# Brigitte Gontero

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8009898/publications.pdf

Version: 2024-02-01

| | | | |
|---|---|---|---|
| 90 papers | 3,179 citations | 136950 32 h-index | 182427 51 g-index |
| 99 all docs | 99 docs citations | 99 times ranked | 3027 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | A Proteomic Survey of Chlamydomonas reinhardtii Mitochondria Sheds New Light on the Metabolic Plasticity of the Organelle and on the Nature of the Â-Proteobacterial Mitochondrial Ancestor. Molecular Biology and Evolution, 2009, 26, 1533-1548. | 8.9 | 172 |
| 2 | A new widespread subclass of carbonic anhydrase in marine phytoplankton. ISME Journal, 2019, 13, 2094-2106. | 9.8 | 165 |
| 3 | A functional five-enzyme complex of chloroplasts involved in the Calvin cycle. FEBS Journal, 1988, 173, 437-443. | 0.2 | 135 |
| 4 | Glutathionylation in the Photosynthetic Model Organism Chlamydomonas reinhardtii: A Proteomic Survey. Molecular and Cellular Proteomics, 2012, 11, M111.014142. | 3.8 | 127 |
| 5 | Emergence of new regulatory mechanisms in the Benson-Calvin pathway via protein-protein interactions: a glyceraldehyde-3-phosphate dehydrogenase/CP12/phosphoribulokinase complex. Journal of Experimental Botany, 2004, 55, 1245-1254. | 4.8 | 116 |
| 6 | Silver nanoparticles induced reactive oxygen species via photosynthetic energy transport imbalance in an aquatic plant. Nanotoxicology, 2017, 11, 157-167. | 3.0 | 112 |
| 7 | The Small Protein CP12:â€‰ A Protein Linker for Supramolecular Complex Assembly. Biochemistry, 2003, 42, 8163-8170. | 2.5 | 110 |
| 8 | Ecological imperatives for aquatic CO2-concentrating mechanisms. Journal of Experimental Botany, 2017, 68, 3797-3814. | 4.8 | 72 |
| 9 | Biochemical and biophysical CO2 concentrating mechanisms in two species of freshwater macrophyte within the genus Ottelia (Hydrocharitaceae). Photosynthesis Research, 2014, 121, 285-297. | 2.9 | 64 |
| 10 | An intrinsically disordered protein, CP12: jack of all trades and master of the Calvin cycle. Biochemical Society Transactions, 2012, 40, 995-999. | 3.4 | 60 |
| 11 | The nature of the <scp>CO</scp><sub>2</sub>â€concentrating mechanisms in a marine diatom, Thalassiosira pseudonana. New Phytologist, 2016, 209, 1417-1427. | 7.3 | 60 |
| 12 | Phylogenetically-based variation in the regulation of the Calvin cycle enzymes, phosphoribulokinase and glyceraldehyde-3-phosphate dehydrogenase, in algae. Journal of Experimental Botany, 2010, 61, 735-745. | 4.8 | 58 |
| 13 | Diatom teratologies as biomarkers of contamination: Are all deformities ecologically meaningful?. Ecological Indicators, 2017, 82, 539-550. | 6.3 | 58 |
| 14 | Comparative sequence analysis of CP12, a small protein involved in the formation of a Calvin cycle complex in photosynthetic organisms. Photosynthesis Research, 2010, 103, 183-194. | 2.9 | 57 |
| 15 | Memory and Imprinting Effects in Multienzyme Complexes. I. Isolation, Dissociation, and Reassociation of a Phosphoribulokinase-Glyceraldehyde-3-Phosphate Dehydrogenase Complex from Chlamydomonas Reinhardtii Chloroplasts. FEBS Journal, 1997, 246, 78-84. | 0.2 | 55 |
| 16 | CP12-mediated protection of Calvinâ€“Benson cycle enzymes from oxidative stress. Biochimie, 2014, 97, 228-237. | 2.6 | 55 |
