Anna-Lisa Paul

List of Publications by Year
in descending order

92 papers	3,098 citations	145106 33 h-index	190340 53 g-index
94 all docs	94 docs citations	94 times ranked	2407 citing authors

#	Article	IF	Citations
1	Plants grown in Apollo lunar regolith present stress-associated transcriptomes that inform prospects for lunar exploration. Communications Biology, 2022, 5, 382.	2.0	26
2	Shared Metabolic Remodeling Processes Characterize the Transcriptome of <i>Arabidopsis thaliana</i> within Various Suborbital Flight Environments. Gravitational and Space Research: Publication of the American Society for Gravitational and Space Research, 2021, 9, 13-29.	0.3	5
3	Epigenomic Regulators Elongator Complex Subunit 2 and Methyltransferase 1 Differentially Condition the Spaceflight Response in Arabidopsis. Frontiers in Plant Science, 2021, 12, 691790.	1.7	11
4	Root Skewing-Associated Genes Impact the Spaceflight Response of Arabidopsis thaliana. Frontiers in Plant Science, 2020, 11, 239.	1.7	32
5	NDVI imaging within space exploration plant growth modules â€“ A case study from EDEN ISS Antarctica. Life Sciences in Space Research, 2020, 26, 1-9.	1.2	7
6	HSFA2 Functions in the Physiological Adaptation of Undifferentiated Plant Cells to Spaceflight. International Journal of Molecular Sciences, 2019, 20, 390.	1.8	18
7	Epigenomics in an extraterrestrial environment: organ-specific alteration of DNA methylation and gene expression elicited by spaceflight in Arabidopsis thaliana. BMC Genomics, 2019, 20, 205.	1.2	47
8	Spaceflight-induced alternative splicing during seedling development in Arabidopsis thaliana. Npj Microgravity, 2019, 5, 9.	1.9	31
9	The Plant Health Monitoring System of the EDEN ISS Space Greenhouse in Antarctica During the 2018 Experiment Phase. Frontiers in Plant Science, 2019, 10, 1457.	1.7	25
10	A member of the CONSTANS-Like protein family is a putative regulator of reactive oxygen species homeostasis and spaceflight physiological adaptation. AoB PLANTS, 2019, 11, ply075.	1.2	8
11	Utilization of singleâ€image normalized difference vegetation index (<scp>SI</scp>â€<scp>NDVI</scp>) for early plant stress detection. Applications in Plant Sciences, 2018, 6, e01186.	0.8	39
12	Comparing <scp>RNA</scp>â€Seq and microarray gene expression data in two zones of the <i>Arabidopsis</i> root apex relevant to spaceflight. Applications in Plant Sciences, 2018, 6, e01197.	0.8	10
13	Phenotypic characterization of an Arabidopsis T-DNA insertion line SALK_063500. Data in Brief, 2018, 18, 913-919.	0.5	0
14	Approaches for Surveying Cosmic Radiation Damage in Large Populations of <i>Arabidopsis thaliana</i> Seeds â€“ Antarctic Balloons and Particle Beams. Gravitational and Space Research: Publication of the American Society for Gravitational and Space Research, 2018, 6, 54-73.	0.3	4
15	Skewing in Arabidopsis roots involves disparate environmental signaling pathways. BMC Plant Biology, 2017, 17, 31.	1.6	24
16	ARG1 Functions in the Physiological Adaptation of Undifferentiated Plant Cells to Spaceflight. Astrobiology, 2017, 17, 1077-1111.	1.5	22
17	Data for characterization of SALK_084889, a T-DNA insertion line of Arabidopsis thaliana. Data in Brief, 2017, 13, 253-258.	0.5	5
18	Patterns of Arabidopsis gene expression in the face of hypobaric stress. AoB PLANTS, 2017, 9, .	1.2	10

