MarÃa Dolores RoldÃ¡n Ruiz

List of Publications by Year
in descending order

60 papers	2,924 citations	159585 30 h-index	168389 53 g-index
62 all docs	62 docs citations	62 times ranked	3221 citing authors

#	Article	IF	Citations
1	Reduction of polynitroaromatic compounds: the bacterial nitroreductases. FEMS Microbiology Reviews, 2008, 32, 474-500.	8.6	339
2	Nitrate reduction and the nitrogen cycle in archaea. Microbiology (United Kingdom), 2004, 150, 3527-3546.	1.8	289
3	Spectroscopic Characterization of a Novel Multihemec-Type Cytochrome Widely Implicated in Bacterial Electron Transport. Journal of Biological Chemistry, 1998, 273, 28785-28790.	3.4	129
4	Bacterial Degradation of Cyanide and Its Metal Complexes under Alkaline Conditions. Applied and Environmental Microbiology, 2005, 71, 940-947.	3.1	121
5	Bacterial nitrate assimilation: gene distribution and regulation. Biochemical Society Transactions, 2011, 39, 1838-1843.	3.4	112
6	Biodegradation of cyanide wastes from mining and jewellery industries. Current Opinion in Biotechnology, 2016, 38, 9-13.	6.6	106
7	Isolation of periplasmic nitrate reductase genes from Rhodobacter sphaeroides DSM 158: structural and functional differences among prokaryotic nitrate reductases. Molecular Microbiology, 1996, 19, 1307-1318.	2.5	104
8	A Low-Redox Potential Heme in the Dinuclear Center of Bacterial Nitric Oxide Reductase: Implications for the Evolution of Energy-Conserving Hemeâˆ’Copper Oxidases. Biochemistry, 1999, 38, 13780-13786.	2.5	102
9	Alkaline cyanide degradation by Pseudomonas pseudoalcaligenes CECT5344 in a batch reactor. Influence of pH. Journal of Hazardous Materials, 2010, 179, 72-78.	12.4	98
10	Exploring anaerobic environments for cyanide and cyano-derivatives microbial degradation. Applied Microbiology and Biotechnology, 2018, 102, 1067-1074.	3.6	71
11	Hydroxylamine Assimilation by Rhodobacter capsulatus E1F1. Journal of Biological Chemistry, 2004, 279, 45485-45494.	3.4	65
12	Chlorate and nitrate reduction in the phototrophic bacteriaRhodobacter capsulatus andRhodobacter sphaeroides. Current Microbiology, 1994, 29, 241-245.	2.2	63
13	The diversity of redox proteins involved in bacterial heterotrophic nitrification and aerobic denitrification. Biochemical Society Transactions, 1998, 26, 401-408.	3.4	62
14	A composite biochemical system for bacterial nitrate and nitrite assimilation as exemplified by<i>Paracoccus denitrificans</i>. Biochemical Journal, 2011, 435, 743-753.	3.7	55
15	Characterization of the <i>Pseudomonas pseudoalcaligenes</i> CECT5344 Cyanase, an Enzyme That Is Not Essential for Cyanide Assimilation. Applied and Environmental Microbiology, 2008, 74, 6280-6288.	3.1	54
16	Effects of Boron on Proton Transport and Membrane Properties of Sunflower (Helianthus annuus L.) Cell Microsomes. Plant Physiology, 1993, 103, 763-769.	4.8	51
17	Regulation of nap Gene Expression and Periplasmic Nitrate Reductase Activity in the Phototrophic Bacterium Rhodobacter sphaeroides DSM158. Journal of Bacteriology, 2002, 184, 1693-1702.	2.2	48
18	Alkaline cyanide biodegradation by Pseudomonas pseudoalcaligenes CECT5344. Biochemical Society Transactions, 2005, 33, 168-169.	3.4	47

