Pascal Rey

List of Publications by Year
in descending order

66 papers	4,608 citations	87888 38 h-index	102487 66 g-index
67 all docs	67 docs citations	67 times ranked	4257 citing authors

#	Article	IF	Citations
1	Thiol Reductases in Deinococcus Bacteria and Roles in Stress Tolerance. Antioxidants, 2022, 11, 561.	5.1	4
2	Redox signaling through zinc activates the radiation response in Deinococcus bacteria. Scientific Reports, 2021, 11, 4528.	3.3	18
3	Plastidial and cytosolic thiol reductases participate in the control of stomatal functioning. Plant, Cell and Environment, 2021, 44, 1417-1435.	5.7	7
4	Contribution of functional genomics to identify the genetic basis of waterâ€deficit tolerance in barley and the related molecular mechanisms. Journal of Agronomy and Crop Science, 2021, 207, 913-935.	3.5	3
5	Involvement of the MetO/Msr System in Two Acer Species That Display Contrasting Characteristics during Germination. International Journal of Molecular Sciences, 2020, 21, 9197.	4.1	3
6	Integration of MsrB1 and MsrB2 in the Redox Network during the Development of Orthodox and Recalcitrant Acer Seeds. Antioxidants, 2020, 9, 1250.	5.1	7
7	Peptide-Bound Methionine Sulfoxide (MetO) Levels and MsrB2 Abundance Are Differentially Regulated during the Desiccation Phase in Contrasted Acer Seeds. Antioxidants, 2020, 9, 391.	5.1	7
8	Is There a Role for Glutaredoxins and BOLAs in the Perception of the Cellular Iron Status in Plants?. Frontiers in Plant Science, 2019, 10, 712.	3.6	19
9	Variability in the redox status of plant 2-Cys peroxiredoxins in relation to species and light cycle. Journal of Experimental Botany, 2019, 70, 5003-5016.	4.8	9
10	Physiological Roles of Plant Methionine Sulfoxide Reductases in Redox Homeostasis and Signaling. Antioxidants, 2018, 7, 114.	5.1	65
11	<i>Solanum tuberosum ZPR1</i> encodes a lightâ€regulated nuclear DNAâ€binding protein adjusting the circadian expression of <i>StBBX24</i> to light cycle. Plant, Cell and Environment, 2017, 40, 424-440.	5.7	13
12	Involvement of <i>Arabidopsis</i> glutaredoxin S14 in the maintenance of chlorophyll content. Plant, Cell and Environment, 2017, 40, 2319-2332.	5.7	44
13	Physiological relevance of plant 2â€Cys peroxiredoxin overoxidation level and oligomerization status. Plant, Cell and Environment, 2016, 39, 103-119.	5.7	21
14	Characterization of the Arabidopsis thaliana 2-Cys peroxiredoxin interactome. Plant Science, 2016, 252, 30-41.	3.6	43
15	Expression and characterization of a barley phosphatidylinositol transfer protein structurally homologous to the yeast Sec14p protein. Plant Science, 2016, 246, 98-111.	3.6	9
16	Involvement of thiol-based mechanisms in plant development. Biochimica Et Biophysica Acta - General Subjects, 2015, 1850, 1479-1496.	2.4	93
17	Arabidopsis Glutaredoxin S17 and Its Partner, the Nuclear Factor Y Subunit C11/Negative Cofactor 2Î±, Contribute to Maintenance of the Shoot Apical Meristem under Long-Day Photoperiod. Plant Physiology, 2015, 167, 1643-1658.	4.8	78
18	Interplay between circadian rhythm, time of the day and osmotic stress constraints in the regulation of the expression of a Solanum Double B-box gene. Annals of Botany, 2014, 113, 831-842.	2.9	39

