Daniela De Biase

List of Publications by Year in descending order

65 papers	2,977 citations	185998 28 h-index	168136 53 g-index
68 all docs	68 docs citations	68 times ranked	2909 citing authors

#	Article	IF	Citations
1	Coping with low pH: molecular strategies in neutralophilic bacteria. FEMS Microbiology Reviews, 2014, 38, 1091-1125.	3.9	375
2	The response to stationary-phase stress conditions in Escherichia coli : role and regulation of the glutamic acid decarboxylase system. Molecular Microbiology, 1999, 32, 1198-1211.	1.2	261
3	Crystal structure and functional analysis of Escherichia coli glutamate decarboxylase. EMBO Journal, 2003, 22, 4027-4037.	3.5	210
4	Glutamate decarboxylaseâ€dependent acid resistance in orally acquired bacteria: function, distribution and biomedical implications of the <scp>gadBC</scp> operon. Molecular Microbiology, 2012, 86, 770-786.	1.2	149
5	Functional Characterization and Regulation of gadX , a Gene Encoding an AraC/XylS-Like Transcriptional Activator of the Escherichia coli Glutamic Acid Decarboxylase System. Journal of Bacteriology, 2002, 184, 2603-2613.	1.0	139
6	Structures of Î³-Aminobutyric Acid (GABA) Aminotransferase, a Pyridoxal 5â€²-Phosphate, and [2Fe-2S] Cluster-containing Enzyme, Complexed with Î³-Ethynyl-GABA and with the Antiepilepsy Drug Vigabatrin. Journal of Biological Chemistry, 2004, 279, 363-373.	1.6	129
7	GadX/GadWâ€dependent regulation of the Escherichia coli acid fitness island: transcriptional control at the gadYâ€“gadW divergent promoters and identification of four novel 42â€ƒbp GadX/GadWâ€specific binding sites. Molecular Microbiology, 2008, 70, 965-982.	1.2	111
8	Isolation, Overexpression, and Biochemical Characterization of the Two Isoforms of Glutamic Acid Decarboxylase fromEscherichia coli. Protein Expression and Purification, 1996, 8, 430-438.	0.6	99
9	Escherichia coli acid resistance: pH-sensing, activation by chloride and autoinhibition in GadB. EMBO Journal, 2006, 25, 2643-2651.	3.5	97
10	The application of glutamic acid Î±-decarboxylase for the valorization of glutamic acid. Green Chemistry, 2009, 11, 1562.	4.6	91
11	Understanding How Microorganisms Respond to Acid pH Is Central to Their Control and Successful Exploitation. Frontiers in Microbiology, 2020, 11, 556140.	1.5	90
12	Crystal Structure of GABA-Aminotransferase, a Target for Antiepileptic Drug Therapy. Biochemistry, 1999, 38, 8628-8634.	1.2	88
13	Mechanisms of Transcription Activation Exerted by GadX and GadW at the gadA and gadBC Gene Promoters of the Glutamate-Based Acid Resistance System in Escherichia coli. Journal of Bacteriology, 2006, 188, 8118-8127.	1.0	65
14	The Escherichia coli Acid Stress Response and Its Significance for Pathogenesis. Advances in Applied Microbiology, 2015, 92, 49-88.	1.3	65
15	Purification and characterization of bioactive peptides from skin extracts of Rana esculenta. Biochimica Et Biophysica Acta - General Subjects, 1990, 1033, 318-323.	1.1	59
16	Mutation of His465 Alters the pH-dependent Spectroscopic Properties of Escherichia coli Glutamate Decarboxylase and Broadens the Range of Its Activity toward More Alkaline pH. Journal of Biological Chemistry, 2009, 284, 31587-31596.	1.6	56
17	Expression and activity of cyclic and linear analogues of esculentin-1, an anti-microbial peptide from amphibian skin. FEBS Journal, 1999, 263, 921-927.	0.2	54
18	Antagonistic Role of H-NS and GadX in the Regulation of the Glutamate Decarboxylase-dependent Acid Resistance System in Escherichia coli. Journal of Biological Chemistry, 2005, 280, 21498-21505.	1.6	50

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19	Automated amino acid analysis using precolumn derivatization with dansylchloride reversed-phase high-performance liquid chromatography. Journal of Chromatography A, 1990, 504, 129-138.	1.8	47
20	The expression of the dodecameric ferritin in Listeria spp. is induced by iron limitation and stationary growth phase. Gene, 2002, 296, 121-128.	1.0	46
21	Glutamate Decarboxylase-Dependent Acid Resistance in Brucella spp.: Distribution and Contribution to Fitness under Extremely Acidic Conditions. Applied and Environmental Microbiology, 2015, 81, 578-586.	1.4	43
22	Six novel tachykinin- and bombesin-related peptides from the skin of the Australian frog Pseudophryne gÃ¼ntheri. Peptides, 1990, 11, 299-304.	1.2	40
23	The Glutamic Acid Decarboxylase System of the New Species Brucella microti Contributes to Its Acid Resistance and to Oral Infection of Mice. Journal of Infectious Diseases, 2012, 206, 1424-1432.	1.9	38
24	Endangered North Atlantic right whales (Eubalaena glacialis) experience repeated, concurrent exposure to multiple environmental neurotoxins produced by marine algae. Environmental Research, 2012, 112, 67-76.	3.7	37
25	Transcription of the Listeria monocytogenes fri gene is growth-phase dependent and is repressed directly by Fur, the ferric uptake regulator. Gene, 2008, 410, 113-121.	1.0	35
26	The Glutaminase-Dependent Acid Resistance System: Qualitative and Quantitative Assays and Analysis of Its Distribution in Enteric Bacteria. Frontiers in Microbiology, 2018, 9, 2869.	1.5	35
27	Cofactor-dependent conformational heterogeneity of GAD65 and its role in autoimmunity and neurotransmitter homeostasis. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E2524-E2529.	3.3	34
28	Active site model for Î³â€aminobutyrate aminotransferase explains substrate specificity and inhibitor reactivities. Protein Science, 1995, 4, 2366-2374.	3.1	29
29	Half-of-the-sites Reactivity of Bovine Serum Amine Oxidase. Reactivity and Chemical Identity of the Second Site. FEBS Journal, 1996, 237, 93-99.	0.2	28
30	Allosteric Communication of Tryptophan Synthase. Journal of Biological Chemistry, 2001, 276, 17747-17753.	1.6	28
31	Purification and Characterization of Recombinant Rabbit Cytosolic Serine Hydroxymethyltransferase. Protein Expression and Purification, 1998, 13, 177-183.	0.6	26
32	Primary Structure and Tissue Distribution of Human 4-Aminobutyrate Aminotransferase. FEBS Journal, 1995, 227, 476-480.	0.2	25
33	Stability and oligomerization of recombinant GadX, a transcriptional activator of the Escherichia coli glutamate decarboxylase system. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2003, 1647, 376-380.	1.1	21
34	Intracellular NADPH Levels Affect the Oligomeric State of the Glucose 6-Phosphate Dehydrogenase. Eukaryotic Cell, 2012, 11, 1503-1511.	3.4	21
35	Contribution of Lys276 to the conformational flexibility of the active site of glutamate decarboxylase fromEscherichia coli. FEBS Journal, 2002, 269, 4913-4920.	0.2	20
36	Protein structure of pig liver 4-aminobutyrate aminotransferase and comparison with a cDNA-deduced sequence. FEBS Journal, 1992, 208, 351-357.	0.2	19

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37	Biochemical and spectroscopic properties ofBrucella microti glutamate decarboxylase, a key component of the glutamateâ€dependent acid resistance system. FEBS Open Bio, 2015, 5, 209-218.	1.0	18
38	Landscape of Stress Response and Virulence Genes Among Listeria monocytogenes Strains. Frontiers in Microbiology, 2021, 12, 738470.	1.5	18
39	The Roles of His-167 and His-275 in the Reaction Catalyzed by Glutamate Decarboxylase from Escherichia coli. Journal of Biological Chemistry, 1998, 273, 1939-1945.	1.6	17
40	The Glutaminase-Dependent System Confers Extreme Acid Resistance to New Species and Atypical Strains of Brucella. Frontiers in Microbiology, 2017, 8, 2236.	1.5	17
41	Effect of Temperature, pH and Plasmids on In Vitro Biofilm Formation in Escherichia coli. Acta Naturae, 2018, 10, 129-132.	1.7	17
42	Bicyclic Î³-amino acids as inhibitors of Î³-aminobutyrate aminotransferase. Journal of Enzyme Inhibition and Medicinal Chemistry, 2016, 31, 295-301.	2.5	14
43	The yhiM gene codes for an inner membrane protein involved in GABA export in Escherichia coli. AIMS Microbiology, 2017, 3, 71-87.	1.0	12
44	Structural model of human GAD65: Prediction and interpretation of biochemical and immunogenic features. Proteins: Structure, Function and Bioinformatics, 2005, 59, 7-14.	1.5	11
45	Stoichiometry and stability of the adduct formed between human 4-aminobutyrate aminotransferase and 4-aminohex-5-enoate: sequence of a labelled peