# Norbert Rolland

List of Publications by Year
in descending order

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|---|---|---|---|
| 81 papers | 6,804 citations | 81900 39 h-index | 71685 76 g-index |
| 81 all docs | 81 docs citations | 81 times ranked | 7194 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | A genome-wide transcriptional analysis using Arabidopsis thaliana Affymetrix gene chips determined plant responses to phosphate deprivation. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 11934-11939. | 7.1 | 834 |
| 2 | AT_CHLORO, a Comprehensive Chloroplast Proteome Database with Subplastidial Localization and Curated Information on Envelope Proteins. Molecular and Cellular Proteomics, 2010, 9, 1063-1084. | 3.8 | 425 |
| 3 | Proteomics of the Chloroplast Envelope Membranes from Arabidopsis thaliana. Molecular and Cellular Proteomics, 2003, 2, 325-345. | 3.8 | 405 |
| 4 | Evidence for a protein transported through the secretory pathway en route to the higher plant chloroplast. Nature Cell Biology, 2005, 7, 1224-1231. | 10.3 | 333 |
| 5 | Glycerolipids in photosynthesis: Composition, synthesis and trafficking. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 470-480. | 1.0 | 296 |
| 6 | PredAlgo: A New Subcellular Localization Prediction Tool Dedicated to Green Algae. Molecular Biology and Evolution, 2012, 29, 3625-3639. | 8.9 | 270 |
| 7 | Integral membrane proteins of the chloroplast envelope: Identification and subcellular localization of new transporters. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 11487-11492. | 7.1 | 241 |
| 8 | Identification of New Intrinsic Proteins in Arabidopsis Plasma Membrane Proteome. Molecular and Cellular Proteomics, 2004, 3, 675-691. | 3.8 | 233 |
| 9 | Chloroplast Proteomics and the Compartmentation of Plastidial Isoprenoid Biosynthetic Pathways. Molecular Plant, 2009, 2, 1154-1180. | 8.3 | 199 |
| 10 | HMA1, a New Cu-ATPase of the Chloro plast Envelope, Is Essential for Growth under Adverse Light Conditions. Journal of Biological Chemistry, 2006, 281, 2882-2892. | 3.4 | 191 |
| 11 | 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 |
| 12 | The Biochemical Machinery of Plastid Envelope Membranes. Plant Physiology, 1998, 118, 715-723. | 4.8 | 168 |
| 13 | Non-canonical Transit Peptide for Import into the Chloroplast. Journal of Biological Chemistry, 2002, 277, 47770-47778. | 3.4 | 154 |
| 14 | Chloroplast proteomics highlights the subcellular compartmentation of lipid metabolism. Progress in Lipid Research, 2010, 49, 128-158. | 11.6 | 153 |
| 15 | Organic solvent extraction as a versatile procedure to identify hydrophobic chloroplast membrane proteins. Electrophoresis, 2000, 21, 3517-3526. | 2.4 | 152 |
| 16 | The hydrophobic proteome of mitochondrial membranes from Arabidopsis cell suspensions. Phytochemistry, 2004, 65, 1693-1707. | 2.9 | 135 |
| 17 | Chloroplast envelope membranes: a dynamic interface between plastids and the cytosol. Photosynthesis Research, 2007, 92, 225-244. | 2.9 | 134 |
| 18 | Pyruvate Formate-lyase and a Novel Route of Eukaryotic ATP Synthesis in Chlamydomonas Mitochondria*. Journal of Biological Chemistry, 2006, 281, 9909-9918. | 3.4 | 118 |

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|---|---|---|---|
| 19 | The Biosynthetic Capacities of the Plastids and Integration Between Cytoplasmic and Chloroplast Processes. Annual Review of Genetics, 2012, 46, 233-264. | 7.6 | 115 |