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19	Degradation of p -nitrophenol by the phototrophic bacterium Rhodobacter capsulatus. Archives of Microbiology, 1997, 169, 36-42.	2.2	46
20	Spatial navigation impairment in patients with refractory temporal lobe epilepsy: Evidence from a new virtual reality-based task. Epilepsy and Behavior, 2011, 22, 364-369.	1.7	44
21	Bacterial cyanide degradation is under review: Pseudomonas pseudoalcaligenes CECT5344, a case of an alkaliphilic cyanotroph. Biochemical Society Transactions, 2011, 39, 269-274.	3.4	43
22	In vivo and in vitro effects of boron on the plasma membrane proton pump of sunflower roots. Physiologia Plantarum, 1992, 84, 49-54.	5.2	42
23	Exploring the Denitrification Proteome of Paracoccus denitrificans PD1222. Frontiers in Microbiology, 2018, 9, 1137.	3.5	41
24	Identification of two domains and distal histidine ligands to the four haems in the bacterial c-type cytochrome NapC; the prototype connector between quinol/quinone and periplasmic oxido-reductases. Biochemical Journal, 2002, 368, 425-432.	3.7	40
25	Spectral Properties of Bacterial Nitric-oxide Reductase. Journal of Biological Chemistry, 2002, 277, 20146-20150.	3.4	38
26	Draft whole genome sequence of the cyanideâ€degrading bacterium <i><scp>P</scp>seudomonas pseudoalcaligenes</i><scp>CECT</scp>5344. Environmental Microbiology, 2013, 15, 253-270.	3.8	38
27	NapF Is a Cytoplasmic Iron-Sulfur Protein Required for Fe-S Cluster Assembly in the Periplasmic Nitrate Reductase. Journal of Biological Chemistry, 2004, 279, 49727-49735.	3.4	36
28	The assimilatory nitrate reduction system of the phototrophic bacterium Rhodobacter capsulatus E1F1. Biochemical Society Transactions, 2006, 34, 127-129.	3.4	33
29	Cyanide degradation by Pseudomonas pseudoalcaligenes CECT5344 involves a malateâ€Š:â€Šquinone oxidoreductase and an associated cyanide-insensitive electron transfer chain. Microbiology (United) Tj ETQq1 1 0.784314 rg BT /Overl	1.8	32
30	Virtual reality tasks disclose spatial memory alterations in fibromyalgia. Rheumatology, 2009, 48, 1273-1278.	1.9	31
31	The <scp><i>P</i></scp><i>aracoccus denitrificans</i><scp>N</scp>ar<scp>K</scp>â€like nitrate and nitrite transportersâ€"probing nitrate uptake and nitrate/nitrite exchange mechanisms. Molecular Microbiology, 2017, 103, 117-133.	2.5	30
32	The <i>nit1C</i> gene cluster of <i>Pseudomonas pseudoalcaligenes</i> CECT5344 involved in assimilation of nitriles is essential for growth on cyanide. Environmental Microbiology Reports, 2012, 4, 326-334.	2.4	29
33	Nitrogen Oxyanion-dependent Dissociation of a Two-component Complex That Regulates Bacterial Nitrate Assimilation. Journal of Biological Chemistry, 2013, 288, 29692-29702.	3.4	29
34	Molecular and Regulatory Properties of the Nitrate Reducing Systems of Rhodobacter. Current Microbiology, 1996, 33, 341-346.	2.2	28
35	Spatial memory alterations in children with epilepsy of genetic origin or unknown cause. Epileptic Disorders, 2014, 16, 203-207.	1.3	28
36	Complete genome sequence of the cyanide-degrading bacterium Pseudomonas pseudoalcaligenes CECT5344. Journal of Biotechnology, 2014, 175, 67-68.	3.8	28

