Joost Thomas van Dongen

List of Publications by Year
in descending order

74 papers	10,046 citations	38742 50 h-index	79698 73 g-index
76 all docs	76 docs citations	76 times ranked	10704 citing authors

#	Article	IF	Citations
1	Remobilization of pollutants during extreme flood events poses severe risks to human and environmental health. Journal of Hazardous Materials, 2022, 421, 126691.	12.4	43
2	Molecular oxygen as a signaling component in plant development. New Phytologist, 2021, 229, 24-35.	7.3	69
3	Comparing straw, compost, and biochar regarding their suitability as agricultural soil amendments to affect soil structure, nutrient leaching, microbial communities, and the fate of pesticides. Science of the Total Environment, 2021, 751, 141607.	8.0	221
4	Volatiles of rhizobacteriaSerratiaandStenotrophomonasalter growth and metabolite composition ofArabidopsis thaliana. Plant Biology, 2019, 21, 109-119.	3.8	16
5	Multiparametric realâ€time sensing of cytosolic physiology links hypoxia responses to mitochondrial electron transport. New Phytologist, 2019, 224, 1668-1684.	7.3	69
6	The ACBP1-RAP2.12 signalling hub: A new perspective on integrative signalling during hypoxia in plants. Plant Signaling and Behavior, 2019, 14, e1651184.	2.4	12
7	HBI1 Mediates the Trade-off between Growth and Immunity through Its Impact on Apoplastic ROS Homeostasis. Cell Reports, 2019, 28, 1670-1678.e3.	6.4	44
8	An apical hypoxic niche sets the pace of shoot meristem activity. Nature, 2019, 569, 714-717.	27.8	137
9	Hypoxic Conditions in Crown Galls Induce Plant Anaerobic Responses That Support Tumor Proliferation. Frontiers in Plant Science, 2019, 10, 56.	3.6	38
10	Oxygen Sensing and Integrative Stress Signaling in Plants. Plant Physiology, 2018, 176, 1131-1142.	4.8	89
11	Low-oxygen response is triggered by an ATP-dependent shift in oleoyl-CoA in <i>Arabidopsis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E12101-E12110.	7.1	55
12	Community recommendations on terminology and procedures used in flooding and low oxygen stress research. New Phytologist, 2017, 214, 1403-1407.	7.3	146
13	Isolation and characterization of three new PGPR and their effects on the growth of <i>Arabidopsis</i> and <i>Datura</i> plants. Journal of Plant Interactions, 2017, 12, 1-6.	2.1	45
14	Comparison of mitochondrial gene expression and polysome loading in different tobacco tissues. Plant Methods, 2017, 13, 112.	4.3	3
15	Oxygen Sensing via the Ethylene Response Transcription Factor RAP2.12 Affects Plant Metabolism and Performance under Both Normoxia and Hypoxia. Plant Physiology, 2016, 172, 141-153.	4.8	82
16	Priming and memory of stress responses in organisms lacking a nervous system. Biological Reviews, 2016, 91, 1118-1133.	10.4	388
17	Mass spectrometryâ€based plant metabolomics: Metabolite responses to abiotic stress. Mass Spectrometry Reviews, 2016, 35, 620-649.	5.4	254
18	Regulation of Primary Metabolism in Response to Low Oxygen Availability as Revealed by Carbon and Nitrogen Isotope Redistribution. Plant Physiology, 2016, 170, 43-56.	4.8	105