| 20 | Ions channels/transporters and chloroplast regulation. Cell Calcium, 2015, 58, 86-97. | 2.4 | 111 |
| 21 | Heterologous Expression of Membrane Proteins: Choosing the Appropriate Host. PLoS ONE, 2011, 6, e29191. | 2.5 | 109 |
| 22 | Disruption of the plastid ycf10 open reading frame affects uptake of inorganic carbon in the chloroplast of Chlamydomonas. EMBO Journal, 1997, 16, 6713-6726. | 7.8 | 107 |
| 23 | Differential extraction of hydrophobic proteins from chloroplast envelope membranes: a subcellular-specific proteomic approach to identify rare intrinsic membrane proteins. Plant Journal, 1999, 19, 217-228. | 5.7 | 100 |
| 24 | Deciphering Thylakoid Sub-compartments using a Mass Spectrometry-based Approach. Molecular and Cellular Proteomics, 2014, 13, 2147-2167. | 3.8 | 96 |
| 25 | MASCP Gator: An Aggregation Portal for the Visualization of Arabidopsis Proteomics Data. Plant Physiology, 2011, 155, 259-270. | 4.8 | 94 |
| 26 | Plant organelle proteomics: Collaborating for optimal cell function. Mass Spectrometry Reviews, 2011, 30, 772-853. | 5.4 | 89 |
| 27 | Plant membrane proteomics. Plant Physiology and Biochemistry, 2004, 42, 943-962. | 5.8 | 85 |
| 28 | Toc159- and Toc75-independent Import of a Transit Sequence-less Precursor into the Inner Envelope of Chloroplasts. Journal of Biological Chemistry, 2007, 282, 29482-29492. | 3.4 | 77 |
| 29 | Proteomics of chloroplast envelope membranes. Photosynthesis Research, 2003, 78, 205-230. | 2.9 | 63 |
| 30 | Subcellular Distribution of O-Acetylserine(thiol)lyase in Cauliflower (Brassica oleracea L.) Inflorescence. Plant Physiology, 1992, 98, 927-935. | 4.8 | 62 |
| 31 | HMA1 and PAA1, two chloroplast-envelope PIB-ATPases, play distinct roles in chloroplast copper homeostasis. Journal of Experimental Botany, 2014, 65, 1529-1540. | 4.8 | 60 |
| 32 | Unraveling Hidden Components of the Chloroplast Envelope Proteome: Opportunities and Limits of Better MS Sensitivity. Molecular and Cellular Proteomics, 2019, 18, 1285-1306. | 3.8 | 58 |
| 33 | Biochemical Characterization of AtHMA6/PAA1, a Chloroplast Envelope Cu(I)-ATPase. Journal of Biological Chemistry, 2011, 286, 36188-36197. | 3.4 | 54 |
| 34 | O-Acetylserine(thiol)lyase from Spinach (Spinacia oleracea L) Leaf: cDNA Cloning, Characterization, and Overexpression in Escherichia coli of the Chloroplast Isoform. Archives of Biochemistry and Biophysics, 1993, 300, 213-222. | 3.0 | 53 |
| 35 | Plant ribosome recycling factor homologue is a chloroplastic protein and is bactericidal in Escherichia coli carrying temperature-sensitive ribosome recycling factor. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 5464-5469. | 7.1 | 52 |
| 36 | Chlamydomonas proteomics. Current Opinion in Microbiology, 2009, 12, 285-291. | 5.1 | 51 |

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| 37 | AT_CHLORO: A Chloroplast Protein Database Dedicated to Sub-Plastidial Localization. Frontiers in Plant Science, 2012, 3, 205. | 3.6 | 48 |
| 38 | Percoll-purified and photosynthetically active chloroplasts from Arabidopsis thaliana leaves. Plant Physiology and Biochemistry, 2008, 46, 951-955. | 5.8 | 42 |
| 39 | Purification and Proteomic Analysis of Chloroplasts and their Sub-Organellar Compartments. Methods in Molecular Biology, 2008, 432, 19-36. | 0.9 | 41 |
