

Eduardo Diaz

List of Publications by Year in descending order

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81
papers

4,451
citations

126858

33
h-index

106281

65
g-index

85
all docs

85
docs citations

85
times ranked

4716
citing authors

#	ARTICLE	IF	CITATIONS
1	Genomic analysis of the aromatic catabolic pathways from <i>Pseudomonas putida</i> KT2440. <i>Environmental Microbiology</i> , 2002, 4, 824-841.	1.8	448
2	Anaerobic Catabolism of Aromatic Compounds: a Genetic and Genomic View. <i>Microbiology and Molecular Biology Reviews</i> , 2009, 73, 71-133.	2.9	378
3	Biodegradation of Aromatic Compounds by <i>Escherichia coli</i> . <i>Microbiology and Molecular Biology Reviews</i> , 2001, 65, 523-569.	2.9	314
4	The Homogentisate Pathway: a Central Catabolic Pathway Involved in the Degradation of l-Phenylalanine, l-Tyrosine, and 3-Hydroxyphenylacetate in <i>Pseudomonas putida</i> . <i>Journal of Bacteriology</i> , 2004, 186, 5062-5077.	1.0	225
5	Bacterial degradation of aromatic pollutants: a paradigm of metabolic versatility. <i>International Microbiology</i> , 2004, 7, 173-80.	1.1	203
6	Bacterial promoters triggering biodegradation of aromatic pollutants. <i>Current Opinion in Biotechnology</i> , 2000, 11, 467-475.	3.3	151
7	Aerobic degradation of aromatic compounds. <i>Current Opinion in Biotechnology</i> , 2013, 24, 431-442.	3.3	148
8	Deciphering the genetic determinants for aerobic nicotinic acid degradation: The <i>nic</i> cluster from <i>Pseudomonas putida</i> KT2440. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 11329-11334.	3.3	136
9	Growth phase-dependent expression of the <i>Pseudomonas putida</i> KT2440 transcriptional machinery analysed with a genome-wide DNA microarray. <i>Environmental Microbiology</i> , 2006, 8, 165-177.	1.8	123
10	The <i>bsd</i> Gene Cluster, Coding for Anaerobic Benzoate Catabolism, in <i>Azoarcus</i> sp. Strain CIB. <i>Journal of Bacteriology</i> , 2004, 186, 5762-5774.	1.0	111
11	The evolutionary relationship of biphenyl dioxygenase from Gram-positive <i>Rhodococcus globerulus</i> P6 to multicomponent dioxygenases from Gram-negative bacteria. <i>Gene</i> , 1995, 156, 11-18.	1.0	93
12	Bacterial Degradation of Benzoate. <i>Journal of Biological Chemistry</i> , 2012, 287, 10494-10508.	1.6	91
13	Engineering synthetic bacterial consortia for enhanced desulfurization and revalorization of oil sulfur compounds. <i>Metabolic Engineering</i> , 2016, 35, 46-54.	3.6	85
14	Biosynthesis of selenium nanoparticles by <i>Azoarcus</i> sp. CIB. <i>Microbial Cell Factories</i> , 2016, 15, 109.	1.9	83
15	Enhancing desulphurization by engineering a flavin reductase-encoding gene cassette in recombinant biocatalysts. <i>Environmental Microbiology</i> , 2000, 2, 687-694.	1.8	82
16	Speeding up bioproduction of selenium nanoparticles by using <i>Vibrio natriegens</i> as microbial factory. <i>Scientific Reports</i> , 2017, 7, 16046.	1.6	81
17	BzdR, a Repressor That Controls the Anaerobic Catabolism of Benzoate in <i>Azoarcus</i> sp. CIB, Is the First Member of a New Subfamily of Transcriptional Regulators. <i>Journal of Biological Chemistry</i> , 2005, 280, 10683-10694.	1.6	77
18	The Behavior of Bacteria Designed for Biodegradation. <i>Nature Biotechnology</i> , 1994, 12, 1349-1356.	9.4	76

