Christophe Dunand

List of Publications by Year in Descending Order

92 papers	7,711 citations	40 h-index	87 g-index
103 ext. papers	9,524 ext. citations	8.1 avg, IF	5.91 L-index

#	Paper	IF	Citations
92	Apoplastic class III peroxidases PRX62 and PRX69 promote Arabidopsis root hair growth at low temperature.. *Nature Communications*, **2022**, 13, 1310	17.4	1
91	Class III Peroxidases PRX01, PRX44, and PRX73 Control Root Hair Growth in Arabidopsis thaliana. *International Journal of Molecular Sciences*, **2022**, 23, 5375	6.3	0
90	Ethylene Signaling Causing Tolerance of Arabidopsis thaliana Roots to Low pH Stress is Linked to Class III Peroxidase Activity. *Journal of Plant Growth Regulation*, **2021**, 40, 116-125	4.7	2
89	A powerful framework for an integrative study with heterogeneous omics data: from univariate statistics to multi-block analysis. *Briefings in Bioinformatics*, **2021**, 22,	13.4	2
88	Highlighting reactive oxygen species as multitaskers in root development. *IScience*, **2021**, 24, 101978	6.1	17
87	Effects of Dielectric Barrier Ambient Air Plasma on Two Brassicaceae Seeds: and. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	1
86	Automatic Prediction and Annotation: There Are Strong Biases for Multigenic Families. *Frontiers in Genetics*, **2021**, 12, 697477	4.5	
85	CsPrx25, a class III peroxidase in Citrus sinensis, confers resistance to citrus bacterial canker through the maintenance of ROS homeostasis and cell wall lignification. *Horticulture Research*, **2020**, 7, 192	7.7	7
84	An integrative Study Showing the Adaptation to Sub-Optimal Growth Conditions of Natural Populations of : A Focus on Cell Wall Changes. *Cells*, **2020**, 9,	7.9	4
83	Seed mucilage evolution: Diverse molecular mechanisms generate versatile ecological functions for particular environments. *Plant, Cell and Environment*, **2020**, 43, 2857-2870	8.4	9
82	Coordination of five class III peroxidase-encoding genes for early germination events of Arabidopsis thaliana. *Plant Science*, **2020**, 298, 110565	5.3	7
81	Global analysis of non-animal peroxidases provides insights into the evolution of this gene family in the green lineage. *Journal of Experimental Botany*, **2020**, 71, 3350-3360	7	6
80	Global Evolutionary Analysis of 11 Gene Families Part of Reactive Oxygen Species (ROS) Gene Network in Four Species. *Antioxidants*, **2020**, 9,	7.1	1
79	The Cell Wall PAC (Proline-Rich, Arabinogalactan Proteins, Conserved Cysteines) Domain-Proteins Are Conserved in the Green Lineage. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	1
78	The Class III Peroxidase Encoding Gene Positively and Spatiotemporally Regulates the Low pH-Induced Cell Death in Roots. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	3
77	Large-scale genome sequencing of mycorrhizal fungi provides insights into the early evolution of symbiotic traits. *Nature Communications*, **2020**, 11, 5125	17.4	86
76	Transcriptomic and cell wall proteomic datasets of rosettes and floral stems from five ecotypes grown at optimal or sub-optimal temperature. *Data in Brief*, **2019**, 27, 104581	1.2	7

