# Jacques Bourguignon

List of Publications by Year
in descending order



| 60 | 4,234 | 126907 33 | 138484 58 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 64 | 64 | 64 | 4521 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | The glycine decarboxylase system: a fascinating complex. Trends in Plant Science, 2001, 6, 167-176. | 8.8 | 391 |
| 2 | The early responses ofArabidopsis thaliana cells to cadmium exposure explored by protein and metabolite profiling analyses. Proteomics, 2006, 6, 2180-2198. | 2.2 | 348 |
| 3 | Genome-wide transcriptome profiling ofÂtheÂearly cadmium response ofÂArabidopsis roots andÂshoots. Biochimie, 2006, 88, 1751-1765. | 2.6 | 335 |
| 4 | A Proteomics Dissection of Arabidopsis thaliana Vacuoles Isolated from Cell Culture. Molecular and Cellular Proteomics, 2007, 6, 394-412. | 3.8 | 294 |
| 5 | Fatty Acid and Lipoic Acid Biosynthesis in Higher Plant Mitochondria. Journal of Biological Chemistry, 2000, 275, 5016-5025. | 3.4 | 168 |
| 6 | Localization and chemical forms of cadmium in plant samples by combining analytical electron microscopy and X-ray spectromicroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2006, 61, 1242-1252. | 2.9 | 168 |
| 7 | Investigating the plant response to cadmium exposure by proteomic and metabolomic approaches. Proteomics, 2011, 11, 1650-1663. | 2.2 | 168 |
| 8 | A survey of the plant mitochondrial proteome in relation to development. Proteomics, 2002, 2, 880. | 2.2 | 152 |
| 9 | [37] Isolation of plant mitochondria: General principles and criteria of integrity. Methods in Enzymology, 1987, 148, 403-415. | 1.0 | 146 |
| 10 | The hydrophobic proteome of mitochondrial membranes from Arabidopsis cell suspensions. Phytochemistry, 2004, 65, 1693-1707. | 2.9 | 135 |
| 11 | Interaction between the Component Enzymes of the Glycine Decarboxylase Multienzyme Complex. Plant Physiology, 1990, 94, 833-839. | 4.8 | 121 |
| 12 | Glycine and serine catabolism in non-photosynthetic higher plant cells: their role in C1 metabolism. Plant Journal, 1999, 20, 197-205. | 5.7 | 111 |
| 13 | Evidence for the Existence in Arabidopsis thaliana of the Proteasome Proteolytic Pathway. Journal of Biological Chemistry, 2009, 284, 35412-35424. | 3.4 | 101 |
| 14 | Plant organelle proteomics: Collaborating for optimal cell function. Mass Spectrometry Reviews, 2011, 30, 772-853. | 5.4 | 89 |
| 15 | Arabidopsis Putative Selenium-Binding Protein1 Expression Is Tightly Linked to Cellular Sulfur Demand and Can Reduce Sensitivity to Stresses Requiring Glutathione for Tolerance Â. Plant Physiology, 2009, 151, 768-781. | 4.8 | 80 |
| 16 | Metabolomic, proteomic andÂbiophysical analyses ofÂArabidopsisÂthaliana cells exposed toÂaÂcaesium stress. Influence ofÂpotassium supply. Biochimie, 2006, 88, 1533-1547. | 2.6 | 79 |
| 17 | Influence of uranium speciation on its accumulation and translocation in three plant species: Oilseed rape, sunflower and wheat. Environmental and Experimental Botany, 2012, 77, 96-107. | 4.2 | 79 |
| 18 | Micro-chemical imaging ofÂcesium distribution inÂArabidopsisÂthaliana plant andÂitsÂinteraction with potassium andÂessential trace elements. Biochimie, 2006, 88, 1583-1590. | 2.6 | 69 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Isolation of a large complex from the matrix of pea leaf mitochondria involved in the rapid transformation of glycine into serine. FEBS Letters, 1986, 207, 18-22. | 2.8 | 65 |
| 20 | Isolation, characterization, and sequence analysis of a cDNA clone encoding L-protein, the dihydrolipoamide dehydrogenase component of the glycine cleavage system from pea-leaf mitochondria. FEBS Journal, 1992, 204, 865-873. | 0.2 | 64 |
