# Francisco JosÃ© MuÃ±oz

List of Publications by Year
in descending order



| | | | |
|---|---|---|---|
| 73 papers | 3,632 citations | 136950 32 h-index | 138484 58 g-index |
| 73 all docs | 73 docs citations | 73 times ranked | 3856 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Action mechanisms of small microbial volatile compounds in plants. Journal of Experimental Botany, 2022, 73, 498-510. | 4.8 | 15 |
| 2 | Proteostatic Regulation of MEP and Shikimate Pathways by Redox-Activated Photosynthesis Signaling in Plants Exposed to Small Fungal Volatiles. Frontiers in Plant Science, 2021, 12, 637976. | 3.6 | 7 |
| 3 | Enhanced Yield of Pepper Plants Promoted by Soil Application of Volatiles From Cell-Free Fungal Culture Filtrates Is Associated With Activation of the Beneficial Soil Microbiota. Frontiers in Plant Science, 2021, 12, 752653. | 3.6 | 9 |
| 4 | Volatiles from the fungal phytopathogen <i>Penicillium aurantiogriseum</i> modulate root metabolism and architecture through proteome resetting. Plant, Cell and Environment, 2020, 43, 2551-2570. | 5.7 | 19 |
| 5 | Plant responses to fungal volatiles involve global posttranslational thiol redox proteome changes that affect photosynthesis. Plant, Cell and Environment, 2019, 42, 2627-2644. | 5.7 | 26 |
| 6 | Mitochondrial Zea mays Brittle1-1 Is a Major Determinant of the Metabolic Fate of Incoming Sucrose and Mitochondrial Function in Developing Maize Endosperms. Frontiers in Plant Science, 2019, 10, 242. | 3.6 | 8 |
| 7 | Volatile compounds other than CO<sub>2</sub> emitted by different microorganisms promote distinct posttranscriptionally regulated responses in plants. Plant, Cell and Environment, 2019, 42, 1729-1746. | 5.7 | 35 |
| 8 | A cAMP/CRP-controlled mechanism for the incorporation of extracellular ADP-glucose in Escherichia coli involving NupC and NupG nucleoside transporters. Scientific Reports, 2018, 8, 15509. | 3.3 | 20 |
| 9 | Plastidial Phosphoglucose Isomerase Is an Important Determinant of Seed Yield through Its Involvement in Gibberellin-Mediated Reproductive Development and Storage Reserve Biosynthesis in Arabidopsis. Plant Cell, 2018, 30, 2082-2098. | 6.6 | 15 |
| 10 | Genetic and isotope ratio mass spectrometric evidence for the occurrence of starch degradation and cycling in illuminated Arabidopsis leaves. PLoS ONE, 2017, 12, e0171245. | 2.5 | 19 |
| 11 | Volatile compounds emitted by diverse phytopathogenic microorganisms promote plant growth and flowering through cytokinin action. Plant, Cell and Environment, 2016, 39, 2592-2608. | 5.7 | 93 |
| 12 | Arabidopsis Responds to <i>Alternaria alternata</i> Volatiles by Triggering Plastid Phosphoglucose Isomerase-Independent Mechanisms. Plant Physiology, 2016, 172, 1989-2001. | 4.8 | 58 |
| 13 | Comparative Genomic and Phylogenetic Analyses of Gammaproteobacterial glg Genes Traced the Origin of the Escherichia coli Glycogen glgBXCAP Operon to the Last Common Ancestor of the Sister Orders Enterobacteriales and Pasteurellales. PLoS ONE, 2015, 10, e0115516. | 2.5 | 23 |
| 14 | Plastidic Phosphoglucose Isomerase Is an Important Determinant of Starch Accumulation in Mesophyll Cells, Growth, Photosynthetic Capacity, and Biosynthesis of Plastidic Cytokinins in Arabidopsis. PLoS ONE, 2015, 10, e0119641. | 2.5 | 30 |
| 15 | Characterization of multiple SPS knockout mutants reveals redundant functions of the four Arabidopsis sucrose phosphate synthase isoforms in plant viability, and strongly indicates that enhanced respiration and accelerated starch turnover can alleviate the blockage of sucrose biosynthesis. Plant Science, 2015, 238, 135-147. | 3.6 | 39 |
| 16 | Starch biosynthesis, its regulation and biotechnological approaches to improve crop yields. Biotechnology Advances, 2014, 32, 87-106. | 11.7 | 211 |