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19	Universal barrier to lateral spread of specific genes among microorganisms. <i>Molecular Microbiology</i> , 1994, 13, 855-861.	1.2	75
20	Whole-genome analysis of <i>Azoarcus</i> sp. strain CIB provides genetic insights to its different lifestyles and predicts novel metabolic features. <i>Systematic and Applied Microbiology</i> , 2015, 38, 462-471.	1.2	73
21	Unravelling the gallic acid degradation pathway in bacteria: the <i>gal</i> cluster from <i>Pseudomonas putida</i> . <i>Molecular Microbiology</i> , 2011, 79, 359-374.	1.2	72
22	Metabolic and process engineering for biodesulfurization in Gram-negative bacteria. <i>Journal of Biotechnology</i> , 2017, 262, 47-55.	1.9	58
23	A dual lethal system to enhance containment of recombinant micro-organisms. <i>Microbiology (United Kingdom)</i> , 2007, 153, 357-365.	0.7	57
24	Characterization of the last step of the aerobic phenylacetic acid degradation pathway. <i>Microbiology (United Kingdom)</i> , 2007, 153, 357-365.	0.7	55
25	Molecular Characterization of the Gallate Dioxygenase from <i>Pseudomonas putida</i> KT2440. <i>Journal of Biological Chemistry</i> , 2005, 280, 35382-35390.	1.6	53
26	New challenges for syngas fermentation: towards production of biopolymers. <i>Journal of Chemical Technology and Biotechnology</i> , 2015, 90, 1735-1751.	1.6	53
27	<i>Azoarcus</i> sp. CIB, an Anaerobic Biodegrader of Aromatic Compounds Shows an Endophytic Lifestyle. <i>PLoS ONE</i> , 2014, 9, e110771.	1.1	49
28	The two-step lysis system of pneumococcal bacteriophage EJ-1 is functional in Gram-negative bacteria: triggering of the major pneumococcal autolysin in <i>Escherichia coli</i> . <i>Molecular Microbiology</i> , 1996, 19, 667-681.	1.2	48
29	Regulation of the <i>mhp</i> Cluster Responsible for 3-(3-Hydroxyphenyl)propionic Acid Degradation in <i>Escherichia coli</i> . <i>Journal of Biological Chemistry</i> , 2003, 278, 27575-27585.	1.6	42
30	Genomic Insights in the Metabolism of Aromatic Compounds in <i>Pseudomonas</i> . , 2004, , 425-462.		41
31	A second chromosomal copy of the <i>catA</i> gene endows <i>Pseudomonas putida</i> with an enzymatic safety valve for excess of catechol. <i>Environmental Microbiology</i> , 2014, 16, 1767-1778.	1.8	38
32	Characterization of the <i>mbd</i> cluster encoding the anaerobic 3-methylbenzoyl-CoA central pathway. <i>Environmental Microbiology</i> , 2013, 15, 148-166.	1.8	37
33	Genetic Characterization of the Phenylacetyl-Coenzyme A Oxygenase from the Aerobic Phenylacetic Acid Degradation Pathway of <i>Escherichia coli</i> . <i>Applied and Environmental Microbiology</i> , 2006, 72, 7422-7426.	1.4	36
34	Analysis of Dibenzothiophene Desulfurization in a Recombinant <i>Pseudomonas putida</i> Strain. <i>Applied and Environmental Microbiology</i> , 2009, 75, 875-877.	1.4	34
35	Biochemical Characterization of the Transcriptional Regulator BzdR from <i>Azoarcus</i> sp. CIB. <i>Journal of Biological Chemistry</i> , 2010, 285, 35694-35705.	1.6	33
36	Testosterone Degradative Pathway of <i>Novosphingobium tardagens</i> . <i>Genes</i> , 2019, 10, 871.	1.0	30