#	Article	IF	Citations
19	Redox regulation in shoot growth, SAM maintenance and flowering. Current Opinion in Plant Biology, 2016, 29, 121-128.	7.1	117
20	The stability and nuclear localization of the transcription factor <scp>RAP</scp>2.12 are dynamically regulated by oxygen concentration. Plant, Cell and Environment, 2015, 38, 1094-1103.	5.7	95
21	Oxygen Sensing and Signaling. Annual Review of Plant Biology, 2015, 66, 345-367.	18.7	212
22	Fermentation and alternative oxidase contribute to the action of amino acid biosynthesis-inhibiting herbicides. Journal of Plant Physiology, 2015, 175, 102-112.	3.5	27
23	A Trihelix DNA Binding Protein Counterbalances Hypoxia-Responsive Transcriptional Activation in Arabidopsis. PLoS Biology, 2014, 12, e1001950.	5.6	86
24	Plant cysteine oxidases control the oxygen-dependent branch of the N-end-rule pathway. Nature Communications, 2014, 5, 3425.	12.8	293
25	Differential physiological responses of different rice (Oryza sativa) cultivars to elevated night temperature during vegetative growth. Functional Plant Biology, 2014, 41, 437.	2.1	45
26	Nighttime Sugar Starvation Orchestrates Gibberellin Biosynthesis and Plant Growth in <i>Arabidopsis</i>. Plant Cell, 2013, 25, 3760-3769.	6.6	76
27	Diurnal Changes of Polysome Loading Track Sucrose Content in the Rosette of Wild-Type Arabidopsis and the Starchless <i>pgm</i> Mutant Â Â. Plant Physiology, 2013, 162, 1246-1265.	4.8	133
28	Misexpression of a Chloroplast Aspartyl Protease Leads to Severe Growth Defects and Alters Carbohydrate Metabolism in Arabidopsis Â Â. Plant Physiology, 2012, 160, 1237-1250.	4.8	34
29	Plant-growth promoting effect of newly isolated rhizobacteria varies between two Arabidopsis ecotypes. Plant Signaling and Behavior, 2012, 7, 623-627.	2.4	23
30	Conducting Molecular Biomarker Discovery Studies in Plants. Methods in Molecular Biology, 2012, 918, 127-150.	0.9	6
31	Modification of OsSUT1 gene expression modulates the salt response of rice Oryza sativa cv. Taipei 309. Plant Science, 2012, 182, 101-111.	3.6	60
32	Making sense of low oxygen sensing. Trends in Plant Science, 2012, 17, 129-138.	8.8	465
33	Optical Oxygen Micro- and Nanosensors for Plant Applications. Sensors, 2012, 12, 7015-7032.	3.8	61
34	Microbacterium yannicii sp. nov., isolated from Arabidopsis thaliana roots. International Journal of Systematic and Evolutionary Microbiology, 2012, 62, 822-826.	1.7	19
35	MAPA Distinguishes Genotype-Specific Variability of Highly Similar Regulatory Protein Isoforms in Potato Tuber. Journal of Proteome Research, 2011, 10, 2979-2991.	3.7	42
36	Oxygen sensing in plants is mediated by an N-end rule pathway for protein destabilization. Nature, 2011, 479, 419-422.	27.8	628

#	Article	IF	Citations
37	Regulation of respiration in plants: A role for alternative metabolic pathways. Journal of Plant Physiology, 2011, 168, 1434-1443.	3.5	189
38	Unraveling the role of fermentation in the mode of action of acetolactate synthase inhibitors by metabolic profiling. Journal of Plant Physiology, 2011, 168, 1568-1575.	3.5	30
39	On the origins of nitric oxide. Trends in Plant Science, 2011, 16, 160-168.	8.8	528
40	A Naturally Associated Rhizobacterium of Arabidopsis thaliana Induces a Starvation-Like Transcriptional Response while Promoting Growth. PLoS ONE, 2011, 6, e29382.	2.5	44
41	Hypoxia responsive gene expression is mediated by various subsets of transcription factors and miRNAs that are determined by the actual oxygen availability. New Phytologist, 2011, 190, 442-456.	7.3	149
42	Comparative analysis between plant species of transcriptional and metabolic responses to hypoxia. New Phytologist, 2011, 190, 472-487.	7.3	157
43	Modeling alternatives for interpreting the change in oxygenâ€consumption rates during hypoxic conditions. New Phytologist, 2011, 190, 273-276.	7.3	12
44	Potassium (K ⁺) gradients serve as a mobile energy source in plant vascular tissues. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 864-869.	7.1	255
45	The Composition of Plant Mitochondrial Supercomplexes Changes with Oxygen Availability. Journal of Biological Chemistry, 2011, 286, 43045-43053.	3.4	82
46	The K⁺ battery-regulating Arabidopsis K⁺ channel AKT2 is under the control of multiple post-translational steps. Plant Signaling and Behavior, 2011, 6, 558-562.	2.4	30
47	HRE-Type Genes are Regulated by Growth-Related Changes in Internal Oxygen Concentrations During the Normal Development of Potato (Solanum tuberosum) Tubers. Plant and Cell Physiology, 2011, 52, 1957-1972.	3.1	25
48	Analysis of alanine aminotransferase in various organs of soybean (Glycine max) and in dependence of different nitrogen fertilisers during hypoxic stress. Amino Acids, 2010, 39, 1043-1053.	2.7	91
49	Time course effects on primary metabolism of potato (Solanum tuberosum) tuber tissue after mechanical impact. Postharvest Biology and Technology, 2010, 56, 109-116.	6.0	32
50	HRE1 and HRE2, two hypoxia-inducible ethylene response factors, affect anaerobic responses in Arabidopsis thaliana. Plant Journal, 2010, 62, 302-315.	5.7	384
51	Discovering plant metabolic biomarkers for phenotype prediction using an untargeted approach. Plant Biotechnology Journal, 2010, 8, 900-911.	8.3	113
52	Glycolysis and the Tricarboxylic Acid Cycle Are Linked by Alanine Aminotransferase during Hypoxia Induced by Waterlogging of <i>Lotus japonicus</i>. Plant Physiology, 2010, 152, 1501-1513.	4.8	346
53	Transcript and metabolite profiling of the adaptive response to mild decreases in oxygen concentration in the roots of arabidopsis plants. Annals of Botany, 2009, 103, 269-280.	2.9	197
54	Use of reverseâ€phase liquid chromatography, linked to tandem mass spectrometry, to profile the Calvin cycle and other metabolic intermediates in Arabidopsis rosettes at different carbon dioxide concentrations. Plant Journal, 2009, 59, 826-839.	5.7	216