| 17 | HPLC-MS/MS Analyses Show That the Near-Starchless aps1 and pgm Leaves Accumulate Wild Type Levels of ADPglucose: Further Evidence for the Occurrence of Important ADPglucose Biosynthetic Pathway(s) Alternative to the pPGI-pPGM-AGP Pathway. PLoS ONE, 2014, 9, e104997. | 2.5 | 22 |
| 18 | Systematic Production of Inactivating and Non-Inactivating Suppressor Mutations at the relA Locus That Compensate the Detrimental Effects of Complete spoT Loss and Affect Glycogen Content in Escherichia coli. PLoS ONE, 2014, 9, e106938. | 2.5 | 21 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | GlgS, described previously as a glycogen synthesis control protein, negatively regulates motility and biofilm formation in <i>Escherichia coli</i>. Biochemical Journal, 2013, 452, 559-573. | 3.7 | 28 |
| 20 | Enhancing Sucrose Synthase Activity Results in Increased Levels of Starch and ADP-Glucose in Maize (Zea mays L.) Seed Endosperms. Plant and Cell Physiology, 2013, 54, 282-294. | 3.1 | 119 |
| 21 | No evidence for the occurrence of substrate inhibition of<i>Arabidopsis thaliana</i>sucrose synthase-1 (AtSUS1) by fructose and UDP-glucose. Plant Signaling and Behavior, 2012, 7, 799-802. | 2.4 | 4 |
| 22 | Sucrose synthase activity in the <i>sus1/sus2/sus3/sus4 Arabidopsis</i> mutant is sufficient to support normal cellulose and starch production. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 321-326. | 7.1 | 183 |
| 23 | A sensitive method for confocal fluorescence microscopic visualization of starch granules in iodine stained samples. Plant Signaling and Behavior, 2012, 7, 1146-1150. | 2.4 | 22 |
| 24 | Post-Translational Redox Modification of ADP-Glucose Pyrophosphorylase in Response to Light is Not a Major Determinant of Fine Regulation of Transitory Starch Accumulation in Arabidopsis Leaves. Plant and Cell Physiology, 2012, 53, 433-444. | 3.1 | 38 |
| 25 | Reply to Smith et al.: No evidence to challenge the current paradigm on starch and cellulose biosynthesis involving sucrose synthase activity. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, . | 7.1 | 10 |
| 26 | <i>Escherichia coli</i> glycogen genes are organized in a single <i>glgBXCAP</i> transcriptional unit possessing an alternative suboperonic promoter within <i>glgC</i> that directs <i>glgAP</i> expression. Biochemical Journal, 2011, 433, 107-117. | 3.7 | 44 |
| 27 | Enhancing the expression of starch synthase class IV results in increased levels of both transitory and longâ€term storage starch. Plant Biotechnology Journal, 2011, 9, 1049-1060. | 8.3 | 54 |
| 28 | Specific delivery of AtBT1 to mitochondria complements the aberrant growth and sterility phenotype of homozygous <i>Atbt1</i> Arabidopsis mutants. Plant Journal, 2011, 68, 1115-1121. | 5.7 | 29 |
| 29 | Microbial Volatile-Induced Accumulation of Exceptionally High Levels of Starch in Arabidopsis Leaves Is a Process Involving NTRC and Starch Synthase Classes III and IV. Molecular Plant-Microbe Interactions, 2011, 24, 1165-1178. | 2.6 | 40 |
| 30 | Dual Targeting to Mitochondria and Plastids of AtBT1 and ZmBT1, Two Members of the Mitochondrial Carrier Family. Plant and Cell Physiology, 2011, 52, 597-609. | 3.1 | 46 |
| 31 | Arabidopsis thaliana Mutants Lacking ADP-Glucose Pyrophosphorylase Accumulate Starch and Wild-type ADP-Glucose Content: Further Evidence for the Occurrence of Important Sources, other than ADP-Glucose Pyrophosphorylase, of ADP-Glucose Linked to Leaf Starch Biosynthesis. Plant and Cell Physiology, 2011, 52, 1162-1176. | 3.1 | 54 |
| 32 | Regulation of glycogen metabolism in yeast and bacteria. FEMS Microbiology Reviews, 2010, 34, 952-985. | 8.6 | 340 |
| 33 | Genome-Wide Screening of Genes Whose Enhanced Expression Affects Glycogen Accumulation in Escherichia coli. DNA Research, 2010, 17, 61-71. | 3.4 | 41 |
