Dierk Scheel

List of Publications by Year
in descending order

52 papers	4,364 citations	136950 32 h-index	168389 53 g-index
54 all docs	54 docs citations	54 times ranked	6538 citing authors

#	Article	IF	Citations
1	Interplay between calcium signalling and early signalling elements during defence responses to microbeâ€•or damageâ€associated molecular patterns. Plant Journal, 2011, 68, 100-113.	5.7	339
2	Flg22 regulates the release of an ethylene response factor substrate from MAP kinase 6 in <i>Arabidopsis thaliana</i> via ethylene signaling. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 8067-8072.	7.1	327
3	A lectin S-domain receptor kinase mediates lipopolysaccharide sensing in Arabidopsis thaliana. Nature Immunology, 2015, 16, 426-433.	14.5	286
4	Feruloyl-CoA 6'-Hydroxylase1-Dependent Coumarins Mediate Iron Acquisition from Alkaline Substrates in Arabidopsis. Plant Physiology, 2014, 164, 160-172.	4.8	281
5	High Throughput Identification of Potential Arabidopsis Mitogen-activated Protein Kinases Substrates. Molecular and Cellular Proteomics, 2005, 4, 1558-1568.	3.8	223
6	The Multifunctional Enzyme CYP71B15 (PHYTOALEXIN DEFICIENT3) Converts Cysteine-Indole-3-Acetonitrile to Camalexin in the Indole-3-Acetonitrile Metabolic Network of<i>Arabidopsis thaliana</i>Â Â. Plant Cell, 2009, 21, 1830-1845.	6.6	221
7	Profiling of secondary metabolites in root exudates of Arabidopsis thaliana. Phytochemistry, 2014, 108, 35-46.	2.9	179
8	Ca²⁺ signalling in plant immune response: from pattern recognition receptors to Ca²⁺ decoding mechanisms. New Phytologist, 2014, 204, 782-790.	7.3	148
9	Natural variation of root exudates in Arabidopsis thaliana-linking metabolomic and genomic data. Scientific Reports, 2016, 6, 29033.	3.3	143
10	Drivers of the composition of active rhizosphere bacterial communities in temperate grasslands. ISME Journal, 2020, 14, 463-475.	9.8	141
11	Mutualistic root endophytism is not associated with the reduction of saprotrophic traits and requires a noncompromised plant innate immunity. New Phytologist, 2015, 207, 841-857.	7.3	139
12	The <i><scp>A</scp>rabidopsis thaliana</i> mitogenâ€activated protein kinases <scp>MPK</scp>3 and <scp>MPK</scp>6 target a subclass of â€˜<scp>VQ</scp>â€motifâ€™â€containing proteins to regulate immune responses. New Phytologist, 2014, 203, 592-606.	7.3	132
13	Activation of the <i>Arabidopsis thaliana</i> Mitogen-Activated Protein Kinase MPK11 by the Flagellin-Derived Elicitor Peptide, flg22. Molecular Plant-Microbe Interactions, 2012, 25, 471-480.	2.6	123
14	Dynamic Changes in the Localization of MAPK Cascade Components Controlling Pathogenesis-related (PR) Gene Expression during Innate Immunity in Parsley. Journal of Biological Chemistry, 2004, 279, 22440-22448.	3.4	115
15	Mitogen-activated Protein Kinases Play an Essential Role in Oxidative Burst-independent Expression of Pathogenesis-related Genes in Parsley. Journal of Biological Chemistry, 2003, 278, 2256-2264.	3.4	106
16	Microbe-associated molecular pattern-induced calcium signaling requires the receptor-like cytoplasmic kinases, PBL1 and BIK1. BMC Plant Biology, 2014, 14, 374.	3.6	100
17	Non-targeted profiling of semi-polar metabolites in Arabidopsis root exudates uncovers a role for coumarin secretion and lignification during the local response to phosphate limitation. Journal of Experimental Botany, 2016, 67, 1421-1432.	4.8	95
18	The Biosynthetic Pathway of Indole-3-Carbaldehyde and Indole-3-Carboxylic Acid Derivatives in Arabidopsis Â. Plant Physiology, 2014, 165, 841-853.	4.8	92

