Frank Van Breusegem

List of Publications by Year in descending order

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174 papers 31,244 citations

78 h-index 171 g-index

187 all docs

187 docs citations

times ranked

187

29462 citing authors

| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Improving oxidative stress resilience in plants. Plant Journal, 2022, 109, 359-372. | 2.8 | 70 |
| 2 | The heat is on: a simple method to increase genome editing efficiency in plants. BMC Plant Biology, 2022, 22, 142. | 1.6 | 18 |
| 3 | 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 |
| 4 | Detection of Damage-Activated Metacaspase Activity by Western Blot in Plants. Methods in Molecular Biology, 2022, 2447, 127-137. | 0.4 | 33 |
| 5 | Reactive oxygen species signalling in plant stress responses. Nature Reviews Molecular Cell Biology, 2022, 23, 663-679. | 16.1 | 520 |
| 6 | Phototropin 1 and 2 Influence Photosynthesis, UV-C Induced Photooxidative Stress Responses, and Cell Death. Cells, 2021, 10, 200. | 1.8 | 8 |
| 7 | Understanding plant responses to stress conditions: redox-based strategies. Journal of Experimental Botany, 2021, 72, 5785-5788. | 2.4 | 15 |
| 8 | The <i> Arabidopsis < /i > mediator complex subunit 8 regulates oxidative stress responses. Plant Cell, 2021, 33, 2032-2057.</i> | 3.1 | 23 |
| 9 | Plant redox biology—on the move. Plant Physiology, 2021, 186, 1-3. | 2.3 | 3 |
| 10 | Integrative inference of transcriptional networks in Arabidopsis yields novel ROS signalling regulators. Nature Plants, 2021, 7, 500-513. | 4.7 | 43 |
| 11 | Reactive oxygen species and organellar signaling. Journal of Experimental Botany, 2021, 72, 5807-5824. | 2.4 | 53 |
| 12 | Periodic root branching is influenced by light through an HY1-HY5-auxin pathway. Current Biology, 2021, 31, 3834-3847.e5. | 1.8 | 27 |
| 13 | Contemporary proteomic strategies for cysteine redoxome profiling. Plant Physiology, 2021, 186, 110-124. | 2.3 | 11 |
| 14 | To New Beginnings: Riboproteogenomics Discovery of N-Terminal Proteoforms in Arabidopsis Thaliana. Frontiers in Plant Science, 2021, 12, 778804. | 1.7 | 8 |
| 15 | Dissecting the Role of SAL1 in Metabolizing the Stress Signaling Molecule 3′-Phosphoadenosine 5′-Phosphate in Different Cell Compartments. Frontiers in Molecular Biosciences, 2021, 8, 763795. | 1.6 | 2 |
| 16 | On the move: redox-dependent protein relocation in plants. Journal of Experimental Botany, 2020, 71, 620-631. | 2.4 | 44 |
| 17 | Molecular priming as an approach to induce tolerance against abiotic and oxidative stresses in crop plants. Biotechnology Advances, 2020, 40, 107503. | 6.0 | 144 |
| 18 | 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 |