| 34 | Microbial Volatile Emissions Promote Accumulation of Exceptionally High Levels of Starch in Leaves in Mono- and Dicotyledonous Plants. Plant and Cell Physiology, 2010, 51, 1674-1693. | 3.1 | 83 |
| 35 | A suggested model for potato MIVOISAP involving functions of central carbohydrate and amino acid metabolism, as well as actin cytoskeleton and endocytosis. Plant Signaling and Behavior, 2010, 5, 1638-1641. | 2.4 | 6 |
| 36 | <i>Escherichia coli</i> glycogen metabolism is controlled by the PhoP-PhoQ regulatory system at submillimolar environmental Mg2+ concentrations, and is highly interconnected with a wide variety of cellular processes. Biochemical Journal, 2009, 424, 129-141. | 3.7 | 43 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Enhancing Sucrose Synthase Activity in Transgenic Potato (Solanum tuberosum L.) Tubers Results in Increased Levels of Starch, ADPglucose and UDPglucose and Total Yield. Plant and Cell Physiology, 2009, 50, 1651-1662. | 3.1 | 186 |
| 38 | Starch Granule Initiation in<i>Arabidopsis</i>Requires the Presence of Either Class IV or Class III Starch Synthases. Plant Cell, 2009, 21, 2443-2457. | 6.6 | 217 |
| 39 | CytoplasmicEscherichia coliADP sugar pyrophosphatase binds to cell membranes in response to extracellular signals as the cell population density increases. FEMS Microbiology Letters, 2008, 288, 25-32. | 1.8 | 8 |
| 40 | Plastidial Localization of a Potato â€˜Nudixâ€™ Hydrolase of ADP-glucose Linked to Starch Biosynthesis. Plant and Cell Physiology, 2008, 49, 1734-1746. | 3.1 | 13 |
| 41 | Escherichia coliAspP activity is enhanced by macromolecular crowding and by both glucose-1,6-bisphosphate and nucleotide-sugars. FEBS Letters, 2007, 581, 1035-1040. | 2.8 | 53 |
| 42 | Genome-wide screening of genes affecting glycogen metabolism inEscherichia coliK-12. FEBS Letters, 2007, 581, 2947-2953. | 2.8 | 66 |
| 43 | An <i>Escherichia coli</i> mutant producing a truncated inactive form of GlgC synthesizes glycogen: Further evidences for the occurrence of various important sources of ADPglucose in enterobacteria. FEBS Letters, 2007, 581, 4417-4422. | 2.8 | 30 |
| 44 | Occurrence of more than one important source of ADPglucose linked to glycogen biosynthesis in <i>Escherichia coli</i> and <i>Salmonella</i>. FEBS Letters, 2007, 581, 4423-4429. | 2.8 | 32 |
| 45 | New enzymes, new pathways and an alternative view on starch biosynthesis in both photosynthetic and heterotrophic tissues of plants. Biocatalysis and Biotransformation, 2006, 24, 63-76. | 2.0 | 29 |
| 46 | Molecular cloning of multiple forms of the ovine B7-2 (CD86) costimulatory molecule. Veterinary Immunology and Immunopathology, 2006, 114, 149-158. | 1.2 | 6 |
| 47 | An Important Pool of Sucrose Linked to Starch Biosynthesis is Taken up by Endocytosis in Heterotrophic Cells. Plant and Cell Physiology, 2006, 47, 447-456. | 3.1 | 29 |
| 48 | Rice Plastidial N-Glycosylated Nucleotide Pyrophosphatase/Phosphodiesterase Is Transported from the ER-Golgi to the Chloroplast through the Secretory Pathway. Plant Cell, 2006, 18, 2582-2592. | 6.6 | 150 |
| 49 | Cloning, Expression and Characterization of a Nudix Hydrolase that Catalyzes the Hydrolytic Breakdown of ADP-glucose Linked to Starch Biosynthesis in Arabidopsis thaliana. Plant and Cell Physiology, 2006, 47, 926-934. | 3.1 | 35 |
| 50 | Glycogen Phosphorylase, the Product of the glgP Gene, Catalyzes Glycogen Breakdown by Removing Glucose Units from the Nonreducing Ends in Escherichia coli. Journal of Bacteriology, 2006, 188, 5266-5272. | 2.2 | 103 |
| 51 | Sucrose-inducible Endocytosis as a Mechanism for Nutrient Uptake in Heterotrophic Plant Cells. Plant and Cell Physiology, 2005, 46, 474-481. | 3.1 | 79 |
| 52 | In vivo Expression of a Cicer arietinum Î²-galactosidase in Potato Tubers Leads to a Reduction of the Galactan Side-chains in Cell Wall Pectin. Plant and Cell Physiology, 2005, 46, 1613-1622. | 3.1 | 35 |
