

Brigitte Gontero

List of Publications by Year in descending order

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Version: 2024-02-01

90
papers

3,179
citations

136950

32
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182427

51
g-index

99
all docs

99
docs citations

99
times ranked

3027
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Reduction in Phosphoribulokinase Amount and Re-Routing Metabolism in <i>Chlamydomonas reinhardtii</i> CP12 Mutants. <i>International Journal of Molecular Sciences</i> , 2022, 23, 2710. | 4.1 | 7 |
| 2 | Bioaccessibility of essential lipophilic nutrients in a chloroplast-rich fraction (CRF) from agricultural green waste during simulated human gastrointestinal tract digestion. <i>Food and Function</i> , 2022, 13, 5365-5380. | 4.6 | 1 |
| 3 | A new type of flexible CP12 protein in the marine diatom <i>Thalassiosira pseudonana</i> . <i>Cell Communication and Signaling</i> , 2021, 19, 38. | 6.5 | 9 |
| 4 | ppGpp influences protein protection, growth and photosynthesis in <i>Phaeodactylum tricornutum</i> . <i>New Phytologist</i> , 2021, 230, 1517-1532. | 7.3 | 14 |
| 5 | Flexibility of Oxidized and Reduced States of the Chloroplast Regulatory Protein CP12 in Isolation and in Cell Extracts. <i>Biomolecules</i> , 2021, 11, 701. | 4.0 | 4 |
| 6 | Quantitative monitoring of galactolipid hydrolysis by pancreatic lipase-related protein 2 using thin layer chromatography and thymol-sulfuric acid derivatization. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2021, 1173, 122674. | 2.3 | 5 |
| 7 | Inorganic carbon uptake in a freshwater diatom, <i>Asterionella formosa</i> (Bacillariophyceae): from ecology to genomics. <i>Phycologia</i> , 2021, 60, 427-438. | 1.4 | 6 |
| 8 | Structural Contour Map of the Iota Carbonic Anhydrase from the Diatom <i>Thalassiosira pseudonana</i> Using a Multiprong Approach. <i>International Journal of Molecular Sciences</i> , 2021, 22, 8723. | 4.1 | 6 |
| 9 | Characterization of all the lipolytic activities in pancreatin and comparison with porcine and human pancreatic juices. <i>Biochimie</i> , 2020, 169, 106-120. | 2.6 | 23 |
| 10 | Targeting TOR signaling for enhanced lipid productivity in algae. <i>Biochimie</i> , 2020, 169, 12-17. | 2.6 | 10 |
| 11 | Storage Compound Accumulation in Diatoms as Response to Elevated CO ₂ Concentration. <i>Biology</i> , 2020, 9, 5. | 2.8 | 24 |
| 12 | The digestion of galactolipids and its ubiquitous function in Nature for the uptake of the essential $\hat{\pm}$ -linolenic acid. <i>Food and Function</i> , 2020, 11, 6710-6744. | 4.6 | 23 |
| 13 | Regulation of Carbon Metabolism by Environmental Conditions: A Perspective From Diatoms and Other Chromalveolates. <i>Frontiers in Plant Science</i> , 2020, 11, 1033. | 3.6 | 19 |
| 14 | External $\hat{\pm}$ -carbonic anhydrase and solute carrier 4 are required for bicarbonate uptake in a freshwater angiosperm. <i>Journal of Experimental Botany</i> , 2020, 71, 6004-6014. | 4.8 | 18 |
| 15 | Structural basis for C ₄ photosynthesis without Kranz anatomy in leaves of the submerged freshwater plant <i>Ottelia alismoides</i> . <i>Annals of Botany</i> , 2020, 125, 869-879. | 2.9 | 21 |
| 16 | Insights on the Functions and Ecophysiological Relevance of the Diverse Carbonic Anhydrases in Microalgae. <i>International Journal of Molecular Sciences</i> , 2020, 21, 2922. | 4.1 | 51 |
| 17 | Orchestration of algal metabolism by protein disorder. <i>Archives of Biochemistry and Biophysics</i> , 2019, 672, 108070. | 3.0 | 13 |
| 18 | Interaction between Silver Nanoparticles and Two Dehydrogenases: Role of Thiol Groups. <i>Small</i> , 2019, 15, e1900860. | 10.0 | 42 |

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|----|--|-----|-----------|
| 19 | A new widespread subclass of carbonic anhydrase in marine phytoplankton. <i>ISME Journal</i> , 2019, 13, 2094-2106. | 9.8 | 165 |
| 20 | <i>In vitro</i> digestion of galactolipids from chloroplast-rich fraction (CRF) of postharvest, pea vine field residue (haulm) and spinach leaves. <i>Food and Function</i> , 2019, 10, 7806-7817. | 4.6 | 14 |
| 21 | RSH enzyme diversity for (p)ppGpp metabolism in <i>Phaeodactylum tricornutum</i> and other diatoms. <i>Scientific Reports</i> , 2019, 9, 17682. | 3.3 | 15 |
| 22 | Cryptic Disorder Out of Disorder: Encounter between Conditionally Disordered CP12 and Glyceraldehyde-3-Phosphate Dehydrogenase. <i>Journal of Molecular Biology</i> , 2018, 430, 1218-1234. | 4.2 | 19 |
| 23 | Exploring intrinsically disordered proteins in <i>Chlamydomonas reinhardtii</i> . <i>Scientific Reports</i> , 2018, 8, 6805. | 3.3 | 25 |
| 24 | Trade-offs and Synergies in the Structural and Functional Characteristics of Leaves Photosynthesizing in Aquatic Environments. <i>Advances in Photosynthesis and Respiration</i> , 2018, , 307-343. | 1.0 | 14 |
| 25 | Exploring the microbiome of the freshwater diatom <i>Asterionella formosa</i> in a laboratory context. <i>Environmental Microbiology</i> , 2018, 20, 3601-3615. | 3.8 | 6 |
| 26 | Different CO ₂ acclimation strategies in juvenile and mature leaves of <i>Ottelia alismoides</i> . <i>Photosynthesis Research</i> , 2018, 138, 219-232. | 2.9 | 15 |
| 27 | Interaction between adenylate kinase 3 and glyceraldehyde-3-phosphate dehydrogenase from <i>Chlamydomonas reinhardtii</i> . <i>FEBS Journal</i> , 2018, 285, 2495-2503. | 4.7 | 13 |
| 28 | The effect of chronic silver nanoparticles on aquatic system in microcosms. <i>Environmental Pollution</i> , 2017, 223, 395-402. | 7.5 | 50 |
| 29 | Responses of the marine diatom <i>Thalassiosira pseudonana</i> to changes in CO ₂ concentration: a proteomic approach. <i>Scientific Reports</i> , 2017, 7, 42333. | 3.3 | 36 |
| 30 | Diversity of CO ₂ -concentrating mechanisms and responses to CO ₂ concentration in marine and freshwater diatoms. <i>Journal of Experimental Botany</i> , 2017, 68, 3925-3935. | 4.8 | 35 |
| 31 | Responses of <i>Ottelia alismoides</i> , an aquatic plant with three CCMs, to variable CO ₂ and light. <i>Journal of Experimental Botany</i> , 2017, 68, 3985-3995. | 4.8 | 33 |
| 32 | Silver nanoparticles induced reactive oxygen species via photosynthetic energy transport imbalance in an aquatic plant. <i>Nanotoxicology</i> , 2017, 11, 157-167. | 3.0 | 112 |
| 33 | Regulation of the Calvin-Benson-Bassham cycle in the enigmatic diatoms: biochemical and evolutionary variations on an original theme. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2017, 372, 20160401. | 4.0 | 38 |
| 34 | Diatom teratologies as biomarkers of contamination: Are all deformities ecologically meaningful?. <i>Ecological Indicators</i> , 2017, 82, 539-550. | 6.3 | 58 |
| 35 | Ecological imperatives for aquatic CO ₂ -concentrating mechanisms. <i>Journal of Experimental Botany</i> , 2017, 68, 3797-3814. | 4.8 | 72 |
| 36 | The inhibition of TOR in the model diatom <i>Phaeodactylum tricornutum</i> promotes a get-fat growth regime. <i>Algal Research</i> , 2017, 26, 265-274. | 4.6 | 30 |