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|----|--|--------------|-----------|
| 19 | 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 |
| 20 | Identification of Sulfenylated Cysteines in Arabidopsis thaliana Proteins Using a Disulfide-Linked Peptide Reporter. Frontiers in Plant Science, 2020, 11, 777. | 1.7 | 31 |
| 21 | Classification and Nomenclature of Metacaspases and Paracaspases: No More Confusion with Caspases. Molecular Cell, 2020, 77, 927-929. | 4.5 | 71 |
| 22 | 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 |
| 23 | 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 |
| 24 | The Plant <scp>PTM</scp> Viewer, a central resource for exploring plant protein modifications. Plant Journal, 2019, 99, 752-762. | 2.8 | 97 |
| 25 | Plant proteases and programmed cell death. Journal of Experimental Botany, 2019, 70, 1991-1995. | 2.4 | 20 |
| 26 | Damage on plants activates Ca $<$ sup $>2+sup>-dependent metacaspases for release of immunomodulatory peptides. Science, 2019, 363, .$ | 6.0 | 170 |
| 27 | Secondary sulfur metabolism in cellular signalling and oxidative stress responses. Journal of Experimental Botany, 2019, 70, 4237-4250. | 2.4 | 57 |
| 28 | 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 |
| 29 | Extracellular peptide Kratos restricts cell death during vascular development and stress in Arabidopsis. Journal of Experimental Botany, 2019, 70, 2199-2210. | 2.4 | 11 |
| 30 | Caught green-handed: methods for in vivo detection and visualization of protease activity. Journal of Experimental Botany, 2019, 70, 2125-2141. | 2.4 | 7 |
| 31 | <i>In vivo</i> detection of protein cysteine sulfenylation in plastids. Plant Journal, 2019, 97, 765-778. | 2.8 | 46 |
| 32 | Mitochondrial function modulates touch signalling in <i>Arabidopsis thaliana</i> . Plant Journal, 2019, 97, 623-645. | 2.8 | 32 |
| 33 | Protein Promiscuity in H ₂ O ₂ Signaling. Antioxidants and Redox Signaling, 2019, 30, 1285-1324. | 2.5 | 26 |
| 34 | Arabidopsis RCD1 coordinates chloroplast and mitochondrial functions through interaction with ANAC transcription factors. ELife, 2019, 8 , . | 2.8 | 118 |
| 35 | Post-transcriptional regulation of the oxidative stress response in plants. Free Radical Biology and Medicine, 2018, 122, 181-192. | 1.3 | 35 |
| 36 | Pathways crossing mammalian and plant sulfenomic landscapes. Free Radical Biology and Medicine, 2018, 122, 193-201. | 1.3 | 31 |

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|----|--|--------------|-----------|
| 37 | Redox-dependent control of nuclear transcription in plants. Journal of Experimental Botany, 2018, 69, 3359-3372. | 2.4 | 86 |
| 38 | The function of two type II metacaspases in woody tissues of <i>Populus</i> trees. New Phytologist, 2018, 217, 1551-1565. | 3 . 5 | 30 |
| 39 | Self-protection of cytosolic malate dehydrogenase against oxidative stress in Arabidopsis. Journal of Experimental Botany, 2018, 69, 3491-3505. | 2.4 | 48 |
| 40 | 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 |
| 41 | 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 |
| 42 | 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 |
| 43 | Reactive oxygen species are crucial "pro-life "survival signals in plants. Free Radical Biology and Medicine, 2018, 122, 1-3. | 1.3 | 13 |
| 44 | Reactive oxygen species in plant development. Development (Cambridge), 2018, 145, . | 1.2 | 443 |
| 45 | Arabidopsis thaliana dehydroascorbate reductase 2: Conformational flexibility during catalysis. Scientific Reports, 2017, 7, 42494. | 1.6 | 13 |
| 46 | The Transcription Factor MYB29 Is a Regulator of <i>ALTERNATIVE OXIDASE1a</i> . Plant Physiology, 2017, 173, 1824-1843. | 2.3 | 46 |
| 47 | 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 |
| 48 | 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 |
| 49 | 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 |
| 50 | Identification of dimedone-trapped sulfenylated proteins in plants under stress. Biochemistry and Biophysics Reports, 2017, 9, 106-113. | 0.7 | 21 |
| 51 | Measurement of Transcripts Associated with Photorespiration and Related Redox Signaling. Methods in Molecular Biology, 2017, 1653, 17-29. | 0.4 | 3 |
| 52 | A chemoselective and continuous synthesis of $\langle i \rangle m \langle i \rangle$ -sulfamoylbenzamide analogues. Beilstein Journal of Organic Chemistry, 2017, 13, 303-312. | 1.3 | 6 |
| 53 | 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 |
| 54 | 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 |