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19	Dissecting Low Atmospheric Pressure Stress: Transcriptome Responses to the Components of Hypobaria in Arabidopsis. Frontiers in Plant Science, 2017, 8, 528.	1.7	16
20	Genetic dissection of the Arabidopsis spaceflight transcriptome: Are some responses dispensable for the physiological adaptation of plants to spaceflight?. PLoS ONE, 2017, 12, e0180186.	1.1	63
21	The effect of spaceflight on the gravity-sensing auxin gradient of roots: GFP reporter gene microscopy on orbit. Npj Microgravity, 2016, 2, 15023.	1.9	54
22	Root Growth Patterns and Morphometric Change Based on the Growth Media. Microgravity Science and Technology, 2016, 28, 621-631.	0.7	8
23	Enabling the Spaceflight Methylome: DNA Isolated from Plant Tissues Preserved in RNAlater^{Â®} Is Suitable for Bisulfite PCR Assay of Genome Methylation. Gravitational and Space Research: Publication of the American Society for Gravitational and Space Research, 2016, 4, 28-37.	0.3	5
24	Spaceflight Induces Specific Alterations in the Proteomes of Arabidopsis. Astrobiology, 2015, 15, 32-56.	1.5	63
25	Phosphomimetic mutation of a conserved serine residue in Arabidopsis thaliana 14-3-3Ï‰ suggests a regulatory role of phosphorylation in dimerization and target interactions. Plant Physiology and Biochemistry, 2015, 97, 296-303.	2.8	13
26	Spaceflight Exploration in Plant Gravitational Biology. Methods in Molecular Biology, 2015, 1309, 285-305.	0.4	14
27	Flexible imaging payload for real-time fluorescent biological imaging in parabolic, suborbital and space analog environments. Life Sciences in Space Research, 2014, 3, 32-44.	1.2	3
28	Mapping by VESGEN of Leaf Venation Patterning in <i>Arabidopsis thaliana</i> with Bioinformatic Dimensions of Gene Expression. Gravitational and Space Research: Publication of the American Society for Gravitational and Space Research, 2014, 2, 68-81.	0.3	8
29	<i>Arabidopsis thaliana</i> for Spaceflight Applicationsâ€“Preparing Dormant Biology for Passive Stowage and On-Orbit Activation. Gravitational and Space Research: Publication of the American Society for Gravitational and Space Research, 2014, 2, 81-89.	0.3	9
30	Organ-specific remodeling of the Arabidopsis transcriptome in response to spaceflight. BMC Plant Biology, 2013, 13, 112.	1.6	99
31	A method for preparing spaceflight RNA<i>later</i>â€‘fixed <i>Arabidopsis thaliana</i> (Brassicaceae) tissue for scanning electron microscopy. Applications in Plant Sciences, 2013, 1, 1300034.	0.8	5
32	Fundamental Plant Biology Enabled by The Space Shuttle. American Journal of Botany, 2013, 100, 226-234.	0.8	75
33	Deployment of a Fully-Automated Green Fluorescent Protein Imaging System in a High Arctic Autonomous Greenhouse. Sensors, 2013, 13, 3530-3548.	2.1	6
34	Spaceflight engages heat shock protein and other molecular chaperone genes in tissue culture cells of <i>Arabidopsis thaliana</i>. American Journal of Botany, 2013, 100, 235-248.	0.8	73
35	14-3-3 phosphoprotein interaction networks â€“ does isoform diversity present functional interaction specification?. Frontiers in Plant Science, 2012, 3, 190.	1.7	104
36	The 14-3-3 proteins of Arabidopsis regulate root growth and chloroplast development as components of the photosensory system. Journal of Experimental Botany, 2012, 63, 3061-3070.	2.4	44