75	New insights of low-temperature plasma effects on germination of three genotypes of Arabidopsis thaliana seeds under osmotic and saline stresses. *Scientific Reports*, **2019**, 9, 8649	4.9	23
74	RedoxiBase: A database for ROS homeostasis regulated proteins. *Redox Biology*, **2019**, 26, 101247	11.3	44
73	Medium-Throughput RNA In Situ Hybridization of Serial Sections from Paraffin-Embedded Tissue Microarrays. *Methods in Molecular Biology*, **2019**, 1933, 99-130	1.4	1
72	Phenotypic Trait Variation as a Response to Altitude-Related Constraints in Arabidopsis Populations. *Frontiers in Plant Science*, **2019**, 10, 430	6.2	6
71	Phenotyping and cell wall polysaccharide composition dataset of five arabidopsis ecotypes grown at optimal or sub-optimal temperatures. *Data in Brief*, **2019**, 25, 104318	1.2	5
70	Reconstructing trait evolution in plant evo-devo studies. *Current Biology*, **2019**, 29, R1110-R1118	6.3	29
69	In silico definition of new ligninolytic peroxidase sub-classes in fungi and putative relation to fungal life style. *Scientific Reports*, **2019**, 9, 20373	4.9	6
68	Pectin Demethylesterification Generates Platforms that Anchor Peroxidases to Remodel Plant Cell Wall Domains. *Developmental Cell*, **2019**, 48, 261-276.e8	10.2	25
67	The Chara Genome: Secondary Complexity and Implications for Plant Terrestrialization. *Cell*, **2018**, 174, 448-464.e24	56.2	213
66	Effects of low temperature plasmas and plasma activated waters on Arabidopsis thaliana germination and growth. *PLoS ONE*, **2018**, 13, e0195512	3.7	53
65	Cell wall proteome analysis of Arabidopsis thaliana mature stems. *Proteomics*, **2017**, 17, 1600449	4.8	22
64	Molecular link between auxin and ROS-mediated polar growth. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 5289-5294	11.5	107
63	Cell wall modifications of two Arabidopsis thaliana ecotypes, Col and Sha, in response to sub-optimal growth conditions: An integrative study. *Plant Science*, **2017**, 263, 183-193	5.3	12
62	The class III peroxidase PRX17 is a direct target of the MADS-box transcription factor AGAMOUS-LIKE15 (AGL15) and participates in lignified tissue formation. *New Phytologist*, **2017**, 213, 250-263	9.8	49
61	Proline Hydroxylation in Cell Wall Proteins: Is It Yet Possible to Define Rules?. *Frontiers in Plant Science*, **2017**, 8, 1802	6.2	8
60	An enlarged cell wall proteome of Arabidopsis thaliana rosettes. *Proteomics*, **2016**, 16, 3183-3187	4.8	22
59	Arabidopsis thaliana root cell wall proteomics: Increasing the proteome coverage using a combinatorial peptide ligand library and description of unexpected Hyp in peroxidase amino acid sequences. *Proteomics*, **2016**, 16, 491-503	4.8	38
58	Complementarity of medium-throughput in situ RNA hybridization and tissue-specific transcriptomics: case study of Arabidopsis seed development kinetics. *Scientific Reports*, **2016**, 6, 24644	4.9	14

