Eduardo Diaz

List of Publications by Citations

79 papers	3,627 citations	32 h-index	59 g-index
85 ext. papers	4,106 ext. citations	6.9 avg, IF	5.19 L-index

#	Paper	IF	Citations
79	Genomic analysis of the aromatic catabolic pathways from Pseudomonas putida KT2440. *Environmental Microbiology*, **2002**, 4, 824-41	5.2	380
78	Anaerobic catabolism of aromatic compounds: a genetic and genomic view. *Microbiology and Molecular Biology Reviews*, **2009**, 73, 71-133	13.2	312
77	Biodegradation of aromatic compounds by Escherichia coli. *Microbiology and Molecular Biology Reviews*, **2001**, 65, 523-69, table of contents	13.2	269
76	The homogentisate pathway: a central catabolic pathway involved in the degradation of L-phenylalanine, L-tyrosine, and 3-hydroxyphenylacetate in Pseudomonas putida. *Journal of Bacteriology*, **2004**, 186, 5062-77	3.5	190
75	Bacterial degradation of aromatic pollutants: a paradigm of metabolic versatility. *International Microbiology*, **2004**, 7, 173-80	3	188
74	Bacterial promoters triggering biodegradation of aromatic pollutants. *Current Opinion in Biotechnology*, **2000**, 11, 467-75	11.4	136
73	Aerobic degradation of aromatic compounds. *Current Opinion in Biotechnology*, **2013**, 24, 431-42	11.4	125
72	Growth phase-dependent expression of the Pseudomonas putida KT2440 transcriptional machinery analysed with a genome-wide DNA microarray. *Environmental Microbiology*, **2006**, 8, 165-77	5.2	120
71	Deciphering the genetic determinants for aerobic nicotinic acid degradation: the nic cluster from Pseudomonas putida KT2440. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 11329-34	11.5	112
70	The bzd gene cluster, coding for anaerobic benzoate catabolism, in Azoarcus sp. strain CIB. *Journal of Bacteriology*, **2004**, 186, 5762-74	3.5	92
69	The evolutionary relationship of biphenyl dioxygenase from gram-positive Rhodococcus globerulus P6 to multicomponent dioxygenases from gram-negative bacteria. *Gene*, **1995**, 156, 11-8	3.8	78
68	Enhancing desulphurization by engineering a flavin reductase-encoding gene cassette in recombinant biocatalysts. *Environmental Microbiology*, **2000**, 2, 687-94	5.2	72
67	Bacterial degradation of benzoate: cross-regulation between aerobic and anaerobic pathways. *Journal of Biological Chemistry*, **2012**, 287, 10494-10508	5.4	66
66	Universal barrier to lateral spread of specific genes among microorganisms. *Molecular Microbiology*, **1994**, 13, 855-61	4.1	64
65	Biosynthesis of selenium nanoparticles by Azoarcus sp. CIB. *Microbial Cell Factories*, **2016**, 15, 109	6.4	60
64	Engineering synthetic bacterial consortia for enhanced desulfurization and revalorization of oil sulfur compounds. *Metabolic Engineering*, **2016**, 35, 46-54	9.7	58
63	Unravelling the gallic acid degradation pathway in bacteria: the gal cluster from Pseudomonas putida. *Molecular Microbiology*, **2011**, 79, 359-74	4.1	58

