologia Plantarum, 2014, 151, 3-12.	2.6	88
22	Ethylene signalling and response pathway: a unique signalling cascade with a multitude of inputs and outputs. Physiologia Plantarum, 2005, 123, 195-206.	2.6	77
23	A recombineeringâ€based gene tagging system for Arabidopsis. Plant Journal, 2011, 66, 712-723.	2.8	64
24	Arabidopsis SABRE and CLASP interact to stabilize cell division plane orientation and planar polarity. Nature Communications, 2013, 4, 2779.	5.8	60
25	To Fight or to Grow: The Balancing Role of Ethylene in Plant Abiotic Stress Responses. Plants, 2022, 11, 33.	1.6	58
26	T-DNA Mutagenesis in Arabidopsis. , 2003, 236, 177-188.		38
27	Arabidopsis Ethylene Signaling Pathway. Science Signaling, 2005, 2005, cm4-cm4.	1.6	38
28	Auxin catabolism unplugged: Role of IAA oxidation in auxin homeostasis. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10742-10744.	3.3	37
29	Transcriptomic Signature of the <i>SHATTERPROOF2</i> Expression Domain Reveals the Meristematic Nature of Arabidopsis Gynoecial Medial Domain. Plant Physiology, 2016, 171, 42-61.	2.3	32
30	Vision, challenges and opportunities for a Plant Cell Atlas. ELife, 2021, 10, .	2.8	31
31	Auxin Interactions with Other Hormones in Plant Development. Cold Spring Harbor Perspectives in Biology, 2021, 13, a039990.	2.3	30
32	Epigenetic silencing of a multifunctional plant stress regulator. ELife, 2019, 8, .	2.8	28
33	Molecular Mechanisms of Ethyleneâ€"Auxin Interaction. Molecular Plant, 2013, 6, 1734-1737.	3.9	26
34	A Plant Biologistâ€™s Toolbox to Study Translation. Frontiers in Plant Science, 2018, 9, 873.	1.7	26
35	An Improved Recombineering Toolset for Plants. Plant Cell, 2020, 32, 100-122.	3.1	23
36	The Triple Response Assay and Its Use to Characterize Ethylene Mutants in Arabidopsis. Methods in Molecular Biology, 2017, 1573, 163-209.	0.4	19

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37	Genome-Wide Search for Translated Upstream Open Reading Frames in Arabidopsis Thaliana. IEEE Transactions on Nanobioscience, 2016, 15, 148-157.	2.2	16
38	RiboStreamR: a web application for quality control, analysis, and visualization of Ribo-seq data. BMC Genomics, 2019, 20, 422.	1.2	16
39	Deciphering the molecular basis of tissue-specific gene expression in plants: Can synthetic biology help?. Current Opinion in Plant Biology, 2022, 68, 102241.	3.5	16
40	Kinetic analysis of <i>Arabidopsis</i> glucosyltransferase UGT74B1 illustrates a general mechanism by which enzymes can escape product inhibition. Biochemical Journal, 2013, 450, 37-46.	1.7	15
41	Broadening the impact of plant science through innovative, integrative, and inclusive outreach. Plant Direct, 2021, 5, e00316.	0.8	14
42	Ethylene Signaling Pathway. Science Signaling, 2005, 2005, cm3-cm3.	1.6	13
43	Development of a relative quantification method for infrared matrixâ€assisted laser desorption electrospray ionization mass spectrometry imaging of Arabidopsis seedlings. Rapid Communications in Mass Spectrometry, 2020, 34, e8616.	0.7	12
44	Leveraging synthetic biology approaches in plant hormone research. Current Opinion in Plant Biology, 2021, 60, 101998.	3.5	11
45	Monitoring Ethylene in Plants: Genetically Encoded Reporters and Biosensors. Small Methods, 2020, 4, 1900260.	4.6	10
46	Bypassing Transcription: A Shortcut in Cytokinin-Auxin Interactions. Developmental Cell, 2011, 21, 608-610.	3.1	9
47	Plant Functional Genomics. Methods in Molecular Biology, 2015, , .	0.4	9
48	A Recombineering-Based Gene Tagging System for Arabidopsis. Methods in Molecular Biology, 2015, 1227, 233-243.	0.4	9
49	Arabidopsis Transformation with Large Bacterial Artificial Chromosomes. Methods in Molecular Biology, 2014, 1062, 271-283.	0.4	9
50	PCR-Based Screening for Insertional Mutants. , 2006, 323, 163-172.		8
51	From Ethylene-Auxin Interactions to Auxin Biosynthesis and Signal Integration. Plant Cell, 2019, 31, 1393-1394.	3.1	6
52	A Stacking-Based Approach to Identify Translated Upstream Open Reading Frames in Arabidopsis Thaliana. Lecture Notes in Computer Science, 2015, , 138-149.	1.0	6
53	A Ribo-Seq Method to Study Genome-Wide Translational Regulation in Plants. Methods in Molecular Biology, 2022, 2494, 61-98.	0.4	6
54	A Ribosome Footprinting Protocol for Plants. Bio-protocol, 2016, 6, .	0.2	4

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55	Editorial: Relevance of Translational Regulation on Plant Growth and Environmental Responses. Frontiers in Plant Science, 2017, 8, 2170.	1.7	3
56	Plant Biology Research: What Is Next?. Frontiers in Plant Science, 2021, 12, 749104.	1.7	3
57	Structureâ€“Function Analysis of Interallelic Complementation in <i>ROOTY</i> Transheterozygotes. Plant Physiology, 2020, 183, 1110-1125.	2.3	3
58	Cutting Out the Middle Man in Light-Hormone Interactions. Developmental Cell, 2016, 39, 524-526.	3.1	2
59	Editorial overview: Toward deciphering the molecular basis of plant phenotypic plasticity. Current Opinion in Plant Biology, 2021, 63, 102107.	3.5	2
60	RiboSimR: A Tool for Simulation and Power Analysis of Ribo-seq Data. Lecture Notes in Computer Science, 2020, , 121-133.	1.0	1
61	Deep sequencing of ribosomal footprints for studying genome-wide mRNA translation in plants. , 2013, , .		0
62	Mining transcript features related to translation in Arabidopsis using LASSO and random forest. , 2015, , .		0