57	CaM and CML emergence in the green lineage. *Trends in Plant Science*, **2015**, 20, 483-9	13.1	96
56	Explosive tandem and segmental duplications of multigenic families in Eucalyptus grandis. *Genome Biology and Evolution*, **2015**, 7, 1068-81	3.9	23
55	Primary transcripts of microRNAs encode regulatory peptides. *Nature*, **2015**, 520, 90-3	50.4	263
54	Algal ancestor of land plants was preadapted for symbiosis. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 13390-5	11.5	197
53	Roles of cell wall peroxidases in plant development. *Phytochemistry*, **2015**, 112, 15-21	4	158
52	The Arabidopsis Class III Peroxidase AtPRX71 Negatively Regulates Growth under Physiological Conditions and in Response to Cell Wall Damage. *Plant Physiology*, **2015**, 169, 2513-25	6.6	40
51	Arabidopsis seed mucilage secretory cells: regulation and dynamics. *Trends in Plant Science*, **2015**, 20, 515-24	13.1	61
50	Genome-wide analysis of the AP2/ERF family in Eucalyptus grandis: an intriguing over-representation of stress-responsive DREB1/CBF genes. *PLoS ONE*, **2015**, 10, e0121041	3.7	26
49	The genome of Eucalyptus grandis. *Nature*, **2014**, 510, 356-62	50.4	497
48	Automatic multigenic family annotation: risks and solutions. *Trends in Genetics*, **2014**, 30, 323-5	8.5	19
47	Genome-wide characterization and expression profiling of the AUXIN RESPONSE FACTOR (ARF) gene family in Eucalyptus grandis. *PLoS ONE*, **2014**, 9, e108906	3.7	27
46	Expression of PRX36, PMEI6 and SBT1.7 is controlled by complex transcription factor regulatory networks for proper seed coat mucilage extrusion. *Plant Signaling and Behavior*, **2014**, 9, e977734	2.5	12
45	Identification of a hydrogen peroxide signalling pathway in the control of light-dependent germination in Arabidopsis. *Planta*, **2013**, 238, 381-95	4.7	53
44	PeroxiBase: a database for large-scale evolutionary analysis of peroxidases. *Nucleic Acids Research*, **2013**, 41, D441-4	20.1	121
43	Molecular and biochemical aspects of plant terrestrialization. *Perspectives in Plant Ecology, Evolution and Systematics*, **2012**, 14, 49-59	3	40
42	A burst of plant NADPH oxidases. *Trends in Plant Science*, **2012**, 17, 9-15	13.1	478
41	Insight into trade-off between wood decay and parasitism from the genome of a fungal forest pathogen. *New Phytologist*, **2012**, 194, 1001-1013	9.8	168
40	Origin of strigolactones in the green lineage. *New Phytologist*, **2012**, 195, 857-871	9.8	204

39	GECA: a fast tool for gene evolution and conservation analysis in eukaryotic protein families. *Bioinformatics*, **2012**, 28, 1398-9	7.2	21
38	Ascorbate peroxidase-related (APx-R) is a new heme-containing protein functionally associated with ascorbate peroxidase but evolutionarily divergent. *New Phytologist*, **2011**, 191, 234-250	9.8	43
37	Ascorbate peroxidase-related (APx-R) is not a duplicable gene. *Plant Signaling and Behavior*, **2011**, 6, 1908-13	2.5	11
36	Reactive oxygen species during plant-microorganism early interactions. *Journal of Integrative Plant Biology*, **2010**, 52, 195-204	8.3	227
35	Evolution and expression of class III peroxidases. *Archives of Biochemistry and Biophysics*, **2010**, 500, 58-65	4.1	55
34	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. *BMC Genomics*, **2010**, 11, 528	4.5	36
33	PeroxiBase: a powerful tool to collect and analyse peroxidase sequences from Viridiplantae. *Journal of Experimental Botany*, **2009**, 60, 453-9	7	33
32	Specific functions of individual class III peroxidase genes. *Journal of Experimental Botany*, **2009**, 60, 391-408	7	275
31	PeroxiBase: a database with new tools for peroxidase family classification. *Nucleic Acids Research*, **2009**, 37, D261-6	20.1	118
30	An anionic class III peroxidase from zucchini may regulate hypocotyl elongation through its auxin oxidase activity. *Planta*, **2009**, 229, 823-36	4.7	35
29	The peroxidase-cyclooxygenase superfamily: Reconstructed evolution of critical enzymes of the innate immune system. *Proteins: Structure, Function and Bioinformatics*, **2008**, 72, 589-605	4.2	119
28	Glutathione peroxidase family - an evolutionary overview. *FEBS Journal*, **2008**, 275, 3959-70	5.7	291
27	PeroxiBase: the peroxidase database. *Phytochemistry*, **2007**, 68, 1605-11	4	159
26	Distribution of superoxide and hydrogen peroxide in Arabidopsis root and their influence on root development: possible interaction with peroxidases. *New Phytologist*, **2007**, 174, 332-341	9.8	359
25	Waving and skewing: how gravity and the surface of growth media affect root development in Arabidopsis. *New Phytologist*, **2007**, 176, 37-43	9.8	84
24	Localization of superoxide in the root apex of Arabidopsis. *Plant Signaling and Behavior*, **2007**, 2, 131-2	2.5	12
23	Cell growth and differentiation in Arabidopsis epidermal cells. *Journal of Experimental Botany*, **2007** , 58, 3829-40	7	52
22	Prokaryotic origins of the non-animal peroxidase superfamily and organelle-mediated transmission to eukaryotes. *Genomics*, **2007**, 89, 567-79	4.3	84

