Frank Van Breusegem

List of Publications by Year
in descending order

174 papers	31,244 citations	7069 78 h-index	4535 171 g-index
187 all docs	187 docs citations	187 times ranked	26769 citing authors

#	Article	IF	Citations
1	Reactive oxygen gene network of plants. Trends in Plant Science, 2004, 9, 490-498.	4.3	4,689
2	ROS signaling: the new wave?. Trends in Plant Science, 2011, 16, 300-309.	4.3	1,911
3	Dual action of the active oxygen species during plant stress responses. Cellular and Molecular Life Sciences, 2000, 57, 779-795.	2.4	1,590
4	Reactive oxygen species as signals that modulate plant stress responses and programmed cell death. BioEssays, 2006, 28, 1091-1101.	1.2	951
5	Reactive Oxygen Species in Plant Cell Death. Plant Physiology, 2006, 141, 384-390.	2.3	818
6	Catalase function in plants: a focus on Arabidopsis mutants as stress-mimic models. Journal of Experimental Botany, 2010, 61, 4197-4220.	2.4	736
7	Transcriptomic Footprints Disclose Specificity of Reactive Oxygen Species Signaling in Arabidopsis Â. Plant Physiology, 2006, 141, 436-445.	2.3	683
8	Signal transduction during oxidative stress. Journal of Experimental Botany, 2002, 53, 1227-1236.	2.4	643
9	How relevant are flavonoids as antioxidants in plants?. Trends in Plant Science, 2009, 14, 125-132.	4.3	548
10	Reactive oxygen species signalling in plant stress responses. Nature Reviews Molecular Cell Biology, 2022, 23, 663-679.	16.1	520
11	The role of active oxygen species in plant signal transduction. Plant Science, 2001, 161, 405-414.	1.7	493
12	Morphological classification of plant cell deaths. Cell Death and Differentiation, 2011, 18, 1241-1246.	5.0	481
13	Genome-Wide Analysis of Hydrogen Peroxide-Regulated Gene Expression in Arabidopsis Reveals a High Light-Induced Transcriptional Cluster Involved in Anthocyanin Biosynthesis Â. Plant Physiology, 2005, 139, 806-821.	2.3	476
14	Singlet Oxygen Is the Major Reactive Oxygen Species Involved in Photooxidative Damage to Plants. Plant Physiology, 2008, 148, 960-968.	2.3	475
15	Reactive oxygen species in plant development. Development (Cambridge), 2018, 145, .	1.2	443
16	Induction of systemic resistance in tomato by N-acyl-L-homoserine lactone-producing rhizosphere bacteria. Plant, Cell and Environment, 2006, 29, 909-918.	2.8	420
17	Perturbation of Indole-3-Butyric Acid Homeostasis by the UDP-Glucosyltransferase<i>UGT74E2</i>Modulates<i>Arabidopsis</i>Architecture and Water Stress Tolerance. Plant Cell, 2010, 22, 2660-2679.	3.1	407
18	Conditional oxidative stress responses in the Arabidopsis photorespiratory mutant <i>cat2</i> demonstrate that redox state is a key modulator of daylengthâ€dependent gene expression, and define photoperiod as a crucial factor in the regulation of H₂O₂â€induced cell death. Plant Journal, 2007, 52, 640-657.	2.8	394

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19	<i>Arabidopsis</i> Type I Metacaspases Control Cell Death. Science, 2010, 330, 1393-1397.	6.0	376
20	Spreading the news: subcellular and organellar reactive oxygen species production and signalling. Journal of Experimental Botany, 2016, 67, 3831-3844.	2.4	364
21	Resistance to Botrytis cinerea in sitiens, an Abscisic Acid-Deficient Tomato Mutant, Involves Timely Production of Hydrogen Peroxide and Cell Wall Modifications in the Epidermis. Plant Physiology, 2007, 144, 1863-1877.	2.3	350