| 40 | In vivo spectroscopy and NMR metabolite fingerprinting approaches to connect the dynamics of photosynthetic and metabolic phenotypes in resurrection plant Haberlea rhodopensis during desiccation and recovery. Frontiers in Plant Science, 2015, 6, 564. | 3.6 | 37 |
| 41 | Do plastid envelope membranes play a role in the expression of the plastid genome?. Biochimie, 1999, 81, 619-629. | 2.6 | 34 |
| 42 | Purification of Intact Chloroplasts from Arabidopsis and Spinach Leaves by Isopycnic Centrifugation. Current Protocols in Cell Biology, 2008, 40, Unit 3.30. | 2.3 | 34 |
| 43 | A versatile method for deciphering plant membrane proteomes. Journal of Experimental Botany, 2006, 57, 1579-1589. | 4.8 | 33 |
| 44 | Lactococcus lactis, an Alternative System for Functional Expression of Peripheral and Intrinsic Arabidopsis Membrane Proteins. PLoS ONE, 2010, 5, e8746. | 2.5 | 33 |
| 45 | Spinach Chloroplast O-Acetylserine (thiol)-Lyase Exhibits two Catalytically Non-Equivalent Pyridoxal-5'-Phosphate-Containing Active Sites. FEBS Journal, 1996, 236, 272-282. | 0.2 | 31 |
| 46 | Sulfolipid Is a Potential Candidate for Annexin Binding to the Outer Surface of Chloroplast. Biochemical and Biophysical Research Communications, 2000, 272, 519-524. | 2.1 | 31 |
| 47 | Strategies to identify transport systems in plants. Trends in Plant Science, 2001, 6, 577-585. | 8.8 | 30 |
| 48 | Identification and characterization of plant glycerophosphodiester phosphodiesterase. Biochemical Journal, 2004, 379, 601-607. | 3.7 | 27 |
| 49 | Membrane Protein Expression in Lactococcus lactis. Methods in Molecular Biology, 2010, 601, 67-85. | 0.9 | 23 |
| 50 | ChloroKB: A Web Application for the Integration of Knowledge Related to Chloroplast Metabolic Network. Plant Physiology, 2017, 174, 922-934. | 4.8 | 23 |
| 51 | A new chloroplast envelope carbonic anhydrase activity is induced during acclimation to low inorganic carbon concentrations in Chlamydomonas reinhardtii. Planta, 2001, 213, 286-295. | 3.2 | 22 |
| 52 | Higher plant chloroplasts import the mRNA coding for the eucaryotic translation initiation factor 4E. FEBS Letters, 2007, 581, 3921-3926. | 2.8 | 22 |
| 53 | HMA6 and HMA8 are two chloroplast Cu+-ATPases with different enzymatic properties. Bioscience Reports, 2015, 35, . | 2.4 | 20 |
| 54 | Expression of a chloroplast ATP/ADP transporter in E. coli membranes: Behind the Mistic strategy. Biochimica Et Biophysica Acta - Biomembranes, 2011, 1808, 2059-2066. | 2.6 | 18 |

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|---|---|---|---|
| 55 | The chloroplast membrane associated ceQORH putative quinone oxidoreductase reduces long-chain, stress-related oxidized lipids. Phytochemistry, 2016, 122, 45-55. | 2.9 | 16 |
| 56 | The Main Functions of Plastids. Methods in Molecular Biology, 2018, 1829, 73-85. | 0.9 | 15 |
| 57 | Complementary biochemical approaches applied to the identification of plastidial calmodulin-binding proteins. Molecular BioSystems, 2013, 9, 1234. | 2.9 | 14 |
| 58 | Purification and Fractionation of Membranes for Proteomic Analyses. , 2006, 323, 403-420. | | 13 |
| 59 | AT_CHLORO: The First Step When Looking for Information About Subplastidial Localization of Proteins. Methods in Molecular Biology, 2018, 1829, 395-406. | 0.9 | 13 |
| 60 | Current status of the multinational Arabidopsis community. Plant Direct, 2020, 4, e00248. | 1.9 | 13 |
| 61 | Designing the Crops for the Future; The CropBooster Program. Biology, 2021, 10, 690. | 2.8 | 12 |