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|----|---|-----|-----------|
| 37 | The intriguing CP12-like tail of adenylate kinase 3 from <i>Chlamydomonas reinhardtii</i> . FEBS Journal, 2016, 283, 3389-3407. | 4.7 | 10 |
| 38 | Absence of residual structure in the intrinsically disordered regulatory protein CP12 in its reduced state. Biochemical and Biophysical Research Communications, 2016, 477, 20-26. | 2.1 | 14 |
| 39 | Redox regulation of ATP sulfurylase in microalgae. Biochemical and Biophysical Research Communications, 2016, 478, 1555-1562. | 2.1 | 14 |
| 40 | The nature of the CO ₂ -concentrating mechanisms in a marine diatom, <i>Thalassiosira pseudonana</i> . New Phytologist, 2016, 209, 1417-1427. | 7.3 | 60 |
| 41 | Fairy-tails flexibility and function of intrinsically disordered extensions in the photosynthetic world. Frontiers in Molecular Biosciences, 2015, 2, 23. | 3.5 | 29 |
| 42 | Phosphoribulokinase from <i>Chlamydomonas reinhardtii</i> : a Benson-Calvin cycle enzyme enslaved to its cysteine residues. Molecular BioSystems, 2015, 11, 1134-1145. | 2.9 | 26 |
| 43 | The DJ-1 superfamily member Hsp31 repairs proteins from glycation by methylglyoxal and glyoxal. Biochemical and Biophysical Research Communications, 2015, 463, 1305-1310. | 2.1 | 33 |
| 44 | Micellar lipid composition affects micelle interaction with class B scavenger receptor extracellular loops. Journal of Lipid Research, 2015, 56, 1123-1133. | 4.2 | 22 |
| 45 | FRET analysis of CP12 structural interplay by GAPDH and PRK. Biochemical and Biophysical Research Communications, 2015, 458, 488-493. | 2.1 | 13 |
| 46 | Diversity and regulation of ATP sulfurylase in photosynthetic organisms. Frontiers in Plant Science, 2014, 5, 597. | 3.6 | 52 |
| 47 | Conformational modulation and hydrodynamic radii of CP12 protein and its complexes probed by fluorescence correlation spectroscopy. FEBS Journal, 2014, 281, 3206-3217. | 4.7 | 14 |
| 48 | CP12-mediated protection of Calvin-Benson cycle enzymes from oxidative stress. Biochimie, 2014, 97, 228-237. | 2.6 | 55 |
| 49 | Biochemical and biophysical CO ₂ concentrating mechanisms in two species of freshwater macrophyte within the genus <i>Ottelia</i> (Hydrocharitaceae). Photosynthesis Research, 2014, 121, 285-297. | 2.9 | 64 |
| 50 | Glyceraldehyde-3-phosphate dehydrogenase is regulated by ferredoxin-NADP reductase in the diatom <i>Asterionella formosa</i> . New Phytologist, 2014, 203, 414-423. | 7.3 | 32 |
| 51 | Effect of environmental conditions on various enzyme activities and triacylglycerol contents in cultures of the freshwater diatom, <i>Asterionella formosa</i> (Bacillariophyceae). Biochimie, 2014, 101, 21-30. | 2.6 | 26 |
| 52 | Regulation of photosynthetic carbon metabolism in aquatic and terrestrial organisms by Rubisco activase, redox-modulation and CP12. Aquatic Botany, 2014, 118, 14-23. | 1.6 | 20 |
| 53 | Exploration of CP12 conformational changes and of quaternary structural properties using electrospray ionization traveling wave ion mobility mass spectrometry. Rapid Communications in Mass Spectrometry, 2013, 27, 179-186. | 1.5 | 14 |
| 54 | Dynamics of the intrinsically disordered protein CP12 in its association with GAPDH in the green alga <i>Chlamydomonas reinhardtii</i> : a fuzzy complex. Molecular BioSystems, 2013, 9, 2869. | 2.9 | 26 |