| 17 | Diversity and regulation of ATP sulfurylase in photosynthetic organisms. Frontiers in Plant Science, 2014, 5, 597. | 3.6 | 52 |
| 18 | Insights on the Functions and Ecophysiological Relevance of the Diverse Carbonic Anhydrases in Microalgae. International Journal of Molecular Sciences, 2020, 21, 2922. | 4.1 | 51 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | The effect of chronic silver nanoparticles on aquatic system in microcosms. Environmental Pollution, 2017, 223, 395-402. | 7.5 | 50 |
| 20 | Modulation, via Protein-Protein Interactions, of Glyceraldehyde-3-phosphate Dehydrogenase Activity through Redox Phosphoribulokinase Regulation. Journal of Biological Chemistry, 2003, 278, 12078-12084. | 3.4 | 47 |
| 21 | Tyrosineâ€Targeted Spin Labeling and EPR Spectroscopy: An Alternative Strategy for Studying Structural Transitions in Proteins. Angewandte Chemie - International Edition, 2011, 50, 9108-9111. | 13.8 | 44 |
| 22 | Interaction between Silver Nanoparticles and Two Dehydrogenases: Role of Thiol Groups. Small, 2019, 15, e1900860. | 10.0 | 42 |
| 23 | Construction of a 3D model of CP12, a protein linker. Journal of Molecular Graphics and Modelling, 2006, 25, 186-195. | 2.4 | 41 |
| 24 | Exploring CP12 binding proteins revealed aldolase as a new partner for the phosphoribulokinase/glyceraldehyde 3â€phosphate dehydrogenase/CP12 complexâ€ƒâ€“â€ƒpurification and kinetic characterization of this enzyme from Chlamydomonas reinhardtii. FEBS Journal, 2008, 275, 1248-1259. | 4.7 | 39 |
| 25 | 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. Bioconjugate Chemistry, 2013, 24, 1110-1117. | 3.6 | 39 |
| 26 | Mapping of the interaction site of CP12 with glyceraldehyde-3-phosphate dehydrogenase from Chlamydomonas reinhardtii.. FEBS Journal, 2006, 273, 3358-3369. | 4.7 | 38 |
| 27 | CP12 from Chlamydomonas reinhardtii, a Permanent Specific â€œChaperone-likeâ€•Protein of Glyceraldehyde-3-phosphate Dehydrogenase. Journal of Biological Chemistry, 2009, 284, 12735-12744. | 3.4 | 38 |
| 28 | Regulation of the Calvinâ€“Bensonâ€“Bassham cycle in the enigmatic diatoms: biochemical and evolutionary variations on an original theme. Philosophical Transactions of the Royal Society B: Biological Sciences, 2017, 372, 20160401. | 4.0 | 38 |
| 29 | Responses of the marine diatom Thalassiosira pseudonana to changes in CO2 concentration: a proteomic approach. Scientific Reports, 2017, 7, 42333. | 3.3 | 36 |
| 30 | Regulation of phosphoribulokinase and glyceraldehyde 3â€phosphate dehydrogenase in a freshwater diatom, Asterionella formosa<sup>1</sup>. Journal of Phycology, 2007, 43, 1227-1235. | 2.3 | 35 |
| 31 | Diversity of CO2-concentrating mechanisms and responses to CO2 concentration in marine and freshwater diatoms. Journal of Experimental Botany, 2017, 68, 3925-3935. | 4.8 | 35 |
| 32 | Thioredoxin Activation of Phosphoribulokinase in a Bi-enzyme Complex from Chlamydomonas reinhardtii Chloroplasts. Journal of Biological Chemistry, 2000, 275, 9447-9451. | 3.4 | 33 |
| 33 | 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 |
| 34 | Responses of Ottelia alismoides, an aquatic plant with three CCMs, to variable CO2 and light. Journal of Experimental Botany, 2017, 68, 3985-3995. | 4.8 | 33 |