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19	Evidence for participation of the methionine sulfoxide reductase repair system in plant seed longevity. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 3633-3638.	7.1	97
20	A drought-sensitive barley variety displays oxidative stress and strongly increased contents in low-molecular weight antioxidant compounds during water deficit compared to a tolerant variety. Journal of Plant Physiology, 2013, 170, 633-645.	3.5	51
21	Overexpression of plastidial thioredoxins f and m differentially alters photosynthetic activity and response to oxidative stress in tobacco plants. Frontiers in Plant Science, 2013, 4, 390.	3.6	31
22	Involvement of thioredoxin y2 in the preservation of leaf methionine sulfoxide reductase capacity and growth under high light. Plant, Cell and Environment, 2013, 36, 670-682.	5.7	47
23	Thioredoxin m4 Controls Photosynthetic Alternative Electron Pathways in Arabidopsis Â Â. Plant Physiology, 2012, 161, 508-520.	4.8	100
24	Differential responses to salinity of two Atriplex halimus populations in relation to organic solutes and antioxidant systems involving thiol reductases. Journal of Plant Physiology, 2012, 169, 1445-1453.	3.5	25
25	Atypical Thioredoxins in Poplar: The Glutathione-Dependent Thioredoxin-Like 2.1 Supports the Activity of Target Enzymes Possessing a Single Redox Active Cysteine Â. Plant Physiology, 2012, 159, 592-605.	4.8	39
26	Affinity Chromatography: A Valuable Strategy to Isolate Substrates of Methionine Sulfoxide Reductases?. Antioxidants and Redox Signaling, 2012, 16, 79-84.	5.4	33
27	Arabidopsis thaliana plastidial methionine sulfoxide reductases B, MSRBs, account for most leaf peptide MSR activity and are essential for growth under environmental constraints through a role in the preservation of photosystem antennae. Plant Journal, 2010, 61, 271-282.	5.7	75
28	Plant Thioredoxin CDSP32 Regenerates 1-Cys Methionine Sulfoxide Reductase B Activity through the Direct Reduction of Sulfenic Acid. Journal of Biological Chemistry, 2010, 285, 14964-14972.	3.4	66
29	Regeneration Mechanisms of Arabidopsis thaliana Methionine Sulfoxide Reductases B by Glutaredoxins and Thioredoxins. Journal of Biological Chemistry, 2009, 284, 18963-18971.	3.4	120
30	Protein-Repairing Methionine Sulfoxide Reductases in Photosynthetic Organisms: Gene Organization, Reduction Mechanisms, and Physiological Roles. Molecular Plant, 2009, 2, 202-217.	8.3	108
31	Vitamin E is essential for the tolerance of <i>Arabidopsis thaliana</i> to metalâ€induced oxidative stress. Plant, Cell and Environment, 2008, 31, 244-257.	5.7	167
32	Functional analysis and expression characteristics of chloroplastic Prx IIE. Physiologia Plantarum, 2008, 133, 599-610.	5.2	50
33	The organ-dependent abundance of a Solanum lipid transfer protein is up-regulated upon osmotic constraints and associated with cold acclimation ability. Journal of Experimental Botany, 2008, 59, 2191-2203.	4.8	24
34	Tocotrienols, the Unsaturated Forms of Vitamin E, Can Function as Antioxidants and Lipid Protectors in Tobacco Leaves. Plant Physiology, 2008, 147, 764-778.	4.8	71
35	Studies on the reducing systems for plant and animal thioredoxin-independent methionine sulfoxide reductases B. Biochemical and Biophysical Research Communications, 2007, 361, 629-633.	2.1	26
36	Efficiency of biochemical protection against toxic effects of accumulated salt differentiates Thellungiella halophila from Arabidopsis thaliana. Journal of Plant Physiology, 2007, 164, 375-384.	3.5	48

