Emilio FernÃ¡ndez Reyes

List of Publications by Year
in descending order

115 papers	8,770 citations	66343 42 h-index	45317 90 g-index
116 all docs	116 docs citations	116 times ranked	7828 citing authors

#	Article	IF	Citations
1	The <i>Chlamydomonas</i> Genome Reveals the Evolution of Key Animal and Plant Functions. Science, 2007, 318, 245-250.	12.6	2,354
2	A unified nomenclature of NITRATE TRANSPORTER 1/PEPTIDE TRANSPORTER family members in plants. Trends in Plant Science, 2014, 19, 5-9.	8.8	581
3	The nodule inceptionâ€like protein 7 modulates nitrate sensing and metabolism in Arabidopsis. Plant Journal, 2009, 57, 426-435.	5.7	384
4	Nitrate Reductase Regulates Plant Nitric Oxide Homeostasis. Trends in Plant Science, 2017, 22, 163-174.	8.8	338
5	Understanding nitrate assimilation and its regulation in microalgae. Frontiers in Plant Science, 2015, 6, 899.	3.6	261
6	Transgenic microalgae as green cell-factories. Trends in Biotechnology, 2004, 22, 45-52.	9.3	250
7	Identification of nitrate transporter genes in Chlamydomonas reinhardtii. Plant Journal, 1994, 5, 407-419.	5.7	189
8	Inorganic nitrogen assimilation in Chlamydomonas. Journal of Experimental Botany, 2007, 58, 2279-2287.	4.8	136
9	A dual system formed by the ARC and NR molybdoenzymes mediates nitriteâ€dependent NO production in <i>Chlamydomonas</i>. Plant, Cell and Environment, 2016, 39, 2097-2107.	5.7	130
10	PCR-identification of a Nicotiana plumbaginifolia cDNA homologous to the high-affinity nitrate transporters of the crnA family. Plant Molecular Biology, 1997, 34, 265-274.	3.9	129
11	A high-affinity molybdate transporter in eukaryotes. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 20126-20130.	7.1	125
12	Eukaryotic nitrate and nitrite transporters. Cellular and Molecular Life Sciences, 2001, 58, 225-233.	5.4	124
13	Nitrate Signaling by the Regulatory Gene<i>NIT2</i>in<i>Chlamydomonas</i>. Plant Cell, 2007, 19, 3491-3503.	6.6	124
14	Nitrate Assimilation in <i>Chlamydomonas</i>. Eukaryotic Cell, 2008, 7, 555-559.	3.4	114
15	A high affinity nitrate transport system fromChlamydomonasrequires two gene products. FEBS Letters, 2000, 466, 225-227.	2.8	106
16	Nitrate and Nitrite Are Transported by Different Specific Transport Systems and by a Bispecific Transporter in Chlamydomonas reinhardtii. Journal of Biological Chemistry, 1996, 271, 2088-2092.	3.4	105
17	Restriction enzyme site-directed amplification PCR: A tool to identify regions flanking a marker DNA. Analytical Biochemistry, 2005, 340, 330-335.	2.4	99
18	Differential Regulation of the Chlamydomonas Nar1 Gene Family by Carbon and Nitrogen. Protist, 2006, 157, 421-433.	1.5	99

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19	Algae and humans share a molybdate transporter. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 6420-6425.	7.1	97
20	Metabolic engineering of ketocarotenoids biosynthesis in the unicelullar microalga Chlamydomonas reinhardtii. Journal of Biotechnology, 2007, 130, 143-152.	3.8	95
21	Reverse genetics in Chlamydomonas: a platform for isolating insertional mutants. Plant Methods, 2011, 7, 24.	4.3	87
22	<scp>THB</scp>1, a truncated hemoglobin, modulates nitric oxide levels and nitrate reductase activity. Plant Journal, 2015, 81, 467-479.	5.7	87
23	A Soluble Guanylate Cyclase Mediates Negative Signaling by Ammonium on Expression of Nitrate Reductase in <i>Chlamydomonas</i> Â. Plant Cell, 2010, 22, 1532-1548.	6.6	86
24	Molybdenum metabolism in plants. Metallomics, 2013, 5, 1191.	2.4	86
25	Five nitrate assimilation-related loci are clustered in Chlamydomonas reinhardtii. Molecular Genetics and Genomics, 1993, 240, 387-394.	2.4	85
26	Functional Genomics of the Regulation of the Nitrate Assimilation Pathway in Chlamydomonas. Plant Physiology, 2005, 137, 522-533.	4.8	83
27	The Chlamydomonas reinhardtii Nar1 Gene Encodes a Chloroplast Membrane Protein Involved in Nitrite Transport. Plant Cell, 2000, 12, 1441-1453.	6.6	79
28	Ammonium transporter genes in Chlamydomonas: the nitrate-specific regulatory gene Nit2 is involved in Amt1;1 expression. Plant Molecular Biology, 2004, 56, 863-878.	3.9	72
29	In vivo complementation analysis of nitrate reductase-deficient mutants in Chlamydomonas reinhardtii. Current Genetics, 1986, 10, 397-403.	1.7	69
30	Nuclear Transformation of Eukaryotic Microalgae. Advances in Experimental Medicine and Biology, 2007, 616, 1-11.	1.6	69
31	Nitric oxide controls nitrate and ammonium assimilation in Chlamydomonas reinhardtii. Journal of Experimental Botany, 2013, 64, 3373-3383.	4.8	67
32	Function and Structure of the Molybdenum Cofactor Carrier Protein from Chlamydomonas reinhardtii. Journal of Biological Chemistry, 2006, 281, 30186-30194.	3.4	65
33	Role of Nitrate Reductase in NO Production in Photosynthetic Eukaryotes. Plants, 2019, 8, 56.	3.5	57
34	TheChlamydomonas reinhardtiiMoCo carrier protein is multimeric and stabilizes molybdopterin cofactor in a molybdate charged form. FEBS Letters, 1998, 431, 205-209.	2.8	54
35	Regulation of the nitrate-reducing system enzymes in wild-type and mutant strains of Chlamydomonas reinhardii. Molecular Genetics and Genomics, 1982, 186, 164-169.	2.4	53
36	Nitrate signalling on the nitrate reductase gene promoter depends directly on the activity of the nitrate transport systems in Chlamydomonas. Plant Journal, 2002, 30, 261-271.	5.7	52

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37	Mcp1 Encodes the Molybdenum Cofactor Carrier Protein in Chlamydomonas reinhardtii and Participates in Protection, Binding, and Storage Functions of the Cofactor. Journal of Biological Chemistry, 2003, 278, 10885-10890.	3.4	50
38	Clustering of the nitrite reductase gene and a light-regulated gene with nitrate assimilation loci in Chlamydomonas reinhardtii. Planta, 1998, 206, 259-265.	3.2	48
39	Algae-Bacteria Consortia as a Strategy to Enhance H2 Production. Cells, 2020, 9, 1353.	4.1	48
40	Differential Regulation of the High Affinity Nitrite Transport Systems III and IV in Chlamydomonas reinhardtii. Journal of Biological Chemistry, 1999, 274, 27801-27806.	3.4	46
41	Urate oxidase of Chlamydomonas reinhardii. Physiologia Plantarum, 1984, 62, 453-457.	5.2	45
42	The Chlamydomonas reinhardtii Molybdenum Cofactor Enzyme crARC Has a Zn-Dependent Activity and Protein Partners Similar to Those of Its Human Homologue. Eukaryotic Cell, 2011, 10, 1270-1282.	3.4	44
43	Nitrite Reductase Mutants as an Approach to Understanding Nitrate Assimilation in Chlamydomonas reinhardtii. Plant Physiology, 2000, 122, 283-290.	4.8	43
44	Homeostasis of the micronutrients Ni, Mo and Cl with specific biochemical functions. Current Opinion in Plant Biology, 2009, 12, 358-363.	7.1	43
45	Involvement of chloroplast and mitochondria redox valves in nitrate assimilation. Trends in Plant Science, 2000, 5, 463-464.	8.8	42
46	Cytosolic glutamine synthetase and not nitrate reductase from the green alga Chlamydomonas reinhardtii is phosphorylated and binds 14-3-3 proteins. Planta, 2001, 212, 264-269.	3.2	42
47	Nitrite transport to the chloroplast in Chlamydomonas reinhardtii: molecular evidence for a regulated process. Journal of Experimental Botany, 2002, 53, 845-853.	4.8	40
48	The molybdenum cofactor enzyme mARC: Moonlighting or promiscuous enzyme?. BioFactors, 2017, 43, 486-494.	5.4	40
49	Kinetic Characterization of Nitrite Uptake and Reduction by Chlamydomonas reinhardtii. Plant Physiology, 1986, 82, 904-908.	4.8	38
50	Low oxygen levels contribute to improve photohydrogen production in mixotrophic non-stressed Chlamydomonas cultures. Biotechnology for Biofuels, 2015, 8, 149.	6.2	38
51	Involvement of Reversible Inactivation in the Regulation of Nitrate Reductase Enzyme Levels in Chlamydomonas reinhardtii. Plant Physiology, 1987, 84, 665-669.	4.8	36
52	Nitrate Reductase Regulates Expression of Nitrite Uptake and Nitrite Reductase Activities in <i>Chlamydomonas reinhardtii</i>. Plant Physiology, 1992, 98, 422-426.	4.8	35
53	Direct transfer of molybdopterin cofactor to aponitrate reductase from a carrier protein inChlamydomonas reinhardtii. FEBS Letters, 1992, 307, 162-163.	2.8	35
54	Toxicity of and mutagenesis by chlorate are independent of nitrate reductase activity in Chlamydomonas reinhardtii. Molecular Genetics and Genomics, 1993, 237, 429-438.	2.4	35

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55	How Chlamydomonas handles nitrate and the nitric oxide cycle. Journal of Experimental Botany, 2017, 68, 2593-2602.	4.8	34
56	A mutant of Chlamydomonas reinhardtii altered in the transport of ammonium and methylammonium. Molecular Genetics and Genomics, 1987, 206, 414-418.	2.4	33
57	Relevance of nutrient media composition for hydrogen production in Chlamydomonas. Photosynthesis Research, 2015, 125, 395-406.	2.9	33
58	OK, thanks! A new mutualism between Chlamydomonas and methylobacteria facilitates growth on amino acids and peptides. FEMS Microbiology Letters, 2018, 365, .	1.8	33
59	Nitrogen isotope signature evidences ammonium deprotonation as a common transport mechanism for the AMT-Mep-Rh protein superfamily. Science Advances, 2018, 4, eaar3599.	10.3	33
60	Constitutive expression of nitrate reductase changes the regulation of nitrate and nitrite transporters in Chlamydomonas reinhardtii. Plant Journal, 1996, 9, 819-827.	5.7	30
61	REM1, a New Type of Long Terminal Repeat Retrotransposon in Chlamydomonas reinhardtii. Molecular and Cellular Biology, 2005, 25, 10628-10638.	2.3	30
62	From the Eukaryotic Molybdenum Cofactor Biosynthesis to the Moonlighting Enzyme mARC. Molecules, 2018, 23, 3287.	3.8	30
63	Ammonium (methylammonium) is the co-repressor of nitrate reductase inChlamydomonas reinhardii. FEBS Letters, 1984, 176, 453-456.	2.8	29
64	Low-expression genes induced by nitrogen starvation and subsequent sexual differentiation in Chlamydomonas reinhardtii, isolated by the differential display technique. Planta, 2001, 213, 309-317.	3.2	29
65	Insertional Mutagenesis as a Tool to Study Genes/Functions in Chlamydomonas. Advances in Experimental Medicine and Biology, 2007, 616, 77-89.	1.6	29
66	The activity of the high-affinity nitrate transport system I (NRT2;1, NAR2) is responsible for the efficient signalling of nitrate assimilation genes in Chlamydomonas reinhardtii. Planta, 2002, 215, 606-611.	3.2	27
67	The biosynthesis of nitrous oxide in the green alga <i>Chlamydomonas reinhardtii</i>. Plant Journal, 2017, 91, 45-56.	5.7	26
68	In vitro complementation of assimilatory NAD(P)H-nitrate reductase from mutants of Chlamydomonas reinhardii. Biochimica Et Biophysica Acta - Biomembranes, 1981, 657, 1-12.	2.6	25
69	Molybdenum metabolism in the alga Chlamydomonas stands at the crossroad of those in Arabidopsis and humans. Metallomics, 2011, 3, 578.	2.4	24
70	Nitrogen scavenging from amino acids and peptides in the model alga Chlamydomonas reinhardtii. The role of extracellular l-amino oxidase. Algal Research, 2019, 38, 101395.	4.6	24
71	Regulation of molybdenum cofactor species in the green alga Chlamydomonas reinhardtii. Biochimica Et Biophysica Acta - General Subjects, 1991, 1073, 463-469.	2.4	23
72	Regulation of nitrite uptake and nitrite reductase expression in Chlamydomonas reinhardtii. Biochimica Et Biophysica Acta - General Subjects, 1991, 1074, 6-11.	2.4	23