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37	Assimilation of cyanide and cyano-derivatives by Pseudomonas pseudoalcaligenes CECT5344: from omic approaches to biotechnological applications. FEMS Microbiology Letters, 2018, 365, .	1.8	28
38	The cyanotrophic bacterium Pseudomonas pseudoalcaligenes CECT5344 responds to cyanide by defence mechanisms against iron deprivation, oxidative damage and nitrogen stress. Environmental Microbiology, 2007, 9, 1541-1549.	3.8	27
39	DNA microarray analysis of the cyanotroph Pseudomonas pseudoalcaligenes CECT5344 in response to nitrogen starvation, cyanide and a jewelry wastewater. Journal of Biotechnology, 2015, 214, 171-181.	3.8	25
40	Quantitative proteomic analysis of Pseudomonas pseudoalcaligenes CECT5344 in response to industrial cyanide-containing wastewaters using Liquid Chromatography-Mass Spectrometry/Mass Spectrometry (LC-MS/MS). PLoS ONE, 2017, 12, e0172908.	2.5	25
41	Transcriptional and translational adaptation to aerobic nitrate anabolism in the denitrifier <i>Paracoccus denitrificans</i>. Biochemical Journal, 2017, 474, 1769-1787.	3.7	24
42	Expression and characterization of the assimilatory NADH-nitrite reductase from the phototrophic bacterium Rhodobacter capsulatus E1F1. Archives of Microbiology, 2006, 186, 339-344.	2.2	22
43	Finished genome sequence and methylome of the cyanide-degrading Pseudomonas pseudoalcaligenes strain CECT5344 as resolved by single-molecule real-time sequencing. Journal of Biotechnology, 2016, 232, 61-68.	3.8	20
44	Cyanate Assimilation by the Alkaliphilic Cyanide-Degrading Bacterium Pseudomonas pseudoalcaligenes CECT5344: Mutational Analysis of the cyn Gene Cluster. International Journal of Molecular Sciences, 2019, 20, 3008.	4.1	20
45	Putative small RNAs controlling detoxification of industrial cyanide-containing wastewaters by Pseudomonas pseudoalcaligenes CECT5344. PLoS ONE, 2019, 14, e0212032.	2.5	20
46	Pseudomonas pseudoalcaligenes CECT5344, a cyanide-degrading bacterium with by-product (polyhydroxyalkanoates) formation capacity. Microbial Cell Factories, 2015, 14, 77.	4.0	18
47	Effect of pH on the denitrification proteome of the soil bacterium Paracoccus denitrificans PD1222. Scientific Reports, 2021, 11, 17276.	3.3	18
48	Regulation and Characterization of Two Nitroreductase Genes, nprA and nprB , of Rhodobacter capsulatus. Applied and Environmental Microbiology, 2005, 71, 7643-7649.	3.1	17
49	Poly(3-hydroxybutyrate) hyperproduction by a global nitrogen regulator NtrB mutant strain of Paracoccus denitrificans PD1222. FEMS Microbiology Letters, 2018, 365, .	1.8	17
50	Electron transfer to the active site of the bacterial nitric oxide reductase is controlled by ligand binding to heme b3. Biochimica Et Biophysica Acta - Bioenergetics, 2011, 1807, 451-457.	1.0	15
51	The NprA nitroreductase required for 2,4â€dinitrophenol reduction in <i>Rhodobacter capsulatus</i> is a dihydropteridine reductase. Environmental Microbiology, 2008, 10, 3174-3183.	3.8	14
52	Effect of xenobiotics on inorganic nitrogen assimilation by the phototrophic bacteriumRhodobacter capsulatus E1F1. Current Microbiology, 1994, 29, 119-122.	2.2	11
53	Role of the Dihydrodipicolinate Synthase DapA1 on Iron Homeostasis During Cyanide Assimilation by the Alkaliphilic Bacterium Pseudomonas pseudoalcaligenes CECT5344. Frontiers in Microbiology, 2020, 11, 28.	3.5	10
54	Interactions Between Nitrate Assimilation and 2,4-Dinitrophenol Cometabolism in Rhodobacter capsulatus E1F1. Current Microbiology, 2006, 53, 37-42.	2.2	9

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55	Effect of sodium chloride on growth, ion content, and hydrogen ion extrusion activity of sunflower and jojoba roots. Journal of Plant Nutrition, 1993, 16, 1047-1058.	1.9	8
56	Bioremediation of cyanideâ€containing wastes. EMBO Reports, 2021, 22, e53720.	4.5	8
57	Isolation of bacterial strains able to degrade biphenyl, diphenyl ether and the heat transfer fluid used in thermo-solar plants. New Biotechnology, 2017, 35, 35-41.	4.4	7
58	Genetic Relationships in an International Collection of <i>Puccinia horiana</i> Isolates Based on Newly Identified Molecular Markers and Demonstration of Recombination. Phytopathology, 2013, 103, 1169-1179.	2.2	6
59	Alternative Pathway for 3-Cyanoalanine Assimilation in Pseudomonas pseudoalcaligenes CECT5344 under Noncyanotrophic Conditions. Microbiology Spectrum, 2021, 9, e0077721.	3.0	3
60	Editorial to the thematic issue new insights into the nitrogen cycle. FEMS Microbiology Letters, 2018, 365, .	1.8	0