| 35 | Information Transfer in Multienzyme Complexes. 1. Thermodynamics of Conformational Constraints and Memory Effects in the Bienzyme Glyceraldehyde-3-Phosphate-Dehydrogenase-Phosphoribulokinase Complex of Chlamydomonas reinhardtii Chloroplasts. FEBS Journal, 1997, 250, 286-295. | 0.2 | 32 |
| 36 | Glyceraldehydeâ€3â€phosphate dehydrogenase is regulated by ferredoxinâ€<scp>NADP</scp> reductase in the diatom <scp>A</scp>sterionella formosa. New Phytologist, 2014, 203, 414-423. | 7.3 | 32 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Information Transfer in Multienzyme Complexes. 2. The Role of Arg64 of Chlamydomonas reinhardtii Phosphoribulokinase in the Information Transfer Between Glyceraldehydes-3-Phosphate Dehydrogenase and Phosphoribulokinase. FEBS Journal, 1997, 250, 296-302. | 0.2 | 31 |
| 38 | Memory and Imprinting in Multienzyme Complexes. Journal of Biological Chemistry, 1999, 274, 20879-20884. | 3.4 | 30 |
| 39 | Mapping of a copper-binding site on the small CP12 chloroplastic protein of Chlamydomonas reinhardtii using top-down mass spectrometry and site-directed mutagenesis. Biochemical Journal, 2009, 419, 75-86. | 3.7 | 30 |
| 40 | The inhibition of TOR in the model diatom Phaeodactylum tricornutum promotes a get-fat growth regime. Algal Research, 2017, 26, 265-274. | 4.6 | 30 |
| 41 | Fairy Ã¢â‚¬Å“tailsÃ¢â‚¬Â flexibility and function of intrinsically disordered extensions in the photosynthetic world. Frontiers in Molecular Biosciences, 2015, 2, 23. | 3.5 | 29 |
| 42 | Mass spectrometric analysis of the interactions between CP12, a chloroplast protein, and metal ions: a possible regulatory role within a PRK/GAPDH/CP12 complex. Rapid Communications in Mass Spectrometry, 2005, 19, 3379-3388. | 1.5 | 28 |
| 43 | CP12 residues involved in the formation and regulation of the glyceraldehyde-3-phosphate dehydrogenaseâ€“CP12â€“phosphoribulokinase complex in Chlamydomonas reinhardtii. Molecular BioSystems, 2012, 8, 2994. | 2.9 | 28 |
| 44 | Dynamics of the intrinsically disordered protein CP12 in its association with GAPDH in the green alga Chlamydomonas reinhardtii: a fuzzy complex. Molecular BioSystems, 2013, 9, 2869. | 2.9 | 26 |
| 45 | Effect of environmental conditions on various enzyme activities and triacylglycerol contents in cultures of the freshwater diatom, Asterionella formosa (Bacillariophyceae). Biochimie, 2014, 101, 21-30. | 2.6 | 26 |
| 46 | Phosphoribulokinase from Chlamydomonas reinhardtii: a Bensonâ€“Calvin cycle enzyme enslaved to its cysteine residues. Molecular BioSystems, 2015, 11, 1134-1145. | 2.9 | 26 |
| 47 | Exploring intrinsically disordered proteins in Chlamydomonas reinhardtii. Scientific Reports, 2018, 8, 6805. | 3.3 | 25 |
| 48 | Striking Conformational Change Suspected within the Phosphoribulokinase Dimer Induced by Interaction with GAPDH. Journal of Biological Chemistry, 2002, 277, 6743-6749. | 3.4 | 24 |
| 49 | Storage Compound Accumulation in Diatoms as Response to Elevated CO2 Concentration. Biology, 2020, 9, 5. | 2.8 | 24 |
| 50 | SPECIFICITY AND FUNCTION OF GLYCERALDEHYDEâ€3â€PHOSPHATE DEHYDROGENASE IN A FRESHWATER DIATOM, ASTERIONELLA FORMOSA (BACILLARIOPHYCEAE)<sup>1</sup>. Journal of Phycology, 2008, 44, 1455-1464. | 2.3 | 23 |
| 51 | A New Function of GAPDH from Chlamydomonas reinhardtii: A Thiolâ^'Disulfide Exchange Reaction with CP12. Biochemistry, 2009, 48, 6034-6040. | 2.5 | 23 |