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19	Analysis of new type III effectors from <i>Xanthomonas</i> uncovers XopB and XopS as suppressors of plant immunity. New Phytologist, 2012, 195, 894-911.	7.3	85
20	Arabidopsis Transporter ABCG37/PDR9 contributes primarily highly oxygenated Coumarins to Root Exudation. Scientific Reports, 2017, 7, 3704.	3.3	83
21	The Arabidopsis Tandem Zinc Finger 9 Protein Binds RNA and Mediates Pathogen-Associated Molecular Pattern-Triggered Immune Responses. Plant and Cell Physiology, 2014, 55, 412-425.	3.1	77
22	The ABC Transporter ABCG1 Is Required for Suberin Formation in Potato Tuber Periderm. Plant Cell, 2014, 26, 3403-3415.	6.6	77
23	Defense-Related Calcium Signaling Mutants Uncovered via a Quantitative High-Throughput Screen in Arabidopsis thaliana. Molecular Plant, 2012, 5, 115-130.	8.3	69
24	Bacterial AvrRpt2-Like Cysteine Proteases Block Activation of the Arabidopsis Mitogen-Activated Protein Kinases, MPK4 and MPK11. Plant Physiology, 2016, 171, 2223-2238.	4.8	67
25	Linking root exudates to functional plant traits. PLoS ONE, 2018, 13, e0204128.	2.5	57
26	Regulation of WRKY46 Transcription Factor Function by Mitogen-Activated Protein Kinases in Arabidopsis thaliana. Frontiers in Plant Science, 2016, 7, 61.	3.6	54
27	Sustained mitogen-activated protein kinase activation reprograms defense metabolism and phosphoprotein profile in Arabidopsis thaliana. Frontiers in Plant Science, 2014, 5, 554.	3.6	49
28	Cellular reprogramming through mitogen-activated protein kinases. Frontiers in Plant Science, 2015, 6, 940.	3.6	45
29	Root exudate composition of grass and forb species in natural grasslands. Scientific Reports, 2020, 10, 10691.	3.3	45
30	Drivers of intraspecific trait variation of grass and forb species in German meadows and pastures. Journal of Vegetation Science, 2017, 28, 705-716.	2.2	42
31	Piriformospora indica Stimulates Root Metabolism of Arabidopsis thaliana. International Journal of Molecular Sciences, 2016, 17, 1091.	4.1	35
32	Arabidopsis Protein Phosphatase DBP1 Nucleates a Protein Network with a Role in Regulating Plant Defense. PLoS ONE, 2014, 9, e90734.	2.5	34
33	MPK11â€"a fourth elicitor-responsive mitogen-activated protein kinase in Arabidopsis thaliana. Plant Signaling and Behavior, 2012, 7, 1203-1205.	2.4	32
34	Annotating unknown components from GC/EI-MS-based metabolite profiling experiments using GC/APCI(+)-QTOFMS. Metabolomics, 2014, 10, 324-336.	3.0	31
35	Expression of <scp><i>C</i></scp><i>aenorhabditis elegans</i>â€...<scp><i>PCS</i></scp> in the <scp>AtPCS</scp>1â€deficient <scp><i>A</i></scp><i>rabidopsis thaliana</i>â€...<scp><i>cad1â€3</i></scp> mutant separates the metal tolerance and nonâ€host resistance functions of phytochelatin synthases. Plant, Cell and Environment, 2015, 38, 2239-2247.	5.7	29
36	Phosphorylation of the CAMTA3 Transcription Factor Triggers Its Destabilization and Nuclear Export. Plant Physiology, 2020, 184, 1056-1071.	4.8	29

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37	Semiâ€polar root exudates in natural grassland communities. Ecology and Evolution, 2019, 9, 5526-5541.	1.9	26
38	Phosphorylationâ€dependent control of an RNA granuleâ€localized protein that fineâ€tunes defence gene expression at a postâ€transcriptional level. Plant Journal, 2020, 101, 1023-1039.	5.7	26
39	Arabidopsis thaliana root and root exudate metabolism is altered by the growth-promoting bacterium Kosakonia radicincitans DSM 16656T. Plant and Soil, 2017, 419, 557-573.	3.7	24
40	Predicting individual plant performance in grasslands. Ecology and Evolution, 2017, 7, 8958-8965.	1.9	21
41	Annotation of metabolites from gas chromatography/atmospheric pressure chemical ionization tandem mass spectrometry data using an in silico generated compound database and MetFrag. Rapid Communications in Mass Spectrometry, 2015, 29, 1521-1529.	1.5	20
42	Plant-to-Plant Variability in Root Metabolite Profiles of 19 Arabidopsis thaliana Accessions Is Substance-Class-Dependent. International Journal of Molecular Sciences, 2016, 17, 1565.	4.1	20
43	Altered glycosylation of exported proteins, including surface immune receptors, compromises calcium and downstream signaling responses to microbe-associated molecular patterns in Arabidopsis thaliana. BMC Plant Biology, 2016, 16, 31.	3.6	16
44	A novel family of proline/serine-rich proteins, which are phospho-targets of stress-related mitogen-activated protein kinases, differentially regulates growth and pathogen defense in Arabidopsis thaliana. Plant Molecular Biology, 2017, 95, 123-140.	3.9	16
45	Stress-Related Mitogen-Activated Protein Kinases Stimulate the Accumulation of Small Molecules and Proteins in Arabidopsis thaliana Root Exudates. Frontiers in Plant Science, 2017, 8, 1292.	3.6	15
46	Challenges in the identification of microbeâ€associated molecular patterns in plant and animal innate immunity: a case study with bacterial lipopolysaccharide. Molecular Plant Pathology, 2016, 17, 1165-1169.	4.2	14
47	Early Pep-13-induced immune responses are SERK3A/B-dependent in potato. Scientific Reports, 2019, 9, 18380.	3.3	10
48	PAPE (Prefractionation-Assisted Phosphoprotein Enrichment): A Novel Approach for Phosphoproteomic Analysis of Green Tissues from Plants. Proteomes, 2013, 1, 254-274.	3.5	7
49	Possible role of WRKY transcription factors in regulating immunity in Oryza sativa ssp. indica. Physiological and Molecular Plant Pathology, 2021, 114, 101623.	2.5	5
50	A mutation in Asparagineâ€Linked Glycosylation 12 (ALG12) leads to receptor misglycosylation and attenuated responses to multiple microbial elicitors. FEBS Letters, 2020, 594, 2440-2451.	2.8	4
51	Teaching an old dog new tricks: Suppressing activation of specific mitogen-activated kinases as a potential virulence function of the bacterial AvrRpt2 effector protein. Plant Signaling and Behavior, 2016, 11, e1257456.	2.4	3
52	Quantitative Analysis of Microbe-Associated Molecular Pattern (MAMP)-Induced Ca2+ Transients in Plants. Methods in Molecular Biology, 2016, 1398, 331-344.	0.9	3