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37	Spaceflight Transcriptomes: Unique Responses to a Novel Environment. Astrobiology, 2012, 12, 40-56.	1.5	140
38	Plant growth strategies are remodeled by spaceflight. BMC Plant Biology, 2012, 12, 232.	1.6	90
39	14-3-3 proteins in plant physiology. Seminars in Cell and Developmental Biology, 2011, 22, 720-727.	2.3	234
40	Parabolic Flight Induces Changes in Gene Expression Patterns in<i>Arabidopsis thaliana</i>. Astrobiology, 2011, 11, 743-758.	1.5	39
41	The performance of KSC Fixation Tubes with RNALater for orbital experiments: A case study in ISS operations for molecular biology. Advances in Space Research, 2011, 48, 199-206.	1.2	20
42	Plant phosphopeptide-binding proteins as signaling mediators. Current Opinion in Plant Biology, 2010, 13, 527-532.	3.5	73
43	Growth Performance and Root Transcriptome Remodeling of Arabidopsis in Response to Mars-Like Levels of Magnesium Sulfate. PLoS ONE, 2010, 5, e12348.	1.1	47
44	Lunar Plant Biologyâ€"A Review of the Apollo Era. Astrobiology, 2010, 10, 261-274.	1.5	24
45	Developing strategies for automated remote plant production systems: Environmental control and monitoring of the Arthur Clarke Mars Greenhouse in the Canadian High Arctic. Advances in Space Research, 2009, 44, 1367-1381.	1.2	19
46	Comparative Interactomics: Analysis of <i>Arabidopsis</i> 14-3-3 Complexes Reveals Highly Conserved 14-3-3 Interactions between Humans and Plants. Journal of Proteome Research, 2009, 8, 1913-1924.	1.8	38
47	Effects of a Spaceflight Environment on Heritable Changes in Wheat Gene Expression. Astrobiology, 2009, 9, 359-367.	1.5	7
48	14-3-3 isoforms participate in red light signaling and photoperiodic flowering. Plant Signaling and Behavior, 2008, 3, 304-306.	1.2	15
49	14-3-3 Proteins, red light, and photoperiodic flowering. Plant Signaling and Behavior, 2008, 3, 511-515.	1.2	11
50	Deployment of a Prototype Plant GFP Imager at the Arthur Clarke Mars Greenhouse of the Haughton Mars Project. Sensors, 2008, 8, 2762-2773.	2.1	10
51	Adenine Nucleotide Pool Perturbation Is a Metabolic Trigger for AMP Deaminase Inhibitor-Based Herbicide Toxicity. Plant Physiology, 2007, 143, 1752-1760.	2.3	24
52	The 14-3-3 Proteins <i>Î¼</i> and <i>Ï…</i> Influence Transition to Flowering and Early Phytochrome Response. Plant Physiology, 2007, 145, 1692-1702.	2.3	107
53	High magnetic field induced changes of gene expression in arabidopsis. Biomagnetic Research and Technology, 2006, 4, 7.	2.0	47
54	Exposure ofArabidopsis thalianato Hypobaric Environments: Implications for Low-Pressure Bioregenerative Life Support Systems for Human Exploration Missions and Terraforming on Mars. Astrobiology, 2006, 6, 851-866.	1.5	42

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55	Topographical imaging technique for qualitative analysis of microarray data. BioTechniques, 2006, 41, 554-558.	0.8	1
56	Mars Plant Biology: A Workshop Report and Recommendations for Plant Biology in the Exploration Era. Habitation, 2006, 11, 1-4.	0.2	3
57	Microgravity effects on leaf morphology, cell structure, carbon metabolism and mRNA expression of dwarf wheat. Planta, 2006, 224, 1038-1049.	1.6	92
58	Arabidopsis gene expression patterns are altered during spaceflight. Advances in Space Research, 2005, 36, 1175-1181.	1.2	73
59	Plant molecular biology in the space station era: Utilization of KSC fixation tubes with RNAlater. Acta Astronautica, 2005, 56, 623-628.	1.7	37
60	Isoform-specific Subcellular Localization among 14-3-3 Proteins inArabidopsisSeems to be Driven by Client Interactions. Molecular Biology of the Cell, 2005, 16, 1735-1743.	0.9	96
61	Hypobaric Biology: Arabidopsis Gene Expression at Low Atmospheric Pressure. Plant Physiology, 2004, 134, 215-223.	2.3	90
62	The TAGES Imaging System: Optimizing a Green Fluorescent Protein Imaging System for Plants. , 2003, , .		3
63	Gene Expression in Space Biology Experiments. , 2003, , 343-346.		0
64	Plants in space. Current Opinion in Plant Biology, 2002, 5, 258-263.	3.5	127
65	Molecular Aspects of Stress-Gene Regulation During Spaceflight. Journal of Plant Growth Regulation, 2002, 21, 166-176.	2.8	25
66	Remote sensing of gene expression in Planta: transgenic plants as monitors of exogenous stress perception in extraterrestrial environments. Life Support & Biosphere Science: International Journal of Earth Space, 2002, 8, 83-91.	0.1	10
67	Plant adaptation to low atmospheric pressures: potential molecular responses. Life Support & Biosphere Science: International Journal of Earth Space, 2002, 8, 93-101.	0.1	3
68	The fungicidal and phytotoxic properties of benomyl and PPM in supplemented agar media supporting transgenic arabidopsis plants for a Space Shuttle flight experiment. Applied Microbiology and Biotechnology, 2001, 55, 480-485.	1.7	22
69	Transgene Expression Patterns Indicate That Spaceflight Affects Stress Signal Perception and Transduction in Arabidopsis. Plant Physiology, 2001, 126, 613-621.	2.3	93
70	Higher-order chromatin structure: looping long molecules. , 1999, 41, 713-720.		21
71	PermeabilizedArabidopsis protoplasts provide new insight into the chromatin structure of plant alcohol dehydrogenase genes. , 1998, 22, 7-16.		8
72	Higher Order Chromatin Structures in Maize and Arabidopsis. Plant Cell, 1998, 10, 1349-1359.	3.1	36

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73	In Vivo Footprinting in Arabidopsis. , 1998, 82, 417-429.		2
74	Higher Order Chromatin Structures in Maize and Arabidopsis. Plant Cell, 1998, 10, 1349.	3.1	2
75	Localization of 14-3-3 proteins in the nuclei of arabidopsis and maize. Plant Journal, 1997, 12, 1439-1445.	2.8	71
76	2 Chromatin. Methods in Plant Biochemistry, 1996, , 13-28.	0.2	0
77	Transcription Factor Veracity: Is GBF3 Responsible for ABA-Regulated Expression of Arabidopsis Adh?. Plant Cell, 1996, 8, 847.	3.1	7
78	Chapter 27 In Vivo Footprinting of Proteinâ€"DNA Interactions. Methods in Cell Biology, 1995, 49, 391-400.	0.5	2
79	In vivo footprinting identifies an activating element of the maize Adh2 promoter specific for root and vascular tissues. Plant Journal, 1994, 5, 523-533.	2.8	9
80	Genomic Sequencing in Maize. , 1994, , 579-585.		0
81	Osmium tetroxide footprinting of a scaffold attachment region in the maizeAdh1 promoter. Plant Molecular Biology, 1993, 22, 1145-1151.	2.0	26
82	Chemical detection of Z-DNA within the maize Adh1 promoter. Plant Molecular Biology, 1992, 18, 1181-1184.	2.0	12
83	In vivo Footprinting Reveals Unique cis-Elements and Different Modes of Hypoxic Induction in Maize Adh1 and Adh2. Plant Cell, 1991, 3, 159.	3.1	2
84	In vivo footprinting reveals unique cis-elements and different modes of hypoxic induction in maize Adh1 and Adh2.. Plant Cell, 1991, 3, 159-168.	3.1	62
85	In vivo and in vitro characterization of protein interactions with the dyad G-box of the Arabidopsis Adh gene.. Plant Cell, 1990, 2, 207-214.	3.1	80
86	A simple optoelectronic device for controlling an electrophoresis apparatus. Review of Scientific Instruments, 1989, 60, 3072-3073.	0.6	0
87	Chromatin Structure and Gene Expression. , 1989, , 355-370.		0
88	Assays for studying chromatin structure. , 1989, , 231-241.		1
89	Constitutive and anaerobically induced DNase-I-hypersensitive sites in the 5' region of the maize Adh1 gene. Proceedings of the National Academy of Sciences of the United States of America, 1987, 84, 799-803.	3.3	51
90	An Analysis of Chromatin Structure and Gene Regulation. , 1987, , 47-58.		1

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91	Regulation of genes encoding the large subunit of ribulose-1,5-bisphosphate carboxylase and the photosystem II polypeptides D-1 and D-2 during the cell cycle of Chlamydomonas reinhardtii.. Journal of Cell Biology, 1986, 103, 1837-1845.	2.3	56
92	Transgenic Plant Biomonitors: Stress Gene Biocompatibility Evaluation of the Plant Growth Facility for PGIM-01. , 0, , .		0