

Christophe Dunand

List of Publications by Year in descending order

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97
papers

10,715
citations

53794

45
h-index

38395

95
g-index

103
all docs

103
docs citations

103
times ranked

13283
citing authors

#	ARTICLE	IF	CITATIONS
1	Peroxidases have more functions than a Swiss army knife. <i>Plant Cell Reports</i> , 2005, 24, 255-265.	5.6	830
2	Performing the paradoxical: how plant peroxidases modify the cell wall. <i>Trends in Plant Science</i> , 2004, 9, 534-540.	8.8	737
3	The genome of <i>Eucalyptus grandis</i> . <i>Nature</i> , 2014, 510, 356-362.	27.8	725
4	A burst of plant NADPH oxidases. <i>Trends in Plant Science</i> , 2012, 17, 9-15.	8.8	581
5	Distribution of superoxide and hydrogen peroxide in <i>Arabidopsis</i> root and their influence on root development: possible interaction with peroxidases. <i>New Phytologist</i> , 2007, 174, 332-341.	7.3	491
6	The Chara Genome: Secondary Complexity and Implications for Plant Terrestrialization. <i>Cell</i> , 2018, 174, 448-464.e24.	28.9	420
7	Glutathione peroxidase family " an evolutionary overview. <i>FEBS Journal</i> , 2008, 275, 3959-3970.	4.7	400
8	Primary transcripts of microRNAs encode regulatory peptides. <i>Nature</i> , 2015, 520, 90-93.	27.8	370
9	Specific functions of individual class III peroxidase genes. <i>Journal of Experimental Botany</i> , 2009, 60, 391-408.	4.8	354
10	The class III peroxidase multigenic family in rice and its evolution in land plants. <i>Phytochemistry</i> , 2004, 65, 1879-1893.	2.9	347
11	The MUR3 Gene of <i>Arabidopsis</i> Encodes a Xyloglucan Galactosyltransferase That Is Evolutionarily Related to Animal Exostosins. <i>Plant Cell</i> , 2003, 15, 1662-1670.	6.6	304
12	Algal ancestor of land plants was preadapted for symbiosis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 13390-13395.	7.1	292
13	Reactive Oxygen Species during Plant-Microorganism Early Interactions. <i>Journal of Integrative Plant Biology</i> , 2010, 52, 195-204.	8.5	275
14	Origin of strigolactones in the green lineage. <i>New Phytologist</i> , 2012, 195, 857-871.	7.3	258
15	Large-scale genome sequencing of mycorrhizal fungi provides insights into the early evolution of symbiotic traits. <i>Nature Communications</i> , 2020, 11, 5125.	12.8	258
16	Roles of cell wall peroxidases in plant development. <i>Phytochemistry</i> , 2015, 112, 15-21.	2.9	233
17	Insight into trade-off between wood decay and parasitism from the genome of a fungal forest pathogen. <i>New Phytologist</i> , 2012, 194, 1001-1013.	7.3	210
18	Molecular link between auxin and ROS-mediated polar growth. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 5289-5294.	7.1	201

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19	PeroxiBase: The peroxidase database. <i>Phytochemistry</i> , 2007, 68, 1605-1611.	2.9	187
20	Two cell wall associated peroxidases from <i>Arabidopsis</i> influence root elongation. <i>Planta</i> , 2006, 223, 965-974.	3.2	166
21	PeroxiBase: a database with new tools for peroxidase family classification. <i>Nucleic Acids Research</i> , 2009, 37, D261-D266.	14.5	141
22	PeroxiBase: a database for large-scale evolutionary analysis of peroxidases. <i>Nucleic Acids Research</i> , 2012, 41, D441-D444.	14.5	141
23	The peroxidase-cyclooxygenase superfamily: Reconstructed evolution of critical enzymes of the innate immune system. <i>Proteins: Structure, Function and Bioinformatics</i> , 2008, 72, 589-605.	2.6	140
24	CaM and CML emergence in the green lineage. <i>Trends in Plant Science</i> , 2015, 20, 483-489.	8.8	137
25	Expression analysis of the <i>Arabidopsis</i> peroxidase multigenic family. <i>Phytochemistry</i> , 2004, 65, 1331-1342.	2.9	130
26	Waving and skewing: how gravity and the surface of growth media affect root development in <i>Arabidopsis</i> . <i>New Phytologist</i> , 2007, 176, 37-43.	7.3	109
27	Prokaryotic origins of the non-animal peroxidase superfamily and organelle-mediated transmission to eukaryotes. <i>Genomics</i> , 2007, 89, 567-579.	2.9	100
28	<i>Arabidopsis</i> seed mucilage secretory cells: regulation and dynamics. <i>Trends in Plant Science</i> , 2015, 20, 515-524.	8.8	95
29	The class III peroxidase PRX17 is a direct target of the MADS-box transcription factor AGAMOUS-LIKE15 (AGL15) and participates in lignified tissue formation. <i>New Phytologist</i> , 2017, 213, 250-263.	7.3	88
30	Phylogenetic distribution of catalase-peroxidases: Are there patches of order in chaos?. <i>Gene</i> , 2007, 397, 101-113.	2.2	86
31	Effects of low temperature plasmas and plasma activated waters on <i>Arabidopsis thaliana</i> germination and growth. <i>PLoS ONE</i> , 2018, 13, e0195512.	2.5	85
32	Identification of a hydrogen peroxide signalling pathway in the control of light-dependent germination in <i>Arabidopsis</i> . <i>Planta</i> , 2013, 238, 381-395.	3.2	77
33	Evolution and expression of class III peroxidases. <i>Archives of Biochemistry and Biophysics</i> , 2010, 500, 58-65.	3.0	73
34	RedoxiBase: A database for ROS homeostasis regulated proteins. <i>Redox Biology</i> , 2019, 26, 101247.	9.0	73
35	PeroxiBase: A class III plant peroxidase database. <i>Phytochemistry</i> , 2006, 67, 534-539.	2.9	68
36	Cell growth and differentiation in <i>Arabidopsis</i> epidermal cells. <i>Journal of Experimental Botany</i> , 2007, 58, 3829-3840.	4.8	62