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37	Coregulation by Phenylacetyl-Coenzyme A-Responsive PaaX Integrates Control of the Upper and Lower Pathways for Catabolism of Styrene by <i>Pseudomonas</i> sp. Strain Y2. <i>Journal of Bacteriology</i> , 2006, 188, 4812-4821.	1.0	29
38	Genetic characterization of the styrene lower catabolic pathway of <i>Pseudomonas</i> sp. strain Y2. <i>Gene</i> , 2003, 319, 71-83.	1.0	28
39	3-Hydroxyphenylpropionate and Phenylpropionate Are Synergistic Activators of the MhpR Transcriptional Regulator from <i>Escherichia coli</i> . <i>Journal of Biological Chemistry</i> , 2009, 284, 21218-21228.	1.6	28
40	Insights on the regulation of the phenylacetate degradation pathway from <i>Escherichia coli</i> . <i>Environmental Microbiology Reports</i> , 2014, 6, 239-250.	1.0	27
41	A gene containment strategy based on a restriction-modification system. <i>Environmental Microbiology</i> , 2000, 2, 555-563.	1.8	26
42	Bioconversion of lignin-derived aromatics into the building block pyridine 2,4-dicarboxylic acid by engineering recombinant <i>Pseudomonas putida</i> strains. <i>Bioresource Technology</i> , 2022, 346, 126638.	4.8	24
43	A stringently controlled expression system for analysing lateral gene transfer between bacteria. <i>Molecular Microbiology</i> , 1996, 21, 293-300.	1.2	23
44	Identification of the <i>Geobacter metallireducens</i> BamVW Two-Component System, Involved in Transcriptional Regulation of Aromatic Degradation. <i>Applied and Environmental Microbiology</i> , 2010, 76, 383-385.	1.4	23
45	Transcriptional Regulation of the Peripheral Pathway for the Anaerobic Catabolism of Toluene and m-Xylene in <i>Azoarcus</i> sp. CIB. <i>Frontiers in Microbiology</i> , 2018, 9, 506.	1.5	23
46	Suicide Microbes on the Loose. <i>Nature Biotechnology</i> , 1995, 13, 35-37.	9.4	22
47	A finely tuned regulatory circuit of the nicotinic acid degradation pathway in <i>Pseudomonas putida</i> . <i>Environmental Microbiology</i> , 2011, 13, 1718-1732.	1.8	22
48	Aromatic metabolism versus carbon availability: the regulatory network that controls catabolism of less-preferred carbon sources in <i>Escherichia coli</i> . <i>FEMS Microbiology Reviews</i> , 2004, 28, 503-518.	3.9	21
49	Characterization of the transcription unit encoding the major pneumococcal autolysin. <i>Gene</i> , 1990, 90, 157-162.	1.0	20
50	Identification and analysis of a glutaryl-CoA dehydrogenase-encoding gene and its cognate transcriptional regulator from <i>Azoarcus</i> sp. CIB. <i>Environmental Microbiology</i> , 2008, 10, 474-482.	1.8	20
51	The ICE _{XTD} of <i>Azoarcus</i> sp. CIB, an integrative and conjugative element with aerobic and anaerobic catabolic properties. <i>Environmental Microbiology</i> , 2016, 18, 5018-5031.	1.8	20
52	Oxygen-Dependent Regulation of the Central Pathway for the Anaerobic Catabolism of Aromatic Compounds in <i>Azoarcus</i> sp. Strain CIB. <i>Journal of Bacteriology</i> , 2006, 188, 2343-2354.	1.0	19
53	AccR Is a Master Regulator Involved in Carbon Catabolite Repression of the Anaerobic Catabolism of Aromatic Compounds in <i>Azoarcus</i> sp. CIB. <i>Journal of Biological Chemistry</i> , 2014, 289, 1892-1904.	1.6	19
54	Iron-reducing bacteria unravel novel strategies for the anaerobic catabolism of aromatic compounds. <i>Molecular Microbiology</i> , 2005, 58, 1210-1215.	1.2	18

