Dietrich Ernst

List of Publications by Year
in descending order

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68 papers	3,124 citations	159585 30 h-index	155660 55 g-index
68 all docs	68 docs citations	68 times ranked	3592 citing authors

#	Article	IF	Citations
1	Ozone: An abiotic elicitor of plant defence reactions. Trends in Plant Science, 1998, 3, 47-50.	8.8	328
2	Tissue localization of u.v.â€Bâ€screening pigments and of chalcone synthase mRNA in needles of Scots pine seedlings. New Phytologist, 1996, 132, 247-258.	7.3	180
3	Large-Scale Phenomics Identifies Primary and Fine-Tuning Roles for CRKs in Responses Related to Oxidative Stress. PLoS Genetics, 2015, 11, e1005373.	3.5	167
4	A simple and efficient protocol for isolation of functional RNA from plant tissues rich in secondary metabolites. Plant Molecular Biology Reporter, 2000, 18, 33-39.	1.8	158
5	Biochemical Plant Responses to Ozone. Plant Physiology, 1992, 99, 1321-1328.	4.8	156
6	Ozone induction of ethylene emission in tomato plants: regulation by differential accumulation of transcripts for the biosynthetic enzymes. Plant Journal, 1997, 12, 1151-1162.	5.7	133
7	An ozone-responsive region of the grapevine resveratrol synthase promoter differs from the basal pathogen-responsive sequence. Plant Molecular Biology, 1997, 34, 417-426.	3.9	121
8	Crosstalk and differential response to abiotic and biotic stressors reflected at the transcriptional level of effector genes from secondary metabolism. Plant Molecular Biology, 2004, 54, 817-835.	3.9	111
9	Ethylenediurea (EDU): A research tool for assessment and verification of the effects of ground level ozone on plants under natural conditions. Environmental Pollution, 2011, 159, 3283-3293.	7.5	101
10	Common ragweed (Ambrosia artemisiifolia L.): allergenicity and molecular characterization of pollen after plant exposure to elevated NO₂. Plant, Cell and Environment, 2016, 39, 147-164.	5.7	88
11	Gene Induction of Stilbene Biosynthesis in Scots Pine in Response to Ozone Treatment, Wounding, and Fungal Infection. Plant Physiology, 2000, 124, 865-872.	4.8	84
12	Molecular cloning, sequence analysis and elicitor-/ozone-induced accumulation of cinnamyl alcohol dehydrogenase from Norway spruce (Picea abies L.). Plant Molecular Biology, 1993, 23, 145-156.	3.9	80
13	Ragweed (Ambrosia artemisiifolia) pollen allergenicity: SuperSAGE transcriptomic analysis upon elevated CO2 and drought stress. BMC Plant Biology, 2014, 14, 176.	3.6	80
14	Isolation of functional RNA from plant tissues rich in phenolic compounds. Analytical Biochemistry, 1991, 197, 91-95.	2.4	74
15	Molecular cloning and functional expression of a stress-induced multifunctional O-methyltransferase with pinosylvin methyltransferase activity from Scots pine (Pinus sylvestris L.). Plant Molecular Biology, 2000, 44, 733-745.	3.9	72
16	Pollen-Associated Microbiome Correlates with Pollution Parameters and the Allergenicity of Pollen. PLoS ONE, 2016, 11, e0149545.	2.5	70
17	Differential transcript induction of parsley pathogenesis-related proteins and of a small heat shock protein by ozone and heat shock. Plant Molecular Biology, 1997, 33, 343-350.	3.9	64
18	PAR modulation of the UV-dependent levels of flavonoid metabolites in Arabidopsis thaliana (L.) Heynh. leaf rosettes: cumulative effects after a whole vegetative growth period. Protoplasma, 2010, 243, 95-103.	2.1	59