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37	Ascorbate peroxidase-related (APxâ€) is a new hemeâ€containing protein functionally associated with ascorbate peroxidase but evolutionarily divergent. <i>New Phytologist</i> , 2011, 191, 234-250.	7.3	57
38	Pectin Demethylesterification Generates Platforms that Anchor Peroxidases to Remodel Plant Cell Wall Domains. <i>Developmental Cell</i> , 2019, 48, 261-276.e8.	7.0	57
39	Plant Photoreceptors: Phylogenetic Overview. <i>Journal of Molecular Evolution</i> , 2005, 61, 559-569.	1.8	56
40	The Arabidopsis thaliana Class III Peroxidase AtPRX71 Negatively Regulates Growth under Physiological Conditions and in Response to Cell Wall Damage.. <i>Plant Physiology</i> , 2015, 169, pp.01464.2015.	4.8	56
41	Molecular and biochemical aspects of plant terrestrialization. <i>Perspectives in Plant Ecology, Evolution and Systematics</i> , 2012, 14, 49-59.	2.7	55
42	Highlighting reactive oxygen species as multitaskers in root development. <i>IScience</i> , 2021, 24, 101978.	4.1	53
43	Transcriptome analysis of various flower and silique development stages indicates a set of class III peroxidase genes potentially involved in pod shattering in Arabidopsis thaliana. <i>BMC Genomics</i> , 2010, 11, 528.	2.8	51
44	Patterning of Arabidopsis epidermal cells: epigenetic factors regulate the complex epidermal cell fate pathway. <i>Trends in Plant Science</i> , 2006, 11, 601-609.	8.8	50
45	Morphological and physiological traits of three major Arabidopsis thaliana accessions. <i>Journal of Plant Physiology</i> , 2007, 164, 980-992.	3.5	50
46	An anionic class III peroxidase from zucchini may regulate hypocotyl elongation through its auxin oxidase activity. <i>Planta</i> , 2009, 229, 823-836.	3.2	48
47	Reconstructing trait evolution in plant evoâ€devo studies. <i>Current Biology</i> , 2019, 29, R1110-R1118.	3.9	47
48	Genome-Wide Characterization and Expression Profiling of the AUXIN RESPONSE FACTOR (ARF) Gene Family in Eucalyptus grandis. <i>PLoS ONE</i> , 2014, 9, e108906.	2.5	45
49	<i>Arabidopsis thaliana</i> root cell wall proteomics: Increasing the proteome coverage using a combinatorial peptide ligand library and description of unexpected Hyp in peroxidase amino acid sequences. <i>Proteomics</i> , 2016, 16, 491-503.	2.2	45
50	Explosive Tandem and Segmental Duplications of Multigenic Families in Eucalyptus grandis. <i>Genome Biology and Evolution</i> , 2015, 7, 1068-1081.	2.5	42
51	Purification and identification of a Ca ²⁺ -pectate binding peroxidase from Arabidopsis leaves. <i>Phytochemistry</i> , 2004, 65, 307-312.	2.9	41
52	New insights of low-temperature plasma effects on germination of three genotypes of Arabidopsis thaliana seeds under osmotic and saline stresses. <i>Scientific Reports</i> , 2019, 9, 8649.	3.3	40
53	PeroxiBase: a powerful tool to collect and analyse peroxidase sequences from Viridiplantae. <i>Journal of Experimental Botany</i> , 2009, 60, 453-459.	4.8	39
54	Identification and characterisation of Ca ²⁺ -pectate binding peroxidases in Arabidopsis thaliana. <i>Journal of Plant Physiology</i> , 2002, 159, 1165-1171.	3.5	36