21	Phylogenetic distribution of catalase-peroxidases: are there patches of order in chaos?. *Gene*, **2007**, 397, 101-13	3.8	69
20	Morphological and physiological traits of three major Arabidopsis thaliana accessions. *Journal of Plant Physiology*, **2007**, 164, 980-92	3.6	30
19	Divergent evolutionary lines of fungal cytochrome c peroxidases belonging to the superfamily of bacterial, fungal and plant heme peroxidases. *FEBS Letters*, **2006**, 580, 6655-64	3.8	12
18	Patterning of Arabidopsis epidermal cells: epigenetic factors regulate the complex epidermal cell fate pathway. *Trends in Plant Science*, **2006**, 11, 601-9	13.1	41
17	PeroxiBase: a class III plant peroxidase database. *Phytochemistry*, **2006**, 67, 534-9	4	60
16	Two cell wall associated peroxidases from Arabidopsis influence root elongation. *Planta*, **2006**, 223, 965-74	4.7	129
15	Plant photoreceptors: phylogenetic overview. *Journal of Molecular Evolution*, **2005**, 61, 559-69	3.1	53
14	Peroxidases have more functions than a Swiss army knife. *Plant Cell Reports*, **2005**, 24, 255-65	5.1	659
13	Transcession of DNA from bacteria to human cells in culture: a possible role in oncogenesis. *Annals of the New York Academy of Sciences*, **2004**, 1022, 195-201	6.5	5
12	Purification and identification of a Ca(2+)-pectate binding peroxidase from Arabidopsis leaves. *Phytochemistry*, **2004**, 65, 307-12	4	40
11	Expression analysis of the Arabidopsis peroxidase multigenic family. *Phytochemistry*, **2004**, 65, 1331-42	4	106
10	The class III peroxidase multigenic family in rice and its evolution in land plants. *Phytochemistry*, **2004**, 65, 1879-93	4	279
9	Expression analysis of the Arabidopsis peroxidase multigenic family. *Phytochemistry*, **2004**, 65, 1331-1331	4	1
8	Performing the paradoxical: how plant peroxidases modify the cell wall. *Trends in Plant Science*, **2004**, 9, 534-40	13.1	584
7	The MUR3 gene of Arabidopsis encodes a xyloglucan galactosyltransferase that is evolutionarily related to animal exostosins. *Plant Cell*, **2003**, 15, 1662-70	11.6	245
6	Expression of a peroxidase gene in zucchini in relation with hypocotyl growth. *Plant Physiology and Biochemistry*, **2003**, 41, 805-811	5.4	17
5	Identification and characterisation of Ca2+-pectate binding peroxidases inArabidopsis thaliana. *Journal of Plant Physiology*, **2002**, 159, 1165-1171	3.6	31
4	Characterization of the binding of alpha-L-Fuc (1-->2)-beta-D-Gal (1-->), a xyloglucan signal, in blackberry protoplasts. *Plant Science*, **2000**, 151, 183-192	5.3	12

List of Publications

3	APETALA3-nuclease hybrid protein: a potential tool for APETALA3 target gene mutagenesis. *Plant Science*, **1999**, 148, 19-30	5.3	2
2	ExpressWeb: A Web application for clustering and visualization of expression data		1
1	Class III peroxidases PRX01, PRX44, and PRX73 potentially target extensins during root hair growth inArabidopsis thaliana		5