22	Fatty Acid Hydroperoxides and H2O2 in the Execution of Hypersensitive Cell Death in Tobacco Leaves Â. Plant Physiology, 2005, 138, 1516-1526.	2.3	324
23	Hydrogen peroxideâ€"a central hub for information flow in plant cells. AoB PLANTS, 2012, 2012, pls014.	1.2	323
24	A comprehensive analysis of hydrogen peroxide-induced gene expression in tobacco. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 16113-16118.	3.3	309
25	Double antisense plants lacking ascorbate peroxidase and catalase are less sensitive to oxidative stress than single antisense plants lacking ascorbate peroxidase or catalase. Plant Journal, 2002, 32, 329-342.	2.8	308
26	Type II Metacaspases Atmc4 and Atmc9 of Arabidopsis thaliana Cleave Substrates after Arginine and Lysine. Journal of Biological Chemistry, 2004, 279, 45329-45336.	1.6	304
27	Catalase deficiency drastically affects gene expression induced by high light inArabidopsis thaliana. Plant Journal, 2004, 39, 45-58.	2.8	298
28	Stress homeostasis â€" the redox and auxin perspective. Plant, Cell and Environment, 2012, 35, 321-333.	2.8	294
29	The Membrane-Bound NAC Transcription Factor ANAC013 Functions in Mitochondrial Retrograde Regulation of the Oxidative Stress Response in <i>Arabidopsis</i> Â Â. Plant Cell, 2013, 25, 3472-3490.	3.1	293
30	Metacaspases. Cell Death and Differentiation, 2011, 18, 1279-1288.	5.0	292
31	A Membrane-Bound NAC Transcription Factor, ANAC017, Mediates Mitochondrial Retrograde Signaling in <i>Arabidopsis</i> Â Â. Plant Cell, 2013, 25, 3450-3471.	3.1	291
32	Changes in hydrogen peroxide homeostasis trigger an active cell death process in tobacco. Plant Journal, 2003, 33, 621-632.	2.8	272
33	Developmental Stage Specificity and the Role of Mitochondrial Metabolism in the Response of Arabidopsis Leaves to Prolonged Mild Osmotic Stress Â Â Â. Plant Physiology, 2009, 152, 226-244.	2.3	269
34	Survival and growth of Arabidopsis plants given limited water are not equal. Nature Biotechnology, 2011, 29, 212-214.	9.4	267
35	European contribution to the study of ROS: A summary of the findings and prospects for the future from the COST action BM1203 (EU-ROS). Redox Biology, 2017, 13, 94-162.	3.9	242
36	Hydrogen peroxide protects tobacco from oxidative stress by inducing a set of antioxidant enzymes. Cellular and Molecular Life Sciences, 2002, 59, 708-714.	2.4	219

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37	Metacaspase Activity of Arabidopsis thaliana Is Regulated by S-Nitrosylation of a Critical Cysteine Residue. Journal of Biological Chemistry, 2007, 282, 1352-1358.	1.6	209
38	Unraveling the Tapestry of Networks Involving Reactive Oxygen Species in Plants. Plant Physiology, 2008, 147, 978-984.	2.3	207
39	Peroxisomal Hydrogen Peroxide Is Coupled to Biotic Defense Responses by ISOCHORISMATE SYNTHASE1 in a Daylength-Related Manner Â Â Â. Plant Physiology, 2010, 153, 1692-1705.	2.3	202
40	Plant innate immunity â€“ sunny side up?. Trends in Plant Science, 2015, 20, 3-11.	4.3	193
41	Extranuclear protection of chromosomal DNA from oxidative stress. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 1711-1716.	3.3	190
42	Nitric Oxide- and Hydrogen Peroxide-Responsive Gene Regulation during Cell Death Induction in Tobacco Â. Plant Physiology, 2006, 141, 404-411.	2.3	180