| 52 | Characterization of all the lipolytic activities in pancreatin and comparison with porcine and human pancreatic juices. Biochimie, 2020, 169, 106-120. | 2.6 | 23 |
| 53 | The digestion of galactolipids and its ubiquitous function in Nature for the uptake of the essential Î±-linolenic acid. Food and Function, 2020, 11, 6710-6744. | 4.6 | 23 |
| 54 | Molecular Mechanism of NADPH-Glyceraldehyde-3-phosphate Dehydrogenase Regulation through the C-Terminus of CP12 in Chlamydomonas reinhardtii. Biochemistry, 2011, 50, 2881-2888. | 2.5 | 22 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Micellar lipid composition affects micelle interaction with class B scavenger receptor extracellular loops. Journal of Lipid Research, 2015, 56, 1123-1133. | 4.2 | 22 |
| 56 | Structural basis for C4 photosynthesis without Kranz anatomy in leaves of the submerged freshwater plant Ottelia alismoides. Annals of Botany, 2020, 125, 869-879. | 2.9 | 21 |
| 57 | Thermodynamic Analysis of the Emergence of New Regulatory Properties in a Phosphoribulokinase-Glyceraldehyde 3-Phosphate Dehydrogenase Complex. Journal of Biological Chemistry, 2002, 277, 12697-12702. | 3.4 | 20 |
| 58 | Involvement of two positively charged residues of Chlamydomonas reinhardtii glyceraldehyde-3-phosphate dehydrogenase in the assembly process of a bi-enzyme complex involved in CO2 assimilation. FEBS Journal, 2004, 271, 4737-4744. | 0.2 | 20 |
| 59 | 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 |
| 60 | Cryptic Disorder Out of Disorder: Encounter between Conditionally Disordered CP12 and Glyceraldehyde-3-Phosphate Dehydrogenase. Journal of Molecular Biology, 2018, 430, 1218-1234. | 4.2 | 19 |
| 61 | Regulation of Carbon Metabolism by Environmental Conditions: A Perspective From Diatoms and Other Chromalveolates. Frontiers in Plant Science, 2020, 11, 1033. | 3.6 | 19 |
| 62 | Consequences of the presence of 24-epibrassinolide, on cultures of a diatom, Asterionella formosa. Biochimie, 2012, 94, 1213-1220. | 2.6 | 18 |
| 63 | External Î±-carbonic anhydrase and solute carrier 4 are required for bicarbonate uptake in a freshwater angiosperm. Journal of Experimental Botany, 2020, 71, 6004-6014. | 4.8 | 18 |
| 64 | Different CO2 acclimation strategies in juvenile and mature leaves of Ottelia alismoides. Photosynthesis Research, 2018, 138, 219-232. | 2.9 | 15 |
| 65 | RSH enzyme diversity for (p)ppGpp metabolism in Phaeodactylum tricornutum and other diatoms. Scientific Reports, 2019, 9, 17682. | 3.3 | 15 |
| 66 | 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 |
| 67 | Conformational modulation and hydrodynamic radii of <scp>CP</scp>12 protein and its complexes probed by fluorescence correlation spectroscopy. FEBS Journal, 2014, 281, 3206-3217. | 4.7 | 14 |
| 68 | 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 |
| 69 | Redox regulation of ATP sulfurylase in microalgae. Biochemical and Biophysical Research Communications, 2016, 478, 1555-1562. | 2.1 | 14 |
| 70 | Trade-offs and Synergies in the Structural and Functional Characteristics of Leaves Photosynthesizing in Aquatic Environments. Advances in Photosynthesis and Respiration, 2018, , 307-343. | 1.0 | 14 |