| 53 | Sucrose Synthase Controls Both Intracellular ADP Glucose Levels and Transitory Starch Biosynthesis in Source Leaves. Plant and Cell Physiology, 2005, 46, 1366-1376. | 3.1 | 95 |
| 54 | Response to Neuhaus : No need to shift the paradigm on the metabolic pathway to transitory starch in leaves. Trends in Plant Science, 2005, 10, 156-158. | 8.8 | 16 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Most of ADP{middle dot}glucose linked to starch biosynthesis occurs outside the chloroplast in source leaves. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 13080-13085. | 7.1 | 71 |
| 56 | Cloning of a Cicer arietinum Î²-Galactosidase with Pectin-Degrading Function. Plant and Cell Physiology, 2003, 44, 718-725. | 3.1 | 42 |
| 57 | Sucrose Synthase Catalyzes the de novo Production of ADPglucose Linked to Starch Biosynthesis in Heterotrophic Tissues of Plants. Plant and Cell Physiology, 2003, 44, 500-509. | 3.1 | 124 |
| 58 | Cloning, expression and characterization of a mammalian Nudix hydrolase-like enzyme that cleaves the pyrophosphate bond of UDP-glucose. Biochemical Journal, 2003, 370, 409-415. | 3.7 | 26 |
| 59 | A seedling specific vegetative lectin gene is related to development inCicer arietinum. Physiologia Plantarum, 2002, 114, 619-626. | 5.2 | 11 |
| 60 | Two isoforms of a nucleotide-sugar pyrophosphatase/phosphodiesterase from barley leaves (Hordeum) Tj ETQq0 0 0 rgBT /Overlock 10 T | 2.8 | 63 |
| 61 | Expression of a novel chickpea Rab-GDI cDNA mainly in seedlings. Plant Physiology and Biochemistry, 2001, 39, 363-366. | 5.8 | 7 |
| 62 | Reappraisal of the Currently Prevailing Model of Starch Biosynthesis in Photosynthetic Tissues: A Proposal Involving the Cytosolic Production of ADP-Glucose by Sucrose Synthase and Occurrence of Cyclic Turnover of Starch in the Chloroplast. Plant and Cell Physiology, 2001, 42, 1311-1320. | 3.1 | 42 |
| 63 | Adenosine diphosphate sugar pyrophosphatase prevents glycogen biosynthesis in Escherichia coli. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 8128-8132. | 7.1 | 53 |
| 64 | Remodelling Pectin Structure In Potato. Developments in Plant Genetics and Breeding, 2000, 6, 245-256. | 0.6 | 10 |
| 65 | Brassinolides promote the expression of a new Cicer arietinum beta-tubulin gene involved in the epicotyl elongation. Plant Molecular Biology, 1998, 37, 807-817. | 3.9 | 33 |
| 66 | A cDNA encoding a proline-rich protein from Cicer arietinum . Changes in expression during development and abiotic stresses. Physiologia Plantarum, 1998, 102, 582-590. | 5.2 | 18 |
| 67 | Increased expression of two cDNAs encoding metallothionein-like proteins during growth of Cicer arietinum epicotyls. Physiologia Plantarum, 1998, 104, 273-279. | 5.2 | 6 |
| 68 | Two growth-related organ-specific cDNAs from Cicer arietinum epicotyls. Plant Molecular Biology, 1997, 35, 433-442. | 3.9 | 24 |
| 69 | Effect of osmotic stress on the growth of epicotyls of Cicer arietinum in relation to changes in cell wall composition. Physiologia Plantarum, 1993, 87, 552-560. | 5.2 | 28 |
| 70 | Effect of osmotic stress on the growth of epicotyls of Cicer arietinum in relation to changes in the autolytic process and glycanhydrolytic cell wall enzymes. Physiologia Plantarum, 1993, 87, 544-551. | 5.2 | 22 |
| 71 | Effect of osmotic stress on the growth of epicotyls of Cicer arietinum in relation to changes in cell wall composition. Physiologia Plantarum, 1993, 87, 552-560. | 5.2 | 2 |
| 72 | Effect of osmotic stress on the growth of epicotyls of Cicer arietinum in relation to changes in the autolytic process and glycanhydrolytic cell wall enzymes. Physiologia Plantarum, 1993, 87, 544-551. | 5.2 | 4 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Cell wall structure regulates the autolytic process throughout growth of Cicer arietinum epicotyls. Physiologia Plantarum, 1991, 83, 659-663. | 5.2 | 10 |