43	Energy use efficiency is characterized by an epigenetic component that can be directed through artificial selection to increase yield. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 20109-20114.	3.3	176
44	Damage on plants activates Ca ²⁺ -dependent metacaspases for release of immunomodulatory peptides. Science, 2019, 363, .	6.0	170
45	Serpin1 of Arabidopsis thaliana is a Suicide Inhibitor for Metacaspase 9. Journal of Molecular Biology, 2006, 364, 625-636.	2.0	167
46	Spatial H2O2 Signaling Specificity: H2O2 from Chloroplasts and Peroxisomes Modulates the Plant Transcriptome Differentially. Molecular Plant, 2014, 7, 1191-1210.	3.9	167
47	Are metacaspases caspases?. Journal of Cell Biology, 2007, 179, 375-380.	2.3	164
48	Sulfenome mining in <i>Arabidopsis thaliana</i>. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 11545-11550.	3.3	163
49	Oxidative post-translational modifications of cysteine residues in plant signal transduction. Journal of Experimental Botany, 2015, 66, 2923-2934.	2.4	163
50	Signal transduction during oxidative stress. Journal of Experimental Botany, 2002, 53, 1227-36.	2.4	158
51	Anterograde and Retrograde Regulation of Nuclear Genes Encoding Mitochondrial Proteins during Growth, Development, and Stress. Molecular Plant, 2014, 7, 1075-1093.	3.9	156
52	Fatal attraction: the intuitive appeal of GMO opposition. Trends in Plant Science, 2015, 20, 414-418.	4.3	156
53	Licensed to Kill: Mitochondria, Chloroplasts, and Cell Death. Trends in Plant Science, 2015, 20, 754-766.	4.3	155
54	Silencing of poly(ADP-ribose) polymerase in plants alters abiotic stress signal transduction. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 15150-15155.	3.3	153

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55	RBOH-mediated ROS production facilitates lateral root emergence in Arabidopsis. Development (Cambridge), 2016, 143, 3328-39.	1.2	152
56	Molecular priming as an approach to induce tolerance against abiotic and oxidative stresses in crop plants. Biotechnology Advances, 2020, 40, 107503.	6.0	144
57	Transcriptome analysis during cell division in plants. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 14825-14830.	3.3	140
58	Abscisic Acid Deficiency Causes Changes in Cuticle Permeability and Pectin Composition That Influence Tomato Resistance to <i>Botrytis</i> Â<i>cinerea</i> Â Â Â Â. Plant Physiology, 2010, 154, 847-860.	2.3	140
59	The ROS Wheel: Refining ROS Transcriptional Footprints. Plant Physiology, 2016, 171, 1720-1733.	2.3	137
60	AtWRKY15 perturbation abolishes the mitochondrial stress response that steers osmotic stress tolerance in <i>Arabidopsis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20113-20118.	3.3	132
61	Hydrogen Peroxide-Induced Gene Expression across Kingdoms: A Comparative Analysis. Molecular Biology and Evolution, 2008, 25, 507-516.	3.5	122
62	Overproduction of Arabidopsis thaliana FeSOD Confers Oxidative Stress Tolerance to Transgenic Maize. Plant and Cell Physiology, 1999, 40, 515-523.	1.5	120
63	Arabidopsis RCD1 coordinates chloroplast and mitochondrial functions through interaction with ANAC transcription factors. ELife, 2019, 8, .	2.8	118
64	<i>Post mortem</i> function of <scp>A</scp>t<scp>MC</scp>9 in xylem vessel elements. New Phytologist, 2013, 200, 498-510.	3.5	117
65	Mitochondrial typeâ€ł prohibitins of <i>Arabidopsis thaliana</i> are required for supporting proficient meristem development. Plant Journal, 2007, 52, 850-864.	2.8	114
66	Towards a carbon-negative sustainable bio-based economy. Frontiers in Plant Science, 2013, 4, 174.	1.7	114
67	LESION SIMULATING DISEASE1, ENHANCED DISEASE SUSCEPTIBILITY1, and PHYTOALEXIN DEFICIENT4 Conditionally Regulate Cellular Signaling Homeostasis, Photosynthesis, Water Use Efficiency, and Seed Yield in Arabidopsis Â. Plant Physiology, 2013, 161, 1795-1805.	2.3	110
68	The <i>Arabidopsis</i> METACASPASE9 Degradome Â. Plant Cell, 2013, 25, 2831-2847.	3.1	109
69	Cytokinin response factors regulate PIN-FORMED auxin transporters. Nature Communications, 2015, 6, 8717.	5.8	108
70	Mining for protein S-sulfenylation in <i>Arabidopsis</i> uncovers redox-sensitive sites. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 21256-21261.	3.3	107
71	Cysteines under ROS attack in plants: a proteomics view. Journal of Experimental Botany, 2015, 66, 2935-2944.	2.4	103
72	Catalase and<i>NO CATALASE ACTIVITY1</i>Promote Autophagy-Dependent Cell Death in<i>Arabidopsis</i>Â Â Â. Plant Cell, 2013, 25, 4616-4626.	3.1	101

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73	GROWTH REGULATING FACTOR5 Stimulates Arabidopsis Chloroplast Division, Photosynthesis, and Leaf Longevity Â. Plant Physiology, 2015, 167, 817-832.	2.3	100
74	The Plant <scp>PTM</scp> Viewer, a central resource for exploring plant protein modifications. Plant Journal, 2019, 99, 752-762.	2.8	97
75	Effects of overproduction of tobacco MnSOD in maize chloroplasts on foliar tolerance to cold and oxidative stress. Journal of Experimental Botany, 1999, 50, 71-78.	2.4	96
76	Protein Methionine Sulfoxide Dynamics in Arabidopsis thaliana under Oxidative Stress. Molecular and Cellular Proteomics, 2015, 14, 1217-1229.	2.5	88
77	A subcellular localization compendium of hydrogen peroxideâ€induced proteins. Plant, Cell and Environment, 2012, 35, 308-320.	2.8	86
78	Redox-dependent control of nuclear transcription in plants. Journal of Experimental Botany, 2018, 69, 3359-3372.	2.4	86
79	Mitochondrial and Chloroplast Stress Responses Are Modulated in Distinct Touch and Chemical Inhibition Phases. Plant Physiology, 2016, 171, 2150-2165.	2.3	85
80	Cytokinin Response Factor 6 Represses Cytokinin-Associated Genes during Oxidative Stress. Plant Physiology, 2016, 172, pp.00415.2016.	2.3	85
81	Lack of GLYCOLATE OXIDASE1, but Not GLYCOLATE OXIDASE2, Attenuates the Photorespiratory Phenotype of CATALASE2-Deficient Arabidopsis. Plant Physiology, 2016, 171, 1704-1719.	2.3	84
82	Day length is a key regulator of transcriptomic responses to both CO₂ and H₂O₂ in <i>Arabidopsis</i>. Plant, Cell and Environment, 2012, 35, 374-387.	2.8	83
83	<scp>GRIM REAPER</scp> peptide binds to receptor kinase <scp>PRK</scp> 5 to trigger cell death in <i>Arabidopsis</i>. EMBO Journal, 2015, 34, 55-66.	3.5	83
84	The mitochondrial outer membrane <scp>AAA ATP</scp>ase At<scp>OM</scp>66 affects cell death and pathogen resistance in <i><scp>A</scp>rabidopsis thaliana</i>. Plant Journal, 2014, 80, 709-727.	2.8	80
85	<i>Arabidopsis</i> Ensemble Reverse-Engineered Gene Regulatory Network Discloses Interconnected Transcription Factors in Oxidative Stress. Plant Cell, 2015, 26, 4656-4679.	3.1	79
86	Interaction between hormonal and mitochondrial signalling during growth, development and in plant defence responses. Plant, Cell and Environment, 2016, 39, 1127-1139.	2.8	79
87	Opinion on the possible role of flavonoids as energy escape valves: Novel tools for nature's Swiss army knife?. Plant Science, 2010, 179, 297-301.	1.7	71
88	Classification and Nomenclature of Metacaspases and Paracaspases: No More Confusion with Caspases. Molecular Cell, 2020, 77, 927-929.	4.5	71
89	Catalase-deficient tobacco plants: tools for in planta studies on the role of hydrogen peroxide. Redox Report, 2001, 6, 37-42.	1.4	70
90	DYn-2 Based Identification of Arabidopsis Sulfenomes*. Molecular and Cellular Proteomics, 2015, 14, 1183-1200.	2.5	70

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91	Improving oxidative stress resilience in plants. Plant Journal, 2022, 109, 359-372.	2.8	70
92	Prohibitins: mitochondrial partners in development and stress response. Trends in Plant Science, 2010, 15, 275-282.	4.3	68
93	A Temperature-sensitive Mutation in the Arabidopsis thaliana Phosphomannomutase Gene Disrupts Protein Glycosylation and Triggers Cell Death. Journal of Biological Chemistry, 2008, 283, 5708-5718.	1.6	60
94	Overexpression of <i><scp>GA</scp>20â€<scp>OXIDASE</scp>1</i> impacts plant height, biomass allocation and saccharification efficiency in maize. Plant Biotechnology Journal, 2016, 14, 997-1007.	4.1	59
95	Mitochondrial respiratory pathways modulate nitrate sensing and nitrogenâ€dependent regulation of plant architecture in <i>Nicotiana sylvestris</i>. Plant Journal, 2008, 54, 976-992.	2.8	58
96	Mitochondrial Perturbation Negatively Affects Auxin Signaling. Molecular Plant, 2014, 7, 1138-1150.	3.9	57
97	Mitochondrial Defects Confer Tolerance against Cellulose Deficiency. Plant Cell, 2016, 28, 2276-2290.	3.1	57
98	Secondary sulfur metabolism in cellular signalling and oxidative stress responses. Journal of Experimental Botany, 2019, 70, 4237-4250.	2.4	57
99	Characterization of a S-Adenosylmethionine Synthetase Gene in Rice. Plant Physiology, 1994, 105, 1463-1464.	2.3	54
100	Plant proteins under oxidative attack. Proteomics, 2013, 13, 932-940.	1.3	54
101	N-terminal Proteomics Assisted Profiling of the Unexplored Translation Initiation Landscape in Arabidopsis thaliana. Molecular and Cellular Proteomics, 2017, 16, 1064-1080.	2.5	54
102	Reactive oxygen species and organellar signaling. Journal of Experimental Botany, 2021, 72, 5807-5824.	2.4	53
103	The SBT6.1 subtilase processes the GOLVEN1 peptide controlling cell elongation. Journal of Experimental Botany, 2016, 67, 4877-4887.	2.4	51
104	Selection for Improved Energy Use Efficiency and Drought Tolerance in Canola Results in Distinct Transcriptome and Epigenome Changes. Plant Physiology, 2015, 168, 1338-1350.	2.3	49
105	Self-protection of cytosolic malate dehydrogenase against oxidative stress in Arabidopsis. Journal of Experimental Botany, 2018, 69, 3491-3505.	2.4	48
106	Chemical PARP Inhibition Enhances Growth of Arabidopsis and Reduces Anthocyanin Accumulation and the Activation of Stress Protective Mechanisms. PLoS ONE, 2012, 7, e37287.	1.1	47
107	At<scp>SERPIN</scp>1 is an inhibitor of the metacaspase At<scp>MC</scp>1â€mediated cell death and autocatalytic processing <i>in planta</i>. New Phytologist, 2018, 218, 1156-1166.	3.5	47
108	Tolerance to low temperature and paraquat-mediated oxidative stress in two maize genotypes. Journal of Experimental Botany, 1999, 50, 523-532.	2.4	46

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109	The Transcription Factor MYB29 Is a Regulator of <i>ALTERNATIVE OXIDASE1a</i>. Plant Physiology, 2017, 173, 1824-1843.	2.3	46
110	<i>In vivo</i> detection of protein cysteine sulfenylation in plastids. Plant Journal, 2019, 97, 765-778.	2.8	46
111	Activation of auxin signalling counteracts photorespiratory <scp><scp>H₂O₂</scp></scp>â€dependent cell death. Plant, Cell and Environment, 2015, 38, 253-265.	2.8	44
112	On the move: redox-dependent protein relocation in plants. Journal of Experimental Botany, 2020, 71, 620-631.	2.4	44
113	A Generic Tool for Transcription Factor Target Gene Discovery in Arabidopsis Cell Suspension Cultures Based on Tandem Chromatin Affinity Purification. Plant Physiology, 2014, 164, 1122-1133.	2.3	43
114	Integrative inference of transcriptional networks in Arabidopsis yields novel ROS signalling regulators. Nature Plants, 2021, 7, 500-513.	4.7	43
115	SHORT-ROOT Deficiency Alleviates the Cell Death Phenotype of the <i>Arabidopsis catalase2</i> Mutant under Photorespiration-Promoting Conditions. Plant Cell, 2016, 28, 1844-1859.	3.1	42
116	Multivariable environmental conditions promote photosynthetic adaptation potential in Arabidopsis thaliana. Journal of Plant Physiology, 2013, 170, 548-559.	1.6	37
117	Identification of cis-regulatory elements specific for different types of reactive oxygen species in Arabidopsis thaliana. Gene, 2012, 499, 52-60.	1.0	36
118	The dual role of LESION SIMULATING DISEASE 1 as a conditionâ€dependent scaffold protein and transcription regulator. Plant, Cell and Environment, 2017, 40, 2644-2662.	2.8	36
119	Post-transcriptional regulation of the oxidative stress response in plants. Free Radical Biology and Medicine, 2018, 122, 181-192.	1.3	35
120	Engineering Stress Tolerance in Maize. Outlook on Agriculture, 1998, 27, 115-124.	1.8	33
121	Kresoxim-methyl primes<i>Medicago truncatula</i>plants against abiotic stress factors via altered reactive oxygen and nitrogen species signalling leading to downstream transcriptional and metabolic readjustment. Journal of Experimental Botany, 2016, 67, 1259-1274.	2.4	33
122	Effects of overproduction of tobacco MnSOD in maize chloroplasts on foliar tolerance to cold and oxidative stress. , 0, .		33
123	Detection of Damage-Activated Metacaspase Activity by Western Blot in Plants. Methods in Molecular Biology, 2022, 2447, 127-137.	0.4	33
124	Mitochondrial function modulates touch signalling in <i>Arabidopsis thaliana</i>. Plant Journal, 2019, 97, 623-645.	2.8	32
125	o-Phenylenediamine-induced DNA damage and mutagenicity in tobacco seedlings is light-dependent. Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 2001, 495, 117-125.	0.9	31
126	Transcriptional coordination between leaf cell differentiation and chloroplast development established by TCP20 and the subgroup Ib bHLH transcription factors. Plant Molecular Biology, 2014, 85, 233-245.	2.0	31

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127	Pathways crossing mammalian and plant sulfenomic landscapes. Free Radical Biology and Medicine, 2018, 122, 193-201.	1.3	31
128	Identification of Sulfenylated Cysteines in Arabidopsis thaliana Proteins Using a Disulfide-Linked Peptide Reporter. Frontiers in Plant Science, 2020, 11, 777.	1.7	31
129	The function of two type II metacaspases in woody tissues of <i>Populus</i> trees. New Phytologist, 2018, 217, 1551-1565.	3.5	30