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|----|--|------|-----------|
| 55 | Enlarging the Panoply of Site-Directed Spin Labeling Electron Paramagnetic Resonance (SDSL-EPR): Sensitive and Selective Spin-Labeling of Tyrosine Using an Isoindoline-Based Nitroxide. <i>Bioconjugate Chemistry</i> , 2013, 24, 1110-1117. | 3.6 | 39 |
| 56 | Glutathionylation in the Photosynthetic Model Organism <i>Chlamydomonas reinhardtii</i> : A Proteomic Survey. <i>Molecular and Cellular Proteomics</i> , 2012, 11, M111.014142. | 3.8 | 127 |
| 57 | Regulation of glyceraldehyde-3-phosphate dehydrogenase in the eustigmatophyte <i>Pseudocharaciopsis ovalis</i> is intermediate between a chlorophyte and a diatom. <i>European Journal of Phycology</i> , 2012, 47, 207-215. | 2.0 | 6 |
| 58 | An intrinsically disordered protein, CP12: jack of all trades and master of the Calvin cycle. <i>Biochemical Society Transactions</i> , 2012, 40, 995-999. | 3.4 | 60 |
| 59 | CP12 residues involved in the formation and regulation of the glyceraldehyde-3-phosphate dehydrogenase-CP12-phosphoribulokinase complex in <i>Chlamydomonas reinhardtii</i> . <i>Molecular BioSystems</i> , 2012, 8, 2994. | 2.9 | 28 |
| 60 | Consequences of the presence of 24-epibrassinolide, on cultures of a diatom, <i>Asterionella formosa</i> . <i>Biochimie</i> , 2012, 94, 1213-1220. | 2.6 | 18 |
| 61 | Molecular Mechanism of NADPH-Glyceraldehyde-3-phosphate Dehydrogenase Regulation through the C-Terminus of CP12 in <i>Chlamydomonas reinhardtii</i> . <i>Biochemistry</i> , 2011, 50, 2881-2888. | 2.5 | 22 |
| 62 | Creating Order out of Disorder: Structural Imprint of GAPDH on CP12. <i>Structure</i> , 2011, 19, 1728-1729. | 3.3 | 9 |
| 63 | Tyrosine-Targeted Spin Labeling and EPR Spectroscopy: An Alternative Strategy for Studying Structural Transitions in Proteins. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 9108-9111. | 13.8 | 44 |
| 64 | Comparative sequence analysis of CP12, a small protein involved in the formation of a Calvin cycle complex in photosynthetic organisms. <i>Photosynthesis Research</i> , 2010, 103, 183-194. | 2.9 | 57 |
| 65 | Phylogenetically-based variation in the regulation of the Calvin cycle enzymes, phosphoribulokinase and glyceraldehyde-3-phosphate dehydrogenase, in algae. <i>Journal of Experimental Botany</i> , 2010, 61, 735-745. | 4.8 | 58 |
| 66 | CP12 from <i>Chlamydomonas reinhardtii</i> , a Permanent Specific α -Chaperone-like Protein of Glyceraldehyde-3-phosphate Dehydrogenase. <i>Journal of Biological Chemistry</i> , 2009, 284, 12735-12744. | 3.4 | 38 |
| 67 | A Proteomic Survey of <i>Chlamydomonas reinhardtii</i> Mitochondria Sheds New Light on the Metabolic Plasticity of the Organelle and on the Nature of the α -Proteobacterial Mitochondrial Ancestor. <i>Molecular Biology and Evolution</i> , 2009, 26, 1533-1548. | 8.9 | 172 |
| 68 | Mapping of a copper-binding site on the small CP12 chloroplastic protein of <i>Chlamydomonas reinhardtii</i> using top-down mass spectrometry and site-directed mutagenesis. <i>Biochemical Journal</i> , 2009, 419, 75-86. | 3.7 | 30 |
| 69 | A New Function of GAPDH from <i>Chlamydomonas reinhardtii</i> : A Thiol-Disulfide Exchange Reaction with CP12. <i>Biochemistry</i> , 2009, 48, 6034-6040. | 2.5 | 23 |
| 70 | Exploring CP12 binding proteins revealed aldolase as a new partner for the phosphoribulokinase/glyceraldehyde 3-phosphate dehydrogenase/CP12 complex: purification and kinetic characterization of this enzyme from <i>Chlamydomonas reinhardtii</i> . <i>FEBS Journal</i> , 2008, 275, 1248-1259. | 4.7 | 39 |
| 71 | SPECIFICITY AND FUNCTION OF GLYCERALDEHYDE-3-PHOSPHATE DEHYDROGENASE IN A FRESHWATER DIATOM, <i>ASTERIONELLA FORMOSA</i> (BACILLARIOPHYCEAE). <i>Journal of Phycology</i> , 2008, 44, 1455-1464. | 2.3 | 23 |
| 72 | Regulation of phosphoribulokinase and glyceraldehyde 3-phosphate dehydrogenase in a freshwater diatom, <i>Asterionella formosa</i> . <i>Journal of Phycology</i> , 2007, 43, 1227-1235. | 2.3 | 35 |