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19	Caesiumâ€affected gene expression in Arabidopsis thaliana. New Phytologist, 2005, 165, 747-754.	7.3	58
20	Molecular and Immunological Characterization of Ragweed (Ambrosia artemisiifolia L.) Pollen after Exposure of the Plants to Elevated Ozone over a Whole Growing Season. PLoS ONE, 2013, 8, e61518.	2.5	58
21	Lowâ€level radiocaesium exposure alters gene expression in roots of Arabidopsis. New Phytologist, 2005, 168, 141-148.	7.3	47
22	Effects of NO2 and Ozone on Pollen Allergenicity. Frontiers in Plant Science, 2016, 7, 91.	3.6	44
23	Induction of stilbene synthase and cinnamyl alcohol dehydrogenase mRNAs in Scots pine (Pinus) Tj ETQq1 1 0.784314 rgBT /Overloc	3.2	41
24	Nitric oxide burst and nitric oxide-dependent gene induction in plants. Plant Physiology and Biochemistry, 2002, 40, 625-631.	5.8	40
25	Ozone-induced gene expression occurs via ethylene-dependent and -independent signalling. Plant Molecular Biology, 2003, 51, 599-607.	3.9	38
26	Effects of glyphosate on the bacterial community associated with roots of transgenic Roundup ReadyÂ® soybean. European Journal of Soil Biology, 2014, 63, 41-48.	3.2	37
27	Molecular cloning of ozone-inducible protein from Pinus sylvestris L. with high sequence similarity to vertebrate 3-hydroxy-3-methylglutaryl-CoA-synthase. Biochimica Et Biophysica Acta Gene Regulatory Mechanisms, 1997, 1350, 247-252.	2.4	36
28	Oxidative stress and plant secondary metabolism: 6â€³-O-malonylapiin in parsley. Phytochemistry, 1993, 34, 687-691.	2.9	35
29	Ragweed plants grown under elevated CO₂ levels produce pollen which elicit stronger allergic lung inflammation. Allergy: European Journal of Allergy and Clinical Immunology, 2021, 76, 1718-1730.	5.7	35
30	Ozone affects shikimate pathway transcripts and monomeric lignin composition in European beech (Fagus sylvatica L.). European Journal of Forest Research, 2009, 128, 109-116.	2.5	33
31	Ozone affects shikimate pathway genes and secondary metabolites in saplings of European beech (Fagus sylvatica L.) grown under greenhouse conditions. Trees - Structure and Function, 2009, 23, 539-553.	1.9	31
32	Pollen of common ragweed (Ambrosia artemisiifolia L.): Illumina-based de novo sequencing and differential transcript expression upon elevated NO2/O3. Environmental Pollution, 2017, 224, 503-514.	7.5	31
33	Ascorbate promotes emission of mercury vapour from plants. Plant, Cell and Environment, 2005, 28, 1487-1495.	5.7	27
34	Transcript responses in leaves of ozone-treated beech saplings seasons at an outdoor free air model fumigation site over two growing seasons. Plant and Soil, 2009, 323, 61-74.	3.7	26
35	Ethylene- and ozone-induced regulation of a grapevine resveratrol synthase gene: different responsive promoter regions. Plant Physiology and Biochemistry, 2002, 40, 865-870.	5.8	24
36	Ozone fumigation (twice ambient) reduces leaf infestation following natural and artificial inoculation by the endophytic fungus Apiognomonia errabunda of adult European beech trees. Environmental Pollution, 2010, 158, 1043-1050.	7.5	22