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55	CsPrx25, a class III peroxidase in <i>Citrus sinensis</i> , confers resistance to citrus bacterial canker through the maintenance of ROS homeostasis and cell wall lignification. <i>Horticulture Research</i> , 2020, 7, 192.	6.3	35
56	Proline Hydroxylation in Cell Wall Proteins: Is It Yet Possible to Define Rules?. <i>Frontiers in Plant Science</i> , 2017, 8, 1802.	3.6	34
57	Genome-Wide Analysis of the AP2/ERF Family in <i>Eucalyptus grandis</i> : An Intriguing Over-Representation of Stress-Responsive DREB1/CBF Genes. <i>PLoS ONE</i> , 2015, 10, e0121041.	2.5	33
58	An enlarged cell wall proteome of <i>Arabidopsis thaliana</i> rosettes. <i>Proteomics</i> , 2016, 16, 3183-3187.	2.2	31
59	Cell wall proteome analysis of <i>Arabidopsis thaliana</i> mature stems. <i>Proteomics</i> , 2017, 17, 1600449.	2.2	27
60	Cell wall modifications of two <i>Arabidopsis thaliana</i> ecotypes, Col and Sha, in response to sub-optimal growth conditions: An integrative study. <i>Plant Science</i> , 2017, 263, 183-193.	3.6	26
61	Seed mucilage evolution: Diverse molecular mechanisms generate versatile ecological functions for particular environments. <i>Plant, Cell and Environment</i> , 2020, 43, 2857-2870.	5.7	25
62	Apoplastic class III peroxidases PRX62 and PRX69 promote <i>Arabidopsis</i> root hair growth at low temperature. <i>Nature Communications</i> , 2022, 13, 1310.	12.8	25
63	Automatic multigenic family annotation: risks and solutions. <i>Trends in Genetics</i> , 2014, 30, 323-325.	6.7	24
64	Expression of a peroxidase gene in zucchini in relation with hypocotyl growth. <i>Plant Physiology and Biochemistry</i> , 2003, 41, 805-811.	5.8	23
65	GECA: a fast tool for gene evolution and conservation analysis in eukaryotic protein families. <i>Bioinformatics</i> , 2012, 28, 1398-1399.	4.1	21
66	Expression of <i>PRX36</i> , <i>PMEI6</i> and <i>SBT1.7</i> is controlled by complex transcription factor regulatory networks for proper seed coat mucilage extrusion. <i>Plant Signaling and Behavior</i> , 2014, 9, e977734.	2.4	21
67	Coordination of five class III peroxidase-encoding genes for early germination events of <i>Arabidopsis thaliana</i> . <i>Plant Science</i> , 2020, 298, 110565.	3.6	20
68	Complementarity of medium-throughput in situ RNA hybridization and tissue-specific transcriptomics: case study of <i>Arabidopsis</i> seed development kinetics. <i>Scientific Reports</i> , 2016, 6, 24644.	3.3	17
69	Global analysis of non-animal peroxidases provides insights into the evolution of this gene family in the green lineage. <i>Journal of Experimental Botany</i> , 2020, 71, 3350-3360.	4.8	15
70	Class III Peroxidases PRX01, PRX44, and PRX73 Control Root Hair Growth in <i>Arabidopsis thaliana</i> . <i>International Journal of Molecular Sciences</i> , 2022, 23, 5375.	4.1	15
71	Cell-wall microdomain remodeling controls crucial developmental processes. <i>Trends in Plant Science</i> , 2022, 27, 1033-1048.	8.8	14
72	Characterization of the binding of β -L-Fuc (1 \rightarrow 2)- β -D-Gal (1 \rightarrow), a xyloglucan signal, in blackberry protoplasts. <i>Plant Science</i> , 2000, 151, 183-192.	3.6	13