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|----|---|-----|-----------|
| 73 | Mapping of the interaction site of CP12 with glyceraldehyde-3-phosphate dehydrogenase from <i>Chlamydomonas reinhardtii</i> . <i>FEBS Journal</i> , 2006, 273, 3358-3369. | 4.7 | 38 |
| 74 | Construction of a 3D model of CP12, a protein linker. <i>Journal of Molecular Graphics and Modelling</i> , 2006, 25, 186-195. | 2.4 | 41 |
| 75 | Mass spectrometric analysis of the interactions between CP12, a chloroplast protein, and metal ions: a possible regulatory role within a PRK/GAPDH/CP12 complex. <i>Rapid Communications in Mass Spectrometry</i> , 2005, 19, 3379-3388. | 1.5 | 28 |
| 76 | Emergence of new regulatory mechanisms in the Benson-Calvin pathway via protein-protein interactions: a glyceraldehyde-3-phosphate dehydrogenase/CP12/phosphoribulokinase complex. <i>Journal of Experimental Botany</i> , 2004, 55, 1245-1254. | 4.8 | 116 |
| 77 | Involvement of two positively charged residues of <i>Chlamydomonas reinhardtii</i> glyceraldehyde-3-phosphate dehydrogenase in the assembly process of a bi-enzyme complex involved in CO ₂ assimilation. <i>FEBS Journal</i> , 2004, 271, 4737-4744. | 0.2 | 20 |
| 78 | Can the description of a cascade of biochemical events establish the basis of the integration of a biological function?. <i>Biology of the Cell</i> , 2004, 96, 675-676. | 2.0 | 0 |
| 79 | The Small Protein CP12: A Protein Linker for Supramolecular Complex Assembly. <i>Biochemistry</i> , 2003, 42, 8163-8170. | 2.5 | 110 |
| 80 | Modulation, via Protein-Protein Interactions, of Glyceraldehyde-3-phosphate Dehydrogenase Activity through Redox Phosphoribulokinase Regulation. <i>Journal of Biological Chemistry</i> , 2003, 278, 12078-12084. | 3.4 | 47 |
| 81 | Striking Conformational Change Suspected within the Phosphoribulokinase Dimer Induced by Interaction with GAPDH. <i>Journal of Biological Chemistry</i> , 2002, 277, 6743-6749. | 3.4 | 24 |
| 82 | Thermodynamic Analysis of the Emergence of New Regulatory Properties in a Phosphoribulokinase-Glyceraldehyde 3-Phosphate Dehydrogenase Complex. <i>Journal of Biological Chemistry</i> , 2002, 277, 12697-12702. | 3.4 | 20 |
| 83 | Thioredoxin Activation of Phosphoribulokinase in a Bi-enzyme Complex from <i>Chlamydomonas reinhardtii</i> Chloroplasts. <i>Journal of Biological Chemistry</i> , 2000, 275, 9447-9451. | 3.4 | 33 |
| 84 | Memory and Imprinting in Multienzyme Complexes. <i>Journal of Biological Chemistry</i> , 1999, 274, 20879-20884. | 3.4 | 30 |
| 85 | Memory and Imprinting Effects in Multienzyme Complexes. I. Isolation, Dissociation, and Reassociation of a Phosphoribulokinase-Glyceraldehyde-3-Phosphate Dehydrogenase Complex from <i>Chlamydomonas Reinhardtii</i> Chloroplasts. <i>FEBS Journal</i> , 1997, 246, 78-84. | 0.2 | 55 |
| 86 | Information Transfer in Multienzyme Complexes. 1. Thermodynamics of Conformational Constraints and Memory Effects in the Bi-enzyme Glyceraldehyde-3-Phosphate-Dehydrogenase-Phosphoribulokinase Complex of <i>Chlamydomonas reinhardtii</i> Chloroplasts. <i>FEBS Journal</i> , 1997, 250, 286-295. | 0.2 | 32 |
| 87 | Information Transfer in Multienzyme Complexes. 2. The Role of Arg64 of <i>Chlamydomonas reinhardtii</i> Phosphoribulokinase in the Information Transfer Between Glyceraldehydes-3-Phosphate Dehydrogenase and Phosphoribulokinase. <i>FEBS Journal</i> , 1997, 250, 296-302. | 0.2 | 31 |
| 88 | A functional five-enzyme complex of chloroplasts involved in the Calvin cycle. <i>FEBS Journal</i> , 1988, 173, 437-443. | 0.2 | 135 |
| 89 | Analytical ultracentrifugation studies on chloroplastic fructose biphosphatase. <i>Plant Science</i> , 1985, 38, 17-22. | 3.6 | 7 |
| 90 | Control of Carbon Fixation in Chloroplasts. , 0, , 187-218. | | 8 |