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37	Cloning and characterization of two members of the chalcone synthase gene family from walnut. Plant Physiology and Biochemistry, 1999, 37, 721-730.	5.8	21
38	Chalcone synthase activity and polyphenolic compounds of shoot tissues from adult and rejuvenated walnut trees. Planta, 1997, 203, 275-282.	3.2	20
39	Comparison of two ecotypes of the metal hyperaccumulator Thlaspi caerulescens (J. & C. PRESL) at the transcriptional level. Protoplasma, 2010, 239, 81-93.	2.1	20
40	ÃŸ-1,3-Glucanase mRNA is Locally, but not Systemically Induced in Nicotiana Tabacum L. cv. BEL W3 after Ozone Fumigation. Journal of Plant Physiology, 1996, 148, 215-221.	3.5	19
41	Ozone- and ethylene-induced regulation of a grapevine resveratrol synthase promoter in transgenic tobacco. Acta Physiologiae Plantarum, 1997, 19, 467-474.	2.1	19
42	[47] Ozone effects on plant defense. Methods in Enzymology, 2000, 319, 520-535.	1.0	18
43	Transcriptional profiling of summer wheat, grown under different realistic UV-B irradiation regimes. Journal of Plant Physiology, 2007, 164, 913-922.	3.5	18
44	Effect of exogenous cytokinins on growth and somatic embryogenesis in anise cells (Pimpinella) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 4	3.2	17
45	Quantification of mRNAs and Housekeeping Gene Selection for Quantitative Real-Time RT-PCR Normalization in European Beech (Fagus sylvatica L.) during Abiotic and Biotic Stress. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2008, 63, 574-582.	1.4	17
46	A novel method for in vitro culture of plants: Cultivation of barley in a floating hydroponic system. Plant Molecular Biology Reporter, 2003, 21, 405-409.	1.8	16
47	Phytoreduction and volatilization of mercury by ascorbate in Arabidopsis thaliana, European beech and Norway spruce. Applied Geochemistry, 2008, 23, 494-502.	3.0	16
48	Transcription Profiling of the Metal-hyperaccumulator Thlaspi caerulescens (J. & C. PRESL). Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2005, 60, 216-223.	1.4	15
49	Experimental â€˜omicsâ€™ data in tree research: facing complexity. Trees - Structure and Function, 2012, 26, 1723-1735.	1.9	15
50	Transcriptional signatures in leaves of adult European beech trees (Fagus sylvatica L.) in an experimentally enhanced free air ozone setting. Environmental Pollution, 2010, 158, 977-982.	7.5	14
51	Changes of cytokinin nucleotides in an anise cell culture (Pimpinella anisum L.) during growth and embryogenesis. Plant Cell Reports, 1985, 4, 140-143.	5.6	13
52	Mercuric-Ion-Induced Gene Expression inArabidopsis thaliana. International Journal of Phytoremediation, 1999, 1, 153-167.	3.1	11
53	Pollen and <scp>UV</scp>â€B radiation strongly affect the inflammasome response in human primary keratinocytes. Experimental Dermatology, 2016, 25, 991-993.	2.9	9
54	The cinnamyl alcohol dehydrogenase gene structure in Picea abies (L.) Karst.: genomic sequences, Southern hybridization, genetic analysis and phylogenetic relationships. Trees - Structure and Function, 1998, 12, 453-463.	1.9	8

#	Article	IF	Citations
55	Molecular Investigations of the Soil, Rhizosphere and Transgenic Glufosinate-Resistant Rape and Maize Plants in Combination with Herbicide (Basta^{Â®}) Application under Field Conditions. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2008, 63, 864-872.	1.4	8
56	Large-scale protein analysis of European beech trees following four vegetation periods of twice ambient ozone exposure. Journal of Proteomics, 2014, 109, 417-435.	2.4	8
57	The cinnamyl alcohol dehydrogenase gene structure in. Trees - Structure and Function, 1998, 12, 453.	1.9	8
58	Identification of a new member of the WRKY family in tobacco. Involved in ozone-induced gene regulation?. Acta Physiologiae Plantarum, 2006, 28, 117-125.	2.1	6
59	Early changes in mRNA populations in leaves of ultraviolet-B-treated European beech (Fagus sylvatica) Tj ETQq1 1 0.784314 rgBT /Ove	2.1	4
60	Integrated Studies on Abiotic Stress Defence in Trees. Developments in Environmental Science, 2013, , 289-307.	0.5	4
61	cis Elements and Transcription Factors Regulating Gene Promoters in Response to Environmental Stress. Ecological Studies, 2004, , 151-176.	1.2	4
62	Gene expression analysis in the green macroalga Acrosiphonia arcta (Dillw.) J. Ag.: Method optimization and influence of ultraviolet radiation. Phycological Research, 2012, 60, 151-160.	1.6	3
63	Ozone and UV-B Responses of Trees and the Question of Forest Sustainability. Tree Physiology, 2001, , 157-166.	2.5	2
64	Induction of pathogen defence genes in parsley (Petroselinum crispum L.) plants by ozone. Proceedings of the Royal Society of Edinburgh Section B Biological Sciences, 1994, 102, 63-74.	0.2	1
65	Heteroplasmy and atrazine resistance in Chenopodium album and Senecio vulgaris. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2016, 71, 267-272.	1.4	1
66	Effects of high levels of CO2 on gene expression in two different genotypes of Fagus sylvatica. BMC Proceedings, 2011, 5, .	1.6	0
67	Tropospheric Ozone. Tree Physiology, 2002, , 307-324.	2.5	0
68	Ambrosia artemisiifolia: Ein â€žneuesâ€œ Kraut mit hohem allergenen Potenzial. , 0, , .		0