62	BzdR, a repressor that controls the anaerobic catabolism of benzoate in Azoarcus sp. CIB, is the first member of a new subfamily of transcriptional regulators. *Journal of Biological Chemistry*, **2005**, 280, 10683-94	5.4	58
61	The behavior of bacteria designed for biodegradation. *Nature Biotechnology*, **1994**, 12, 1349-56	44.5	58
60	Whole-genome analysis of Azoarcus sp. strain CIB provides genetic insights to its different lifestyles and predicts novel metabolic features. *Systematic and Applied Microbiology*, **2015**, 38, 462-71	4.2	49
59	Molecular characterization of the gallate dioxygenase from Pseudomonas putida KT2440. The prototype of a new subgroup of extradiol dioxygenases. *Journal of Biological Chemistry*, **2005**, 280, 35382-90	5.4	48
58	Speeding up bioproduction of selenium nanoparticles by using Vibrio natriegens as microbial factory. *Scientific Reports*, **2017**, 7, 16046	4.9	47
57	New challenges for syngas fermentation: towards production of biopolymers. *Journal of Chemical Technology and Biotechnology*, **2015**, 90, 1735-1751	3.5	47
56	A dual lethal system to enhance containment of recombinant micro-organisms. *Microbiology (United Kingdom)*, **2003**, 149, 3595-3601	2.9	45
55	Metabolic and process engineering for biodesulfurization in Gram-negative bacteria. *Journal of Biotechnology*, **2017**, 262, 47-55	3.7	42
54	The two-step lysis system of pneumococcal bacteriophage EJ-1 is functional in gram-negative bacteria: triggering of the major pneumococcal autolysin in Escherichia coli. *Molecular Microbiology*, **1996**, 19, 667-81	4.1	41
53	Characterization of the last step of the aerobic phenylacetic acid degradation pathway. *Microbiology (United Kingdom)*, **2007**, 153, 357-365	2.9	39
52	Genomic Insights in the Metabolism of Aromatic Compounds in Pseudomonas **2004**, 425-462		39
51	Azoarcus sp. CIB, an anaerobic biodegrader of aromatic compounds shows an endophytic lifestyle. *PLoS ONE*, **2014**, 9, e110771	3.7	33
50	Regulation of the mhp cluster responsible for 3-(3-hydroxyphenyl)propionic acid degradation in Escherichia coli. *Journal of Biological Chemistry*, **2003**, 278, 27575-85	5.4	33
49	A second chromosomal copy of the catA gene endows Pseudomonas putida mt-2 with an enzymatic safety valve for excess of catechol. *Environmental Microbiology*, **2014**, 16, 1767-78	5.2	32
48	Characterization of the mbd cluster encoding the anaerobic 3-methylbenzoyl-CoA central pathway. *Environmental Microbiology*, **2013**, 15, 148-66	5.2	32
47	Analysis of dibenzothiophene desulfurization in a recombinant Pseudomonas putida strain. *Applied and Environmental Microbiology*, **2009**, 75, 875-7	4.8	31
46	Genetic characterization of the phenylacetyl-coenzyme A oxygenase from the aerobic phenylacetic acid degradation pathway of Escherichia coli. *Applied and Environmental Microbiology*, **2006**, 72, 7422-6	4.8	28
45	Genetic characterization of the styrene lower catabolic pathway of Pseudomonas sp. strain Y2. *Gene*, **2003**, 319, 71-83	3.8	28

44	3-Hydroxyphenylpropionate and phenylpropionate are synergistic activators of the MhpR transcriptional regulator from Escherichia coli. *Journal of Biological Chemistry*, **2009**, 284, 21218-28	5.4	24
43	Biochemical characterization of the transcriptional regulator BzdR from Azoarcus sp. CIB. *Journal of Biological Chemistry*, **2010**, 285, 35694-705	5.4	23
42	Coregulation by phenylacetyl-coenzyme A-responsive PaaX integrates control of the upper and lower pathways for catabolism of styrene by Pseudomonas sp. strain Y2. *Journal of Bacteriology*, **2006**, 188, 4812-21	3.5	23
41	A gene containment strategy based on a restriction-modification system. *Environmental Microbiology*, **2000**, 2, 555-63	5.2	22
40	A stringently controlled expression system for analysing lateral gene transfer between bacteria. *Molecular Microbiology*, **1996**, 21, 293-300	4.1	21
39	Aromatic metabolism versus carbon availability: the regulatory network that controls catabolism of less-preferred carbon sources in Escherichia coli. *FEMS Microbiology Reviews*, **2004**, 28, 503-18	15.1	20
38	Insights on the regulation of the phenylacetate degradation pathway from Escherichia coli. *Environmental Microbiology Reports*, **2014**, 6, 239-50	3.7	19
37	A finely tuned regulatory circuit of the nicotinic acid degradation pathway in Pseudomonas putida. *Environmental Microbiology*, **2011**, 13, 1718-32	5.2	19
36	Characterization of the transcription unit encoding the major pneumococcal autolysin. *Gene*, **1990**, 90, 157-62	3.8	19
35	Suicide microbes on the loose. *Nature Biotechnology*, **1995**, 13, 35-7	44.5	18
34	Testosterone Degradative Pathway of. *Genes*, **2019**, 10,	4.2	17
33	Transcriptional Regulation of the Peripheral Pathway for the Anaerobic Catabolism of Toluene and -Xylene in sp. CIB. *Frontiers in Microbiology*, **2018**, 9, 506	5.7	16
32	AccR is a master regulator involved in carbon catabolite repression of the anaerobic catabolism of aromatic compounds in Azoarcus sp. CIB. *Journal of Biological Chemistry*, **2014**, 289, 1892-904	5.4	16
31	Identification of the Geobacter metallireducens bamVW two-component system, involved in transcriptional regulation of aromatic degradation. *Applied and Environmental Microbiology*, **2010**, 76, 383-5	4.8	16
30	Identification and analysis of a glutaryl-CoA dehydrogenase-encoding gene and its cognate transcriptional regulator from Azoarcus sp. CIB. *Environmental Microbiology*, **2008**, 10, 474-82	5.2	16
29	Oxygen-dependent regulation of the central pathway for the anaerobic catabolism of aromatic compounds in Azoarcus sp. strain CIB. *Journal of Bacteriology*, **2006**, 188, 2343-54	3.5	16
28	Genetic clues on the evolution of anaerobic catabolism of aromatic compounds. *Microbiology (United Kingdom)*, **2004**, 150, 2018-2021	2.9	15
27	Iron-reducing bacteria unravel novel strategies for the anaerobic catabolism of aromatic compounds. *Molecular Microbiology*, **2005**, 58, 1210-5	4.1	15

26	Design of catabolic cassettes for styrene biodegradation. *Antonie Van Leeuwenhoek*, **2003**, 84, 17-24	2.1	14
25	Construction of a broad-host-range pneumococcal promoter-probe plasmid. *Gene*, **1990**, 90, 163-7	3.8	13
24	Unraveling the specific regulation of the central pathway for anaerobic degradation of 3-methylbenzoate. *Journal of Biological Chemistry*, **2015**, 290, 12165-83	5.4	12
23	Identification of a missing link in the evolution of an enzyme into a transcriptional regulator. *PLoS ONE*, **2013**, 8, e57518	3.7	11
22	New insights into the BzdR-mediated transcriptional regulation of the anaerobic catabolism of benzoate in Azoarcus sp. CIB. *Microbiology (United Kingdom)*, **2008**, 154, 306-316	2.9	11
21	Four Molybdenum-Dependent Steroid C-25 Hydroxylases: Heterologous Overproduction, Role in Steroid Degradation, and Application for 25-Hydroxyvitamin D Synthesis. *MBio*, **2018**, 9,	7.8	11
20	The ICE of Azoarcus sp. CIB, an integrative and conjugative element with aerobic and anaerobic catabolic properties. *Environmental Microbiology*, **2016**, 18, 5018-5031	5.2	10
19	Degradation of cyclic diguanosine monophosphate by a hybrid two-component protein protects Azoarcus sp. strain CIB from toluene toxicity. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 13174-13179	11.5	9
18	ArxA From sp. CIB, an Anaerobic Arsenite Oxidase From an Obligate Heterotrophic and Mesophilic Bacterium. *Frontiers in Microbiology*, **2019**, 10, 1699	5.7	9
17	Genome Sequence of Pseudomonas azelaica HBP1, Which Catabolizes 2-Hydroxybiphenyl Fungicide. *Genome Announcements*, **2014**, 2,		9
16	Restricting the dispersal of recombinant DNA: design of a contained biological catalyst. *Nature Biotechnology*, **1996**, 14, 189-91	44.5	9
15	Enhancing the Rice Seedlings Growth Promotion Abilities of sp. CIB by Heterologous Expression of ACC Deaminase to Improve Performance of Plants Exposed to Cadmium Stress. *Microorganisms*, **2020**, 8,	4.9	8
14	Refactoring the [illegible]phage lytic/lysogenic decision with a synthetic regulator. *MicrobiologyOpen*, **2016** , 5, 575-81	3.4	8
13	Plasmids as Tools for Containment. *Microbiology Spectrum*, **2014**, 2,	8.9	7
12	Genome Sequence of Pseudomonas azelaica Strain Aramco J. *Genome Announcements*, **2015**, 3,		6
11	Motility, Adhesion and c-di-GMP Influence the Endophytic Colonization of Rice by sp. CIB. *Microorganisms*, **2021**, 9,	4.9	6
10	Engineering a bzd cassette for the anaerobic bioconversion of aromatic compounds. *Microbial Biotechnology*, **2017**, 10, 1418-1425	6.3	5
9	Expanding the current knowledge and biotechnological applications of the oxygen-independent ortho-phthalate degradation pathway. *Environmental Microbiology*, **2020**, 22, 3478-3493	5.2	4

8	A preliminary crystallographic study of recombinant NicX, an Fe(2+)-dependent 2,5-dihydroxypyridine dioxygenase from Pseudomonas putida KT2440. *Acta Crystallographica Section F: Structural Biology Communications*, **2010**, 66, 549-53		4
7	Bioconversion of lignin-derived aromatics into the building block pyridine 2,4-dicarboxylic acid by engineering recombinant Pseudomonas putida strains.. *Bioresource Technology*, **2021**, 346, 126638	11	3
6	A Novel Redox-Sensing Histidine Kinase That Controls Carbon Catabolite Repression in sp. CIB. *MBio*, **2019**, 10,	7.8	2
5	Plasmids as Tools for Containment589-601		2
4	Elevated c-di-GMP levels promote biofilm formation and biodesulfurization capacity of Rhodococcus erythropolis. *Microbial Biotechnology*, **2021**, 14, 923-937	6.3	2
3	The structure of new cis and trans 3?-phenyl-3?,3a?,4?,5?,6?,7a?-hexahydro-2,1-benzisoxazole-7a?-spiro-2-(3-phenylaziridine). *Journal of Heterocyclic Chemistry*, **1993**, 30, 97-104	1.9	1
2	Understanding the metabolism of the tetralin degrader Sphingopyxis granuli strain TFA through genome-scale metabolic modelling. *Scientific Reports*, **2020**, 10, 8651	4.9	1
1	Plasmids as Tools for Containment615-631		