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37	Specificity of thioredoxins and glutaredoxins as electron donors to two distinct classes of Arabidopsis plastidial methionine sulfoxide reductases B. FEBS Letters, 2007, 581, 4371-4376.	2.8	89
38	The mitochondrial type II peroxiredoxin from poplar. Physiologia Plantarum, 2007, 129, 196-206.	5.2	49
39	The abundance of a single domain cyclophilin in Solanaceae is regulated as a function of organ type and high temperature and not by other environmental constraints. Physiologia Plantarum, 2007, 131, 387-398.	5.2	12
40	The Arabidopsis thaliana sulfiredoxin is a plastidic cysteine-sulfinic acid reductase involved in the photooxidative stress response. Plant Journal, 2007, 49, 505-514.	5.7	98
41	Plant thioredoxins are key actors in the oxidative stress response. Trends in Plant Science, 2006, 11, 329-334.	8.8	305
42	Plant Glutathione Peroxidases Are Functional Peroxiredoxins Distributed in Several Subcellular Compartments and Regulated during Biotic and Abiotic Stresses. Plant Physiology, 2006, 142, 1364-1379.	4.8	329
43	Plant methionine sulfoxide reductase A and B multigenic families. Photosynthesis Research, 2006, 89, 247-262.	2.9	123
44	Expression of SK3-type dehydrin in transporting organs is associated with cold acclimation in Solanum species. Planta, 2006, 224, 205-221.	3.2	77
45	The Arabidopsis Plastidic Methionine Sulfoxide Reductase B Proteins. Sequence and Activity Characteristics, Comparison of the Expression with Plastidic Methionine Sulfoxide Reductase A, and Induction by Photooxidative Stress. Plant Physiology, 2005, 138, 909-922.	4.8	154
46	Vitamin E Protects against Photoinhibition and Photooxidative Stress in Arabidopsis thaliana. Plant Cell, 2005, 17, 3451-3469.	6.6	446
47	Analysis of the proteins targeted by CDSP32, a plastidic thioredoxin participating in oxidative stress responses. Plant Journal, 2004, 41, 31-42.	5.7	143
48	Expression of KS-type dehydrins is primarily regulated by factors related to organ type and leaf developmental stage during vegetative growth. Planta, 2004, 218, 878-885.	3.2	60
49	Evidence for post-translational control in the expression of a gene encoding a plastidic thioredoxin during leaf development in Solanum tuberosum plants. Plant Physiology and Biochemistry, 2003, 41, 303-308.	5.8	12
50	Potato Plants Lacking the CDSP32 Plastidic Thioredoxin Exhibit Overoxidation of the BAS1 2-Cysteine Peroxiredoxin and Increased Lipid Peroxidation in Thylakoids under Photooxidative Stress. Plant Physiology, 2003, 132, 1335-1343.	4.8	105
51	The Plastidic 2-Cysteine Peroxiredoxin Is a Target for a Thioredoxin Involved in the Protection of the Photosynthetic Apparatus against Oxidative Damage. Plant Cell, 2002, 14, 1417-1432.	6.6	184
52	A novel thioredoxin-like protein located in the chloroplast is induced by water deficit in Solanum tuberosum L. plants. Plant Journal, 2002, 13, 97-107.	5.7	99
53	PSII-S gene expression, photosynthetic activity and abundance of plastid thioredoxin-related and lipid-associated proteins during chilling stress in Solanum species differing in freezing resistance. Physiologia Plantarum, 2001, 113, 72-78.	5.2	25
54	Accumulation of plastid lipidâ€associated proteins (fibrillin/CDSP34) upon oxidative stress, ageing and biotic stress in Solanaceae and in response to drought in other species. Journal of Experimental Botany, 2001, 52, 1545-1554.	4.8	98

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55	Over-expression of a pepper plastid lipid-associated protein in tobacco leads to changes in plastid ultrastructure and plant development upon stress. Plant Journal, 2000, 21, 483-494.	5.7	124
56	Involvement of CDSP 32, a drought-induced thioredoxin, in the response to oxidative stress in potato plants. FEBS Letters, 2000, 467, 245-248.	2.8	81
57	Immunocytolocalization of CDSP 32 and CDSP 34, two chloroplastic drought-induced stress proteins in Solanum tuberosum plants. Plant Physiology and Biochemistry, 1999, 37, 305-312.	5.8	42
58	Molecular characterization of CDSP 34, a chloroplastic protein induced by water deficit inSolanum tuberosumL. plants, and regulation ofCDSP 34expression by ABA and high illumination. Plant Journal, 1998, 16, 257-262.	5.7	85
59	Characterization of a novel drought-induced 34-kDa protein located in the thylakoids ofSolanum tuberosum L. plants. Planta, 1996, 198, 471-479.	3.2	75
60	Effects of low temperature, high salinity and exogenous ABA on the synthesis of two chloroplastic drought-induced proteins in Solanum tuberosum. Physiologia Plantarum, 1996, 97, 123-131.	5.2	44
61	Effects of low temperature, high salinity and exogenous ABA on the synthesis of two chloroplastic drought-induced proteins in Solanum tuberosum. Physiologia Plantarum, 1996, 97, 123-131.	5.2	37
62	Cell-type specific expression of three rice genes GOS2, GOS5 and GOS9. Plant Molecular Biology, 1993, 23, 889-894.	3.9	6
63	Atrazine and diuron resistant plants from photoautotrophic protoplast-derived cultures of Nicotiana plumbaginifolia. Plant Cell Reports, 1990, 9, 241-4.	5.6	15
64	Effects of CO₂-Enrichment and of Aminoacetonitrile on Growth and Photosynthesis of Photoautotrophic Calli of <i>Nicotiana plumbaginifolia</i>. Plant Physiology, 1990, 93, 549-554.	4.8	9
65	Photorespiratory Properties of Mesophyll Protoplasts of Nicotiana plumbaginifolia. Plant Physiology, 1989, 89, 762-767.	4.8	12
66	Establishment and characterization of photoautotrophic protoplast-derived cultures ofNicotiana plumbaginifolia. Plant Cell Reports, 1989, 8, 234-237.	5.6	9