| 21 | Glycine metabolism by plant mitochondria. Physiologia Plantarum, 1990, 80, 487-491. | 5.2 | 59 |
| 22 | Evidence for functional interaction between brassinosteroids and cadmium response in Arabidopsis thaliana. Journal of Experimental Botany, 2012, 63, 1185-1200. | 4.8 | 57 |
| 23 | Speciation of uranium in plants upon root accumulation and root-to-shoot translocation: A XAS and TEM study. Environmental and Experimental Botany, 2012, 77, 87-95. | 4.2 | 57 |
| 24 | Glycine decarboxylase and pyruvate dehydrogenase complexes share the same dihydrolipoamide dehydrogenase in pea leaf mitochondria: evidence from mass spectrometry and primary-structure analysis. Biochemical Journal, 1996, 313, 229-234. | 3.7 | 53 |
| 25 | The glycine decarboxylase system in higher plant mitochondria: structure, function and biogenesis. Biochemical Society Transactions, 1994, 22, 184-188. | 3.4 | 50 |
| 26 | Interaction between the lipoamide-containing H-protein and the lipoamide dehydrogenase (L-protein) of the glycine decarboxylase multienzyme system. FEBS Journal, 2000, 267, 2890-2898. | 0.2 | 50 |
| 27 | The Arabidopsis Putative Selenium-Binding Protein Family: Expression Study and Characterization of SBP1 as a Potential New Player in Cadmium Detoxification Processes Â. Plant Physiology, 2008, 147, 239-251. | 4.8 | 48 |
| 28 | The role of plant mitochondria in the biosynthesis of coenzymes. Photosynthesis Research, 2007, 92, 149-162. | 2.9 | 44 |
| 29 | Glycine decarboxylase complex from higher plants. Molecular cloning, tissue distribution and mass spectrometry analyses of the T protein. FEBS Journal, 1993, 217, 377-386. | 0.2 | 42 |
| 30 | Expression, Lipoylation and Structure Determination of Recombinant Pea H-Protein in Escherichia coli. FEBS Journal, 1996, 236, 27-33. | 0.2 | 39 |
| 31 | Interaction between the lipoamide-containing H-protein and the lipoamide dehydrogenase (L-protein) of the glycine decarboxylase multienzyme system. FEBS Journal, 2000, 267, 2882-2889. | 0.2 | 39 |
| 32 | Uranium perturbs signaling and iron uptake response in Arabidopsis thaliana roots. Metallomics, 2014, 6, 809-821. | 2.4 | 38 |
| 33 | Arabidopsis thaliana plants challenged with uranium reveal new insights into iron and phosphate homeostasis. New Phytologist, 2018, 217, 657-670. | 7.3 | 38 |
| 34 | Uncovering the physiological and cellular effects of uranium on the root system of Arabidopsis thaliana. Environmental and Experimental Botany, 2019, 157, 121-130. | 4.2 | 35 |
| 35 | A versatile method for deciphering plant membrane proteomes. Journal of Experimental Botany, 2006, 57, 1579-1589. | 4.8 | 33 |
| 36 | Glutathione and transpiration as key factors conditioning oxidative stress in Arabidopsis thaliana exposed to uranium. Planta, 2014, 239, 817-830. | 3.2 | 32 |

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|---|---|---|---|
| 37 | Investigation of seeds with high-resolution solid-state13C NMR. Magnetic Resonance in Chemistry, 2001, 39, 733-738. | 1.9 | 31 |
| 38 | New insights into theÂregulation ofÂphytochelatin biosynthesis inÂA.Âthaliana cells from metabolite profiling analyses. Biochimie, 2006, 88, 1733-1742. | 2.6 | 29 |
| 39 | Biochemical and Biophysical Characterization of the Selenium-binding and Reducing Site in Arabidopsis thaliana Homologue to Mammals Selenium-binding Protein 1. Journal of Biological Chemistry, 2014, 289, 31765-31776. | 3.4 | 29 |
| 40 | Differential <scp><scp>CO<sub>2</sub></scp></scp> effect on primary carbon metabolism of flag leaves in durum wheat (<scp>T</scp>riticum durum Desf.). Plant, Cell and Environment, 2015, 38, 2780-2794. | 5.7 | 29 |