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73	Chlamydomonas reinhardtii CNX1E Reconstitutes Molybdenum Cofactor Biosynthesis in Escherichia coli Mutants. Eukaryotic Cell, 2007, 6, 1063-1067.	3.4	23
74	Regulation by light of ammonium transport systems in <i>Chlamydomonas reinhardtii</i>. Plant, Cell and Environment, 2010, 33, 1049-1056.	5.7	22
75	Chlamydomonas reinhardtii, an Algal Model in the Nitrogen Cycle. Plants, 2020, 9, 903.	3.5	22
76	Nitrogen Assimilation and its Regulation. , 2009, , 69-113.		21
77	Physicochemical Properties of Ferredoxin from Chlamydomonas reinhardii. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1985, 40, 373-378.	1.4	20
78	Molybdate repair of molybdopterin deficient mutants from Chlamydomonas reinhardtii. Current Genetics, 1987, 12, 349-355.	1.7	19
79	Regulation by ammonium of nitrate and nitrite assimilation in Chlamydomonas reinhardtii. Biochimica Et Biophysica Acta Gene Regulatory Mechanisms, 1988, 951, 98-103.	2.4	19
80	The negative effect of nitrate on gametogenesis is independent of nitrate assimilation in Chlamydomonas reinhardtii. Planta, 2000, 211, 287-292.	3.2	19
81	Transcriptional regulation of CDP1 and CYG56 is required for proper NH4+ sensing in Chlamydomonas. Journal of Experimental Botany, 2011, 62, 1425-1437.	4.8	19
82	Chlamydomonas-Methylobacterium oryzae cooperation leads to increased biomass, nitrogen removal and hydrogen production. Bioresource Technology, 2022, 352, 127088.	9.6	19
83	Chlamydomonas reinhardtii nitrate reductase complex has 105 kDa subunits in the wild-type strain and a structural mutant. Plant Science, 1995, 105, 195-206.	3.6	18
84	Nitrogen Assimilation and its Regulation. , 1998, , 637-659.		18
85	nit 7: A New Locus for Molybdopterin Cofactor Biosynthesis in the Green Alga Chlamydomonas reinhardtii. Plant Physiology, 1992, 98, 395-398.	4.8	15
86	Responses of <i>Chlamydomonas reinhardtii</i> during the transition from Pâ€deficient to Pâ€sufficient growth (the Pâ€overplus response): The roles of the vacuolar transport chaperones and polyphosphate synthesis. Journal of Phycology, 2021, 57, 988-1003.	2.3	15
87	Quantitation of molybdopterin oxidation product in wild-type and molybdenum cofactor deficient mutants of Chalamydomonas reinhardtii. BBA - Proteins and Proteomics, 1992, 1160, 269-274.	2.1	14
88	Chemotaxis to ammonium/methylammonium in Chlamydomonas reinhardtii: the role of transport systems for ammonium/methylammonium. Planta, 2007, 226, 1323-1332.	3.2	14
89	Heteromultimeric structure of the nitrate reductase complex of <i>Chlamydomonas reinhardii</i>. EMBO Journal, 1984, 3, 1403-1407.	7.8	13
90	NADP-malate dehydrogenase from Chlamydomonas: prediction of new structural determinants for redox regulation by homology modelling. Plant Molecular Biology, 2002, 48, 211-221.	3.9	13