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|----|--|-----|-----------|
| 55 | Overexpression of <i><scp>GA</scp>20â€<scp>OXIDASE</scp>1</i> in pacts plant height, biomass allocation and saccharification efficiency in maize. Plant Biotechnology Journal, 2016, 14, 997-1007. | 4.1 | 59 |
| 56 | Mitochondrial and Chloroplast Stress Responses Are Modulated in Distinct Touch and Chemical Inhibition Phases. Plant Physiology, 2016, 171, 2150-2165. | 2.3 | 85 |
| 57 | Cytokinin Response Factor 6 Represses Cytokinin-Associated Genes during Oxidative Stress. Plant Physiology, 2016, 172, pp.00415.2016. | 2.3 | 85 |
| 58 | Mitochondrial Defects Confer Tolerance against Cellulose Deficiency. Plant Cell, 2016, 28, 2276-2290. | 3.1 | 57 |
| 59 | RBOH-mediated ROS production facilitates lateral root emergence in Arabidopsis. Development (Cambridge), 2016, 143, 3328-39. | 1.2 | 152 |
| 60 | 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 |
| 61 | Identification of Differentially Expressed Genes during Lace Plant Leaf Development. International Journal of Plant Sciences, 2016, 177, 419-431. | 0.6 | 4 |
| 62 | 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 |
| 63 | The SBT6.1 subtilase processes the GOLVEN1 peptide controlling cell elongation. Journal of Experimental Botany, 2016, 67, 4877-4887. | 2.4 | 51 |
| 64 | The ROS Wheel: Refining ROS Transcriptional Footprints. Plant Physiology, 2016, 171, 1720-1733. | 2.3 | 137 |
| 65 | Sequence-specific protein aggregation generates defined protein knockdowns in plants. Plant Physiology, 2016, 171, pp.00335.2016. | 2.3 | 24 |
| 66 | Diagonal chromatography to study plant protein modifications. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2016, 1864, 945-951. | 1.1 | 0 |
| 67 | 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 |
| 68 | Spreading the news: subcellular and organellar reactive oxygen species production and signalling. Journal of Experimental Botany, 2016, 67, 3831-3844. | 2.4 | 364 |
| 69 | The Need to Understand GMO Opposition: Reply to Couée. Trends in Plant Science, 2016, 21, 92. | 4.3 | 4 |
| 70 | <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 |
| 71 | GROWTH REGULATING FACTOR5 Stimulates Arabidopsis Chloroplast Division, Photosynthesis, and Leaf Longevity Â. Plant Physiology, 2015, 167, 817-832. | 2.3 | 100 |
| 72 | Oxidative post-translational modifications of cysteine residues in plant signal transduction. Journal of Experimental Botany, 2015, 66, 2923-2934. | 2.4 | 163 |

| # | Article | IF | CITATIONS |
|----|---|--------------|-----------|
| 73 | 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 |
| 74 | Redox Strategies for Crop Improvement. Antioxidants and Redox Signaling, 2015, 23, 1186-1205. | 2.5 | 22 |
| 75 | DYn-2 Based Identification of Arabidopsis Sulfenomes*. Molecular and Cellular Proteomics, 2015, 14, 1183-1200. | 2.5 | 70 |
| 76 | Protein Methionine Sulfoxide Dynamics in Arabidopsis thaliana under Oxidative Stress. Molecular and Cellular Proteomics, 2015, 14, 1217-1229. | 2.5 | 88 |
| 77 | Cysteines under ROS attack in plants: a proteomics view. Journal of Experimental Botany, 2015, 66, 2935-2944. | 2.4 | 103 |
| 78 | Fatal attraction: the intuitive appeal of GMO opposition. Trends in Plant Science, 2015, 20, 414-418. | 4.3 | 156 |
| 79 | Licensed to Kill: Mitochondria, Chloroplasts, and Cell Death. Trends in Plant Science, 2015, 20, 754-766. | 4.3 | 155 |
| 80 | 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 |
| 81 | Cytokinin response factors regulate PIN-FORMED auxin transporters. Nature Communications, 2015, 6, 8717. | 5 . 8 | 108 |
| 82 | ARACINs, Brassicaceae-Specific Peptides Exhibiting Antifungal Activities against Necrotrophic Pathogens in Arabidopsis Â. Plant Physiology, 2015, 167, 1017-1029. | 2.3 | 14 |
| 83 | Plant innate immunity – sunny side up?. Trends in Plant Science, 2015, 20, 3-11. | 4.3 | 193 |
| 84 | <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 |
| 85 | 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 |
| 86 | 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 |
| 87 | Anterograde and Retrograde Regulation of Nuclear Genes Encoding Mitochondrial Proteins during Growth, Development, and Stress. Molecular Plant, 2014, 7, 1075-1093. | 3.9 | 156 |
| 88 | 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 |
| 89 | 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 |
| 90 | 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 |