#	Article	IF	Citations
55	Alternative oxidase: a defence against metabolic fluctuations?. Physiologia Plantarum, 2009, 137, 371-382.	5.2	134
56	Regulation of respiration when the oxygen availability changes. Physiologia Plantarum, 2009, 137, 383-391.	5.2	160
57	Regulation of Respiration and Fermentation to Control the Plant Internal Oxygen Concentration. Plant Physiology, 2009, 149, 1087-1098.	4.8	240
58	A rapid approach for phenotypeâ€screening and database independent detection of cSNP/protein polymorphism using mass accuracy precursor alignment. Proteomics, 2008, 8, 4214-4225.	2.2	78
59	The effect of geometry on three-dimensional tissue growth. Journal of the Royal Society Interface, 2008, 5, 1173-1180.	3.4	413
60	Decreased Expression of Cytosolic Pyruvate Kinase in Potato Tubers Leads to a Decline in Pyruvate Resulting in an in Vivo Repression of the Alternative Oxidase Â. Plant Physiology, 2008, 148, 1640-1654.	4.8	73
61	Combined Transcript and Metabolite Profiling of Arabidopsis Leaves Reveals Fundamental Effects of the Thiol-Disulfide Status on Plant Metabolism Â Â. Plant Physiology, 2006, 141, 412-422.	4.8	93
62	SNF1-related kinases allow plants to tolerate herbivory by allocating carbon to roots. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 12935-12940.	7.1	312
63	Cold-induced repression of the rice anther-specific cell wall invertase gene OSINV4 is correlated with sucrose accumulation and pollen sterility. Plant, Cell and Environment, 2005, 28, 1534-1551.	5.7	309
64	Symbiotic Leghemoglobins Are Crucial for Nitrogen Fixation in Legume Root Nodules but Not for General Plant Growth and Development. Current Biology, 2005, 15, 531-535.	3.9	350
65	Inhibition of de Novo Pyrimidine Synthesis in Growing Potato Tubers Leads to a Compensatory Stimulation of the Pyrimidine Salvage Pathway and a Subsequent Increase in Biosynthetic Performance. Plant Cell, 2005, 17, 2077-2088.	6.6	86
66	New challenges in biophotonics: laser-based fluoroimmuno analysis and in-vivo optical oxygen monitoring. , 2005, , .		6
67	An Optical Multifrequency Phase-Modulation Method Using Microbeads for Measuring Intracellular Oxygen Concentrations in Plants. Biophysical Journal, 2005, 89, 1339-1345.	0.5	97
68	Phloem Import and Storage Metabolism Are Highly Coordinated by the Low Oxygen Concentrations within Developing Wheat Seeds. Plant Physiology, 2004, 135, 1809-1821.	4.8	84
69	Aquaporins. , 2004, , 109-120.		1
70	Members of the aquaporin family in the developing pea seed coat include representatives of the PIP, TIP, and NIP subfamilies. Plant Molecular Biology, 2003, 53, 655-667.	3.9	78
71	Structure of the Developing Pea Seed Coat and the Post-phloem Transport Pathway of Nutrients. Annals of Botany, 2003, 91, 729-737.	2.9	90
72	Lipid Storage Metabolism Is Limited by the Prevailing Low Oxygen Concentrations within Developing Seeds of Oilseed Rape. Plant Physiology, 2003, 133, 2048-2060.	4.8	116

#	Article	IF	Citations
73	Phloem Metabolism and Function Have to Cope with Low Internal Oxygen. Plant Physiology, 2003, 131, 1529-1543.	4.8	186
74	Electrodiffusional Uptake of Organic Cations by Pea Seed Coats. Further Evidence for Poorly Selective Pores in the Plasma Membrane of Seed Coat Parenchyma Cells. Plant Physiology, 2001, 126, 1688-1697.	4.8	19