| 71 | In vitrodigestion of galactolipids from chloroplast-rich fraction (CRF) of postharvest, pea vine field residue (haulm) and spinach leaves. Food and Function, 2019, 10, 7806-7817. | 4.6 | 14 |
| 72 | ppGpp influences protein protection, growth and photosynthesis in Phaeodactylum tricornutum. New Phytologist, 2021, 230, 1517-1532. | 7.3 | 14 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | FRET analysis of CP12 structural interplay by GAPDH and PRK. Biochemical and Biophysical Research Communications, 2015, 458, 488-493. | 2.1 | 13 |
| 74 | Interaction between adenylate kinase 3 and glyceraldehydeâ€3â€phosphate dehydrogenase from Chlamydomonas reinhardtii. FEBS Journal, 2018, 285, 2495-2503. | 4.7 | 13 |
| 75 | Orchestration of algal metabolism by protein disorder. Archives of Biochemistry and Biophysics, 2019, 672, 108070. | 3.0 | 13 |
| 76 | The intriguing CP12â€like tail of adenylate kinase 3 from Chlamydomonas reinhardtii. FEBS Journal, 2016, 283, 3389-3407. | 4.7 | 10 |
| 77 | Targeting TOR signaling for enhanced lipid productivity in algae. Biochimie, 2020, 169, 12-17. | 2.6 | 10 |
| 78 | Creating Order out of Disorder: Structural Imprint of GAPDH on CP12. Structure, 2011, 19, 1728-1729. | 3.3 | 9 |
| 79 | A new type of flexible CP12 protein in the marine diatom Thalassiosira pseudonana. Cell Communication and Signaling, 2021, 19, 38. | 6.5 | 9 |
| 80 | Control of Carbon Fixation in Chloroplasts. , 0, , 187-218. | | 8 |
| 81 | Analytical ultracentrifugation studies on chloroplastic fructose bisphosphatase. Plant Science, 1985, 38, 17-22. | 3.6 | 7 |
| 82 | Reduction in Phosphoribulokinase Amount and Re-Routing Metabolism in Chlamydomonas reinhardtii CP12 Mutants. International Journal of Molecular Sciences, 2022, 23, 2710. | 4.1 | 7 |
| 83 | Regulation of glyceraldehyde-3-phosphate dehydrogenase in the eustigmatophytePseudocharaciopsis ovalisis intermediate between a chlorophyte and a diatom. European Journal of Phycology, 2012, 47, 207-215. | 2.0 | 6 |
| 84 | Exploring the microbiome of the â€œstarâ€•freshwater diatom Asterionella formosa in a laboratory context. Environmental Microbiology, 2018, 20, 3601-3615. | 3.8 | 6 |
| 85 | Inorganic carbon uptake in a freshwater diatom, Asterionella formosa (Bacillariophyceae): from ecology to genomics. Phycologia, 2021, 60, 427-438. | 1.4 | 6 |
| 86 | Structural Contour Map of the Iota Carbonic Anhydrase from the Diatom Thalassiosira pseudonana Using a Multiprong Approach. International Journal of Molecular Sciences, 2021, 22, 8723. | 4.1 | 6 |
| 87 | Quantitative monitoring of galactolipid hydrolysis by pancreatic lipase-related protein 2 using thin layer chromatography and thymol-sulfuric acid derivatization. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2021, 1173, 122674. | 2.3 | 5 |
| 88 | Flexibility of Oxidized and Reduced States of the Chloroplast Regulatory Protein CP12 in Isolation and in Cell Extracts. Biomolecules, 2021, 11, 701. | 4.0 | 4 |
| 89 | Bioaccessibility of essential lipophilic nutrients in a chloroplast-rich fraction (CRF) from agricultural green waste during simulated human gastrointestinal tract digestion. Food and Function, 2022, 13, 5365-5380. | 4.6 | 1 |
| 90 | Can the description of a cascade of biochemical events establish the basis of the integration of a biological function?. Biology of the Cell, 2004, 96, 675-676. | 2.0 | 0 |