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|-----|--|-----|-----------|
| 91 | Spatial H2O2 Signaling Specificity: H2O2 from Chloroplasts and Peroxisomes Modulates the Plant Transcriptome Differentially. Molecular Plant, 2014, 7, 1191-1210. | 3.9 | 167 |
| 92 | Mitochondrial Perturbation Negatively Affects Auxin Signaling. Molecular Plant, 2014, 7, 1138-1150. | 3.9 | 57 |
| 93 | Plant Metacaspase Activation and Activity. Methods in Molecular Biology, 2014, 1133, 237-253. | 0.4 | 7 |
| 94 | 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 |
| 95 | Multivariable environmental conditions promote photosynthetic adaptation potential in Arabidopsis thaliana. Journal of Plant Physiology, 2013, 170, 548-559. | 1.6 | 37 |
| 96 | The <i>Arabidopsis</i> METACASPASE9 Degradome Â. Plant Cell, 2013, 25, 2831-2847. | 3.1 | 109 |
| 97 | Plant proteins under oxidative attack. Proteomics, 2013, 13, 932-940. | 1.3 | 54 |
| 98 | <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 |
| 99 | The Membrane-Bound NAC Transcription Factor ANAC013 Functions in Mitochondrial Retrograde Regulation of the Oxidative Stress Response in <i>Arabidopsis</i> | 3.1 | 293 |
| 100 | Cryptogein-Induced Transcriptional Reprogramming in Tobacco Is Light Dependent \hat{A} \hat{A} . Plant Physiology, 2013, 163, 263-275. | 2.3 | 9 |
| 101 | Catalase and <i>NO CATALASE ACTIVITY1</i> Promote Autophagy-Dependent Cell Death in <i>Arabidopsis</i> Plant Cell, 2013, 25, 4616-4626. | 3.1 | 101 |
| 102 | Towards a carbon-negative sustainable bio-based economy. Frontiers in Plant Science, 2013, 4, 174. | 1.7 | 114 |
| 103 | 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 |
| 104 | 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 |
| 105 | Hydrogen peroxideâ€"a central hub for information flow in plant cells. AoB PLANTS, 2012, 2012, pls014. | 1.2 | 323 |
| 106 | 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 |
| 107 | Identification of cis-regulatory elements specific for different types of reactive oxygen species in Arabidopsis thaliana. Gene, 2012, 499, 52-60. | 1.0 | 36 |
| 108 | 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 |