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73	Localization of Superoxide in the Root Apex of <i>Arabidopsis</i> . <i>Plant Signaling and Behavior</i> , 2007, 2, 131-132.	2.4	13
74	Ascorbate peroxidase-related (APx-R) is not a duplicable gene. <i>Plant Signaling and Behavior</i> , 2011, 6, 1908-1913.	2.4	13
75	In silico definition of new ligninolytic peroxidase sub-classes in fungi and putative relation to fungal life style. <i>Scientific Reports</i> , 2019, 9, 20373.	3.3	13
76	Divergent evolutionary lines of fungal cytochrome c peroxidases belonging to the superfamily of bacterial, fungal and plant heme peroxidases. <i>FEBS Letters</i> , 2006, 580, 6655-6664.	2.8	12
77	Transcriptomic and cell wall proteomic datasets of rosettes and floral stems from five <i>Arabidopsis thaliana</i> ecotypes grown at optimal or sub-optimal temperature. <i>Data in Brief</i> , 2019, 27, 104581.	1.0	11
78	Phenotypic Trait Variation as a Response to Altitude-Related Constraints in <i>Arabidopsis</i> Populations. <i>Frontiers in Plant Science</i> , 2019, 10, 430.	3.6	11
79	Expression analysis of the <i>Arabidopsis</i> peroxidase multigenic family. <i>Phytochemistry</i> , 2004, 65, 1331-1331.	2.9	10
80	Plant Cell Wall Proteins and Development. <i>International Journal of Molecular Sciences</i> , 2020, 21, 2731.	4.1	10
81	A powerful framework for an integrative study with heterogeneous omics data: from univariate statistics to multi-block analysis. <i>Briefings in Bioinformatics</i> , 2021, 22, .	6.5	10
82	Phenotyping and cell wall polysaccharide composition dataset of five <i>Arabidopsis</i> ecotypes grown at optimal or sub-optimal temperatures. <i>Data in Brief</i> , 2019, 25, 104318.	1.0	7
83	The Class III Peroxidase Encoding Gene <i>AtPrx62</i> Positively and Spatiotemporally Regulates the Low pH-Induced Cell Death in <i>Arabidopsis thaliana</i> Roots. <i>International Journal of Molecular Sciences</i> , 2020, 21, 7191.	4.1	7
84	An Integrative Study Showing the Adaptation to Sub-Optimal Growth Conditions of Natural Populations of <i>Arabidopsis thaliana</i> : A Focus on Cell Wall Changes. <i>Cells</i> , 2020, 9, 2249.	4.1	7
85	Mixotrophy in aquatic plants, an overlooked ability. <i>Trends in Plant Science</i> , 2022, 27, 147-157.	8.8	7
86	Global Evolutionary Analysis of 11 Gene Families Part of Reactive Oxygen Species (ROS) Gene Network in Four <i>Eucalyptus</i> Species. <i>Antioxidants</i> , 2020, 9, 257.	5.1	6
87	Myxospermy Evolution in Brassicaceae: A Highly Complex and Diverse Trait with <i>Arabidopsis</i> as an Uncommon Model. <i>Cells</i> , 2021, 10, 2470.	4.1	6
88	Class III Peroxidases in Response to Multiple Abiotic Stresses in <i>Arabidopsis thaliana</i> Pyrenean Populations. <i>International Journal of Molecular Sciences</i> , 2022, 23, 3960.	4.1	6
89	Transfection of DNA from Bacteria to Human Cells in Culture: A Possible Role in Oncogenesis. <i>Annals of the New York Academy of Sciences</i> , 2004, 1022, 195-201.	3.8	5
90	The Cell Wall PAC (Proline-Rich, Arabinogalactan Proteins, Conserved Cysteines) Domain-Proteins Are Conserved in the Green Lineage. <i>International Journal of Molecular Sciences</i> , 2020, 21, 2488.	4.1	5

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91	Ethylene Signaling Causing Tolerance of Arabidopsis thaliana Roots to Low pH Stress is Linked to Class III Peroxidase Activity. <i>Journal of Plant Growth Regulation</i> , 2021, 40, 116-125.	5.1	5
92	Effects of Dielectric Barrier Ambient Air Plasma on Two Brassicaceae Seeds: Arabidopsis thaliana and Camelina sativa. <i>International Journal of Molecular Sciences</i> , 2021, 22, 9923.	4.1	3
93	APETALA3-nuclease hybrid protein: a potential tool for APETALA3 target gene mutagenesis. <i>Plant Science</i> , 1999, 148, 19-30.	3.6	2
94	Medium-Throughput RNA In Situ Hybridization of Serial Sections from Paraffin-Embedded Tissue Microarrays. <i>Methods in Molecular Biology</i> , 2019, 1933, 99-130.	0.9	2
95	Editorial: Co-Evolution of Plant Cell Wall Polymers. <i>Frontiers in Plant Science</i> , 2020, 11, 598299.	3.6	2
96	Automatic Prediction and Annotation: There Are Strong Biases for Multigenic Families. <i>Frontiers in Genetics</i> , 2021, 12, 697477.	2.3	2
97	Editorial for Special Issue: Research on Plant Cell Wall Biology. <i>Cells</i> , 2022, 11, 1480.	4.1	0