130	Natural substrates of plant proteases: how can protease degradomics extend our knowledge?. Physiologia Plantarum, 2012, 145, 28-40.	2.6	29
131	Potential Use of a Serpin from Arabidopsis for Pest Control. PLoS ONE, 2011, 6, e20278.	1.1	28
132	Periodic root branching is influenced by light through an HY1-HY5-auxin pathway. Current Biology, 2021, 31, 3834-3847.e5.	1.8	27
133	Protein Promiscuity in H₂O₂Signaling. Antioxidants and Redox Signaling, 2019, 30, 1285-1324.	2.5	26
134	Heat-inducible rice hsp82 and hsp70 are not always co-regulated. Planta, 1994, 193, 57-66.	1.6	25
135	Sequence-specific protein aggregation generates defined protein knockdowns in plants. Plant Physiology, 2016, 171, pp.00335.2016.	2.3	24
136	The<i>Arabidopsis</i>mediator complex subunit 8 regulates oxidative stress responses. Plant Cell, 2021, 33, 2032-2057.	3.1	23
137	Ascorbate Peroxidase cDNA from Maize. Plant Physiology, 1995, 107, 649-650.	2.3	22
138	Redox Strategies for Crop Improvement. Antioxidants and Redox Signaling, 2015, 23, 1186-1205.	2.5	22
139	Identification of dimedone-trapped sulfenylated proteins in plants under stress. Biochemistry and Biophysics Reports, 2017, 9, 106-113.	0.7	21
140	Disulfide bond formation protects Arabidopsis thaliana glutathione transferase tau 23 from oxidative damage. Biochimica Et Biophysica Acta - General Subjects, 2018, 1862, 775-789.	1.1	20
141	Plant proteases and programmed cell death. Journal of Experimental Botany, 2019, 70, 1991-1995.	2.4	20
142	The heat is on: a simple method to increase genome editing efficiency in plants. BMC Plant Biology, 2022, 22, 142.	1.6	18
143	Bifunctional Chloroplastic DJ-1B from Arabidopsis thaliana is an Oxidation-Robust Holdase and a Glyoxalase Sensitive to H2O2. Antioxidants, 2019, 8, 8.	2.2	17
144	Understanding plant responses to stress conditions: redox-based strategies. Journal of Experimental Botany, 2021, 72, 5785-5788.	2.4	15

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145	A technology platform for the fast production of monoclonal recombinant antibodies against plant proteins and peptides. Journal of Immunological Methods, 2004, 294, 181-187.	0.6	14
146	ARACINs, Brassicaceae-Specific Peptides Exhibiting Antifungal Activities against Necrotrophic Pathogens in Arabidopsis Â. Plant Physiology, 2015, 167, 1017-1029.	2.3	14
147	Arabidopsis thaliana dehydroascorbate reductase 2: Conformational flexibility during catalysis. Scientific Reports, 2017, 7, 42494.	1.6	13
148	Reactive oxygen species are crucial â€œpro-life â€œsurvival signals in plants. Free Radical Biology and Medicine, 2018, 122, 1-3.	1.3	13
149	Hydrogen Peroxide-Responsive Genes in Stress Acclimation and Cell Death. Signaling and Communication in Plants, 2009, , 149-164.	0.5	13
150	Low-steady-state metabolism induced by elevated CO 2 increases resilience to UV radiation in the unicellular green-algae Dunaliella tertiolecta. Environmental and Experimental Botany, 2016, 132, 163-174.	2.0	12
151	Processing of a chimeric protein in chloroplasts is different in transgenic maize and tobacco plants. Plant Molecular Biology, 1998, 38, 491-496.	2.0	11
152	Gold and Palladium Mediated Bimetallic Catalysis: Mechanistic Investigation through the Isolation of the Organogold(I) Intermediates. ACS Catalysis, 2019, 9, 7862-7869.	5.5	11