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|-----|--|-----|-----------|
| 109 | A subcellular localization compendium of hydrogen peroxideâ€induced proteins. Plant, Cell and Environment, 2012, 35, 308-320. | 2.8 | 86 |
| 110 | Stress homeostasis – the redox and auxin perspective. Plant, Cell and Environment, 2012, 35, 321-333. | 2.8 | 294 |
| 111 | Day length is a key regulator of transcriptomic responses to both CO ₂ and H ₂ O ₂ in <i>Arabidopsis</i> . Plant, Cell and Environment, 2012, 35, 374-387. | 2.8 | 83 |
| 112 | Natural substrates of plant proteases: how can protease degradomics extend our knowledge?. Physiologia Plantarum, 2012, 145, 28-40. | 2.6 | 29 |
| 113 | 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 |
| 114 | ROS signaling: the new wave?. Trends in Plant Science, 2011, 16, 300-309. | 4.3 | 1,911 |
| 115 | Survival and growth of Arabidopsis plants given limited water are not equal. Nature Biotechnology, 2011, 29, 212-214. | 9.4 | 267 |
| 116 | Morphological classification of plant cell deaths. Cell Death and Differentiation, 2011, 18, 1241-1246. | 5.0 | 481 |
| 117 | Metacaspases. Cell Death and Differentiation, 2011, 18, 1279-1288. | 5.0 | 292 |
| 118 | Potential Use of a Serpin from Arabidopsis for Pest Control. PLoS ONE, 2011, 6, e20278. | 1.1 | 28 |
| 119 | Perturbation of Indole-3-Butyric Acid Homeostasis by the UDP-Glucosyltransferase <i>UGT74E2</i> Modulates <i>Arabidopsis</i> Folionation of Indole-3-Butyric Acid Homeostasis by the UDP-Glucosyltransferase <i>UGT74E2</i> Folionation of Indole-3-Butyric Acid Homeostasis by the UDP-Glucosyltransferase of Indole-3-Butyric Acid Homeostasis by the Indole-3-Butyri | 3.1 | 407 |
| 120 | Peroxisomal Hydrogen Peroxide Is Coupled to Biotic Defense Responses by ISOCHORISMATE SYNTHASE1 in a Daylength-Related Manner Â. Plant Physiology, 2010, 153, 1692-1705. | 2.3 | 202 |
| 121 | <i>Arabidopsis</i> Type I Metacaspases Control Cell Death. Science, 2010, 330, 1393-1397. | 6.0 | 376 |
| 122 | Abscisic Acid Deficiency Causes Changes in Cuticle Permeability and Pectin Composition That Influence Tomato Resistance to <i>Botrytis</i> À <i>cinerea</i> À Â Â Â Â. Plant Physiology, 2010, 154, 847-860. | 2.3 | 140 |
| 123 | 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 |
| 124 | Prohibitins: mitochondrial partners in development and stress response. Trends in Plant Science, 2010, 15, 275-282. | 4.3 | 68 |
| 125 | Catalase function in plants: a focus on Arabidopsis mutants as stress-mimic models. Journal of Experimental Botany, 2010, 61, 4197-4220. | 2.4 | 736 |
| 126 | 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 |

| # | Article | IF | CITATIONS |
|-----|--|--------------|-----------|
| 127 | Developmental Stage Specificity and the Role of Mitochondrial Metabolism in the Response of Arabidopsis Leaves to Prolonged Mild Osmotic Stress Â. Plant Physiology, 2009, 152, 226-244. | 2.3 | 269 |
| 128 | How relevant are flavonoids as antioxidants in plants?. Trends in Plant Science, 2009, 14, 125-132. | 4.3 | 548 |
| 129 | Hydrogen Peroxide-Responsive Genes in Stress Acclimation and Cell Death. Signaling and Communication in Plants, 2009, , 149-164. | 0.5 | 13 |
| 130 | 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 |
| 131 | Unraveling the Tapestry of Networks Involving Reactive Oxygen Species in Plants. Plant Physiology, 2008, 147, 978-984. | 2.3 | 207 |
| 132 | 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 |
| 133 | Hydrogen Peroxide-Induced Gene Expression across Kingdoms: A Comparative Analysis. Molecular Biology and Evolution, 2008, 25, 507-516. | 3 . 5 | 122 |
| 134 | Singlet Oxygen Is the Major Reactive Oxygen Species Involved in Photooxidative Damage to Plants. Plant Physiology, 2008, 148, 960-968. | 2.3 | 475 |
| 135 | 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 |
| 136 | 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 |
| 137 | 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 |
| 138 | Are metacaspases caspases?. Journal of Cell Biology, 2007, 179, 375-380. | 2.3 | 164 |
| 139 | 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 H ₂ 0 ₂ â€induced cell death. Plant lournal, 2007, 52, 640-657. | 2.8 | 394 |
| 140 | Mitochondrial type†prohibitins of <i>Arabidopsis thaliana</i> are required for supporting proficient meristem development. Plant Journal, 2007, 52, 850-864. | 2.8 | 114 |
| 141 | Reactive Oxygen Species in Plant Cell Death. Plant Physiology, 2006, 141, 384-390. | 2.3 | 818 |
| 142 | Serpin1 of Arabidopsis thaliana is a Suicide Inhibitor for Metacaspase 9. Journal of Molecular Biology, 2006, 364, 625-636. | 2.0 | 167 |
| 143 | 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 |
| 144 | Reactive oxygen species as signals that modulate plant stress responses and programmed cell death. BioEssays, 2006, 28, 1091-1101. | 1.2 | 951 |