| 41 | The gene encoding T protein of the glycine decarboxylase complex involved in the mitochondrial step of the photorespiratory pathway in plants exhibits features of light-induced genes. Plant Molecular Biology, 1998, 37, 309-318. | 3.9 | 25 |
| 42 | Dynamics ofArabidopsis thaliana soluble proteome in response to different nutrient culture conditions. Electrophoresis, 2006, 27, 495-507. | 2.4 | 24 |
| 43 | Investigation of the Local Structure and Dynamics of the H Subunit of the Mitochondrial Glycine Decarboxylase Using Heteronuclear NMR Spectroscopyâ€. Biochemistry, 1999, 38, 8334-8346. | 2.5 | 23 |
| 44 | How reversible are the effects of silver nanoparticles on macrophages? A proteomic-instructed view. Environmental Science: Nano, 2019, 6, 3133-3157. | 4.3 | 21 |
| 45 | Metabolomic investigation of the response of the model plant Arabidopsis thaliana to cadmium exposure: Evaluation of data pretreatment methods for further statistical analyses. Chemometrics and Intelligent Laboratory Systems, 2008, 91, 67-77. | 3.5 | 20 |
| 46 | An outlook on lysine methylation of non-histone proteins in plants. Journal of Experimental Botany, 2018, 69, 4569-4581. | 4.8 | 15 |
| 47 | Calcium-permeable cation channels are involved in uranium uptake in Arabidopsis thaliana. Journal of Hazardous Materials, 2022, 424, 127436. | 12.4 | 15 |
| 48 | Structural and Functional Characterization of H Protein Mutants of the Glycine Decarboxylase Complex. Journal of Biological Chemistry, 1999, 274, 26344-26352. | 3.4 | 14 |
| 49 | Development of a metalloproteomic approach to analyse the response of Arabidopsis cells to uranium stress. Metallomics, 2020, 12, 1302-1313. | 2.4 | 13 |
| 50 | Effects of LS 82556 on thylakoid activities and photosynthesis: A comparison with paraquat and acifluorfen. Pesticide Biochemistry and Physiology, 1987, 29, 209-216. | 3.6 | 11 |
| 51 | Glycine metabolism by plant mitochondria. Physiologia Plantarum, 1990, 80, 487-491. | 5.2 | 11 |
| 52 | A Proteomics Approach Highlights a Myriad of Transporters in theArabidopsis thalianaVacuolar Membrane. Plant Signaling and Behavior, 2007, 2, 413-415. | 2.4 | 9 |
| 53 | High-affinity iron and calcium transport pathways are involved in U(VI) uptake in the budding yeast Saccharomyces cerevisiae. Journal of Hazardous Materials, 2022, 422, 126894. | 12.4 | 8 |
| 54 | An Overview of theArabidopsis Proteome. , 0, , 141-164. | | 6 |

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| 55 | Protein lysine methylation contributes to modulating the response of sensitive and tolerant Arabidopsis species to cadmium stress. Plant, Cell and Environment, 2020, 43, 760-774. | 5.7 | 6 |
| 56 | Characterization of cadmium accumulation and phytoextraction in three species of the genus Atriplex (canescens, halimus and nummularia) in the presence or absence of salt. Plant Physiology and Biochemistry, 2021, 166, 902-911. | 5.8 | 6 |
| 57 | Exploring the Plant Response to Cadmium Exposure by Transcriptomic, Proteomic and Metabolomic Approaches: Potentiality of High-Throughput Methods, Promises of Integrative Biology. , 2012, , 119-142. | | 3 |
| 58 | A novel method for determination of the <scp><sup>15</sup>N</scp> isotopic composition of Rubisco in wheat plants exposed to elevated atmospheric carbon dioxide. Physiologia Plantarum, 2015, 153, 195-203. | 5.2 | 3 |
| 59 | Backbone and sequence-specific assignment of three forms of the lipoate-containing H-protein of the glycine decarboxylase complex. Journal of Biomolecular NMR, 1999, 15, 185-186. | 2.8 | 2 |
| 60 | The vacuole membrane (tonoplast) from the meristematic cells of Brassica oleracea var. Botrytis contains major intrinsic proteins related to tips: A molecular analysis. Biology of the Cell, 1995, 84, 119-119. | 2.0 | 0 |