153	Extracellular peptide Kratos restricts cell death during vascular development and stress in Arabidopsis. Journal of Experimental Botany, 2019, 70, 2199-2210.	2.4	11
154	Contemporary proteomic strategies for cysteine redoxome profiling. Plant Physiology, 2021, 186, 110-124.	2.3	11
155	Cryptogein-Induced Transcriptional Reprogramming in Tobacco Is Light Dependent Â Â. Plant Physiology, 2013, 163, 263-275.	2.3	9
156	Domino reaction of a gold catalyzed 5-<i>endo-dig</i> cyclization and a [3,3]-sigmatropic rearrangement towards polysubstituted pyrazoles. Organic and Biomolecular Chemistry, 2018, 16, 9359-9363.	1.5	9
157	Phototropin 1 and 2 Influence Photosynthesis, UV-C Induced Photooxidative Stress Responses, and Cell Death. Cells, 2021, 10, 200.	1.8	8
158	Preparation of Arabidopsis thaliana Seedling Proteomes for Identifying Metacaspase Substrates by N-terminal COFRADIC. Methods in Molecular Biology, 2014, 1133, 255-261.	0.4	8
159	To New Beginnings: Riboproteogenomics Discovery of N-Terminal Proteoforms in Arabidopsis Thaliana. Frontiers in Plant Science, 2021, 12, 778804.	1.7	8
160	Caught green-handed: methods for in vivo detection and visualization of protease activity. Journal of Experimental Botany, 2019, 70, 2125-2141.	2.4	7
161	Plant Metacaspase Activation and Activity. Methods in Molecular Biology, 2014, 1133, 237-253.	0.4	7
162	Zeatin modulates flower bud development and tocopherol levels in <i>Cistus albidus</i> (L.) plants as they age. Plant Biology, 2015, 17, 90-96.	1.8	6

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163	A chemoselective and continuous synthesis of <i>m</i>-sulfamoylbenzamide analogues. Beilstein Journal of Organic Chemistry, 2017, 13, 303-312.	1.3	6
164	Novel Role of JAC1 in Influencing Photosynthesis, Stomatal Conductance, and Photooxidative Stress Signalling Pathway in Arabidopsis thaliana. Frontiers in Plant Science, 2020, 11, 1124.	1.7	5
165	Proteolytic Activation of Plant Membrane-Bound Transcription Factors. Frontiers in Plant Science, 0, 13, .	1.7	5
166	Identification of Differentially Expressed Genes during Lace Plant Leaf Development. International Journal of Plant Sciences, 2016, 177, 419-431.	0.6	4
167	The Need to Understand GMO Opposition: Reply to CouÃ©e. Trends in Plant Science, 2016, 21, 92.	4.3	4
168	Measurement of Transcripts Associated with Photorespiration and Related Redox Signaling. Methods in Molecular Biology, 2017, 1653, 17-29.	0.4	3
169	Plant redox biologyâ€"on the move. Plant Physiology, 2021, 186, 1-3.	2.3	3
170	Chemical Genetics Approach Identifies Abnormal Inflorescence Meristem 1 as a Putative Target of a Novel Sulfonamide That Protects Catalase2-Deficient Arabidopsis against Photorespiratory Stress. Cells, 2020, 9, 2026.	1.8	2
171	Dissecting the Role of SAL1 in Metabolizing the Stress Signaling Molecule 3â€²-Phosphoadenosine 5â€²-Phosphate in Different Cell Compartments. Frontiers in Molecular Biosciences, 2021, 8, 763795.	1.6	2
172	Chemical Perturbation of Chloroplast Ca2+ Dynamics in Arabidopsis thaliana Suspension Cell Cultures and Seedlings. Methods in Molecular Biology, 2022, 2494, 149-158.	0.4	1
173	Diagonal chromatography to study plant protein modifications. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2016, 1864, 945-951.	1.1	0
174	Transgenic Plants Expressing Tolerance Toward Oxidative Stress. , 2002, , .		0