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|-----|---|-----|-----------|
| 145 | Transcriptomic Footprints Disclose Specificity of Reactive Oxygen Species Signaling in Arabidopsis Â. Plant Physiology, 2006, 141, 436-445. | 2.3 | 683 |
| 146 | Nitric Oxide- and Hydrogen Peroxide-Responsive Gene Regulation during Cell Death Induction in Tobacco Â. Plant Physiology, 2006, 141, 404-411. | 2.3 | 180 |
| 147 | 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 |
| 148 | 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 |
| 149 | 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 |
| 150 | Catalase deficiency drastically affects gene expression induced by high light inArabidopsis thaliana. Plant Journal, 2004, 39, 45-58. | 2.8 | 298 |
| 151 | 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 |
| 152 | Reactive oxygen gene network of plants. Trends in Plant Science, 2004, 9, 490-498. | 4.3 | 4,689 |
| 153 | Changes in hydrogen peroxide homeostasis trigger an active cell death process in tobacco. Plant Journal, 2003, 33, 621-632. | 2.8 | 272 |
| 154 | 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 |
| 155 | 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 |
| 156 | Signal transduction during oxidative stress. Journal of Experimental Botany, 2002, 53, 1227-1236. | 2.4 | 643 |
| 157 | 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 |
| 158 | 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 |
| 159 | Transgenic Plants Expressing Tolerance Toward Oxidative Stress. , 2002, , . | | 0 |
| 160 | Signal transduction during oxidative stress. Journal of Experimental Botany, 2002, 53, 1227-36. | 2.4 | 158 |
| 161 | The role of active oxygen species in plant signal transduction. Plant Science, 2001, 161, 405-414. | 1.7 | 493 |
| 162 | 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 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 163 | Catalase-deficient tobacco plants: tools for in planta studies on the role of hydrogen peroxide. Redox Report, 2001, 6, 37-42. | 1.4 | 70 |
| 164 | Dual action of the active oxygen species during plant stress responses. Cellular and Molecular Life Sciences, 2000, 57, 779-795. | 2.4 | 1,590 |
| 165 | Overproduction of Arabidopsis thaliana FeSOD Confers Oxidative Stress Tolerance to Transgenic Maize. Plant and Cell Physiology, 1999, 40, 515-523. | 1.5 | 120 |
| 166 | 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 |
| 167 | Tolerance to low temperature and paraquat-mediated oxidative stress in two maize genotypes. Journal of Experimental Botany, 1999, 50, 523-532. | 2.4 | 46 |
| 168 | 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 |
| 169 | Engineering Stress Tolerance in Maize. Outlook on Agriculture, 1998, 27, 115-124. | 1.8 | 33 |
| 170 | Ascorbate Peroxidase cDNA from Maize. Plant Physiology, 1995, 107, 649-650. | 2.3 | 22 |
| 171 | Heat-inducible rice hsp82 and hsp70 are not always co-regulated. Planta, 1994, 193, 57-66. | 1.6 | 25 |
| 172 | Characterization of a S-Adenosylmethionine Synthetase Gene in Rice. Plant Physiology, 1994, 105, 1463-1464. | 2.3 | 54 |
| 173 | Effects of overproduction of tobacco MnSOD in maize chloroplasts on foliar tolerance to cold and oxidative stress. , 0, . | | 33 |
| 174 | Proteolytic Activation of Plant Membrane-Bound Transcription Factors. Frontiers in Plant Science, 0, 13, . | 1.7 | 5 |