| 62 | Common sequence motifs coding for higher-plant and prokaryotic O-acetylserine (thiol)-lyases: bacterial origin of a chloroplast transit peptide?. Biochemical Journal, 1993, 293, 829-833. | 3.7 | 11 |
| 63 | Preparation of Envelope Membrane Fractions from Arabidopsis Chloroplasts for Proteomic Analysis and Other Studies. Methods in Molecular Biology, 2011, 775, 189-206. | 0.9 | 11 |
| 64 | Structural Insights into the Nucleotide-Binding Domains of the P1B-type ATPases HMA6 and HMA8 from Arabidopsis thaliana. PLoS ONE, 2016, 11, e0165666. | 2.5 | 9 |
| 65 | Oligomeric Status and Nucleotide Binding Properties of the Plastid ATP/ADP Transporter 1: Toward a Molecular Understanding of the Transport Mechanism. PLoS ONE, 2012, 7, e32325. | 2.5 | 9 |
| 66 | The Chloroplast Envelope Proteome and Lipidome. Plant Cell Monographs, 2009, , 41-88. | 0.4 | 8 |
| 67 | Preparation of Membrane Fractions (Envelope, Thylakoids, Grana, and Stroma Lamellae) from Arabidopsis Chloroplasts for Quantitative Proteomic Investigations and Other Studies. Methods in Molecular Biology, 2018, 1696, 117-136. | 0.9 | 8 |
| 68 | Identification of Two Conserved Residues Involved in Copper Release from Chloroplast PIB-1-ATPases. Journal of Biological Chemistry, 2016, 291, 20136-20148. | 3.4 | 7 |
| 69 | Regulation of the anion channel of the chloroplast envelope from spinach. Journal of Bioenergetics and Biomembranes, 2003, 35, 221-229. | 2.3 | 6 |
| 70 | Assessment of Organelle Purity Using Antibodies and Specific Assays. Methods in Molecular Biology, 2008, 432, 345-356. | 0.9 | 6 |
| 71 | Crystal Structure of the Chloroplastic Oxoene Reductase ceQORH from Arabidopsis thaliana. Frontiers in Plant Science, 2017, 8, 329. | 3.6 | 6 |
| 72 | Calmodulin is involved in the dual subcellular location of two chloroplast proteins. Journal of Biological Chemistry, 2019, 294, 17543-17554. | 3.4 | 6 |

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|---|---|---|---|
| 73 | No plastidial calmodulin-like proteins detected by two targeted mass-spectrometry approaches and GFP fusion proteins. New Negatives in Plant Science, 2016, 3-4, 19-26. | 0.9 | 5 |
| 74 | Preparation of Chloroplast Sub-compartments from Arabidopsis for the Analysis of Protein Localization by Immunoblotting or Proteomics. Journal of Visualized Experiments, 2018, , . | 0.3 | 5 |
| 75 | Subcellular and Sub-organellar Proteomics as a Complementary Tool to Study the Evolution of the Plastid Proteome. , 2012, , 217-238. | | 4 |
| 76 | Lactococcus lactis: Recent Developments in Functional Expression of Membrane Proteins. , 2014, , 107-132. | | 4 |
| 77 | Analytical ultracentrifugation and preliminary X-ray studies of the chloroplast envelope quinone oxidoreductase homologue fromArabidopsis thaliana. Acta Crystallographica Section F, Structural Biology Communications, 2015, 71, 455-458. | 0.8 | 2 |
| 78 | Membrane Protein Production in Lactococcus lactis for Functional Studies. Methods in Molecular Biology, 2016, 1432, 79-101. | 0.9 | 2 |
| 79 | Functional Expression of Plant Membrane Proteins in Lactococcus lactis. Methods in Molecular Biology, 2015, 1258, 147-165. | 0.9 | 1 |
| 80 | Highly active membrane proteins produced in a cell-free expression system. Microbial Cell Factories, 2006, 5, S20. | 4.0 | 0 |
| 81 | Structural and enzymatic kinetic studies of the chloroplast gamma-ketol reductase fromArabidopsis thaliana. Acta Crystallographica Section A: Foundations and Advances, 2015, 71, s235-s235. | 0.1 | 0 |