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91	Genes involved in nitrate assimilation. Plant Molecular Biology Reporter, 1994, 12, S45-S49.	1.8	12
92	Different forms of molybdenum cofactor inVicia faba seeds: The presence of molybdenum cofactor carrier protein and its purification. Planta, 1997, 201, 64-70.	3.2	12
93	Chlamydomonas reinhardtii strains expressing nitrate reductase under control of the cabII-1 promoter: isolation of chlorate resistant mutants and identification of new loci for nitrate assimilation. Photosynthesis Research, 2005, 83, 151-161.	2.9	12
94	THB1 regulates nitrate reductase activity and THB1 and THB2 transcription differentially respond to NO and the nitrate/ammonium balance in Chlamydomonas. Plant Signaling and Behavior, 2015, 10, e1042638.	2.4	12
95	<scp><i>C</i></scp><i>hlamydomonas</i>â€…<scp>NZF</scp>1, a tandemâ€repeated zinc finger factor involved in nitrate signalling by controlling the regulatory gene <scp><i>NIT</i></scp><i>2</i>. Plant, Cell and Environment, 2014, 37, 2139-2150.	5.7	11
96	Characterization of a Mutant Deficient for Ammonium and Nitric Oxide Signalling in the Model System Chlamydomonas reinhardtii. PLoS ONE, 2016, 11, e0155128.	2.5	11
97	Blueâ€light requirement for the biosynthesis of an NO2âˆ'transport system in theChlamydomonas reinhardtiinitrate transport mutant S10*. Plant, Cell and Environment, 1999, 22, 1169-1175.	5.7	10
98	Isolation and properties of the NAD(P)H-cytochrome c reductase subunit of Chlamydomonas reinhardii NAD(P)H-nitrate reductase. BBA - Proteins and Proteomics, 1983, 745, 12-19.	2.1	9
99	Nitrate Reductase from a Mutant Strain of Chlamydomonas reinhardii Incapable of Nitrate Assimilation. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1983, 38, 439-445.	1.4	9
100	Cooperative regulation by ammonium and ammonium derivatives of nitrite uptake in Chlamydomonas reinhardtii. Biochimica Et Biophysica Acta - Biomembranes, 1987, 902, 287-292.	2.6	9
101	Ketocarotenoid Biosynthesis in Transgenic Microalgae Expressing a Foreign Î²-C-4-carotene Oxygenase Gene. Methods in Molecular Biology, 2012, 892, 283-295.	0.9	9
102	Identification of the MAPK Cascade and its Relationship with Nitrogen Metabolism in the Green Alga Chlamydomonas reinhardtii. International Journal of Molecular Sciences, 2020, 21, 3417.	4.1	9
103	Origin Recognition Complex (ORC) Evolution Is Influenced by Global Gene Duplication/Loss Patterns in Eukaryotic Genomes. Genome Biology and Evolution, 2020, 12, 3878-3889.	2.5	9
104	Characterization of Chlamydomonas 102 and 104 Mutants Reveals Intermolecular Complementation in the Molybdenum Cofactor Protein CNX1E. Protist, 2013, 164, 116-128.	1.5	8
105	Study of Different Variants of Mo Enzyme crARC and the Interaction with Its Partners crCytb5-R and crCytb5-1. International Journal of Molecular Sciences, 2017, 18, 670.	4.1	8
106	Biochemical characterization of a singular mutant of nitrate reductase from Chlamydomonas reinhardii. New evidence for a heteropolymeric enzyme structure. Biochimica Et Biophysica Acta - Bioenergetics, 1982, 681, 530-537.	1.0	7
107	NRT2.4 and NRT2.5 Are Two Half-Size Transporters from the Chlamydomonas NRT2 Family. Agronomy, 2016, 6, 20.	3.0	7
108	Role of the diaphorase moiety on the reversible inactivation of the Chlamydomonas reinhardii nitrate reductase complex. BBA - Proteins and Proteomics, 1985, 827, 8-13.	2.1	6

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109	Arginine is a component of the ammonium-CYG56 signalling cascade that represses genes of the nitrogen assimilation pathway in Chlamydomonas reinhardtii. PLoS ONE, 2018, 13, e0196167.	2.5	6
110	H2 production pathways in nutrient-replete mixotrophic Chlamydomonas cultures under low light. Response to the commentary article â€œOn the pathways feeding the H2 production process in nutrient-replete, hypoxic conditions,â€•by Alberto Scoma and Szilvia Z. TÃ³th. Biotechnology for Biofuels, 2017, 10, 117.	6.2	5
111	Isoelectric Focusing of the NAD(P)H-Cytochrome c Reductase Subunit of Chlamydomonas reinhardii Nitrate Reductase. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 1983, 38, 35-38.	1.4	4
112	The Chlamydomonas reinhardtii Nar1 Gene Encodes a Chloroplast Membrane Protein Involved in Nitrite Transport. Plant Cell, 2000, 12, 1441.	6.6	3
113	Validation of a New Multicistronic Plasmid for the Efficient and Stable Expression of Transgenes in Microalgae. International Journal of Molecular Sciences, 2020, 21, 718.	4.1	3
114	Corrigendum to: A high affinity nitrate transport system from Chlamydomonas requires two gene products (FEBS 23233). FEBS Letters, 2000, 481, 88-88.	2.8	1
115	The Green Alga Chlamydomonas as a Tool to Study the Nitrate Assimilation Pathway in Plants. , 2006, , 125-158.		0