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55	Four Molybdenum-Dependent Steroid C-25 Hydroxylases: Heterologous Overproduction, Role in Steroid Degradation, and Application for 25-Hydroxyvitamin D ₃ Synthesis. <i>MBio</i> , 2018, 9, .	1.8	16
56	Design of catabolic cassettes for styrene biodegradation. <i>Antonie Van Leeuwenhoek</i> , 2003, 84, 17-24.	0.7	15
57	Genetic clues on the evolution of anaerobic catabolism of aromatic compounds. <i>Microbiology (United Kingdom)</i> , 2004, 150, 2018-2021.	0.7	15
58	New insights into the BzdR-mediated transcriptional regulation of the anaerobic catabolism of benzoate in <i>Azoarcus</i> sp. CIB. <i>Microbiology (United Kingdom)</i> , 2008, 154, 306-316.	0.7	15
59	ArxA From <i>Azoarcus</i> sp. CIB, an Anaerobic Arsenite Oxidase From an Obligate Heterotrophic and Mesophilic Bacterium. <i>Frontiers in Microbiology</i> , 2019, 10, 1699.	1.5	14
60	Enhancing the Rice Seedlings Growth Promotion Abilities of <i>Azoarcus</i> sp. CIB by Heterologous Expression of ACC Deaminase to Improve Performance of Plants Exposed to Cadmium Stress. <i>Microorganisms</i> , 2020, 8, 1453.	1.6	14
61	Construction of a broad-host-range pneumococcal promoter-probe plasmid. <i>Gene</i> , 1990, 90, 163-167.	1.0	13
62	Identification of a Missing Link in the Evolution of an Enzyme into a Transcriptional Regulator. <i>PLoS ONE</i> , 2013, 8, e57518.	1.1	13
63	Unraveling the Specific Regulation of the Central Pathway for Anaerobic Degradation of 3-Methylbenzoate. <i>Journal of Biological Chemistry</i> , 2015, 290, 12165-12183.	1.6	13
64	Degradation of cyclic diguanosine monophosphate by a hybrid two-component protein protects <i>Azoarcus</i> sp. strain CIB from toluene toxicity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 13174-13179.	3.3	13
65	Refactoring the λ phage lytic/lysogenic decision with a synthetic regulator. <i>MicrobiologyOpen</i> , 2016, 5, 575-581.	1.2	12
66	Restricting the Dispersal of Recombinant DNA: Design of a Contained Biological Catalyst. <i>Nature Biotechnology</i> , 1996, 14, 189-191.	9.4	11
67	Genome Sequence of <i>Pseudomonas azelaica</i> HBP1, Which Catabolizes 2-Hydroxybiphenyl Fungicide. <i>Genome Announcements</i> , 2014, 2, .	0.8	11
68	Plasmids as Tools for Containment. <i>Microbiology Spectrum</i> , 2014, 2, .	1.2	10
69	Motility, Adhesion and c-di-GMP Influence the Endophytic Colonization of Rice by <i>Azoarcus</i> sp. CIB. <i>Microorganisms</i> , 2021, 9, 554.	1.6	10
70	Genome Sequence of <i>Pseudomonas azelaica</i> Strain Aramco J. <i>Genome Announcements</i> , 2015, 3, .	0.8	8
71	Elevated c-di-GMP levels promote biofilm formation and biodesulfurization capacity of <i>Rhodococcus erythropolis</i> . <i>Microbial Biotechnology</i> , 2021, 14, 923-937.	2.0	8
72	Engineering a bzd cassette for the anaerobic bioconversion of aromatic compounds. <i>Microbial Biotechnology</i> , 2017, 10, 1418-1425.	2.0	6

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73	Expanding the current knowledge and biotechnological applications of the oxygen-independent ortho-phthalate degradation pathway. <i>Environmental Microbiology</i> , 2020, 22, 3478-3493.	1.8	6
74	A preliminary crystallographic study of recombinant NicX, an Fe ²⁺ -dependent 2,5-dihydropyridine dioxygenase from <i>Pseudomonas putida</i> KT2440. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2010, 66, 549-553.	0.7	4
75	A Novel Redox-Sensing Histidine Kinase That Controls Carbon Catabolite Repression in <i>Azoarcus</i> sp. <i>CIB. MBio</i> , 2019, 10, .	1.8	4
76	Genetic characterization of the cyclohexane carboxylate degradation pathway in the denitrifying bacterium <i>Aromatoleum</i> sp. <i>CIB</i> . <i>Environmental Microbiology</i> , 2022, 24, 4987-5004.	1.8	3
77	The structure of new <i>cis</i> and <i>trans</i> 3-phenyl-3,4,5,6,7-hexahydro-1-benzisoxazole-7-spiro(3-phenylaziridine). <i>Journal of Chemistry</i> , 1993, 30, 97-104.		
78	Further Insights into the Architecture of the PN Promoter That Controls the Expression of the <i>bzd</i> Genes in <i>Azoarcus</i> . <i>Genes</i> , 2019, 10, 489.	1.0	2
79	Plasmids as Tools for Containment. , 0, , 589-601.		2
80	Understanding the metabolism of the tetralin degrader <i>Sphingopyxis granuli</i> strain TFA through genome-scale metabolic modelling. <i>Scientific Reports</i> , 2020, 10, 8651.	1.6	1
81	Plasmids as Tools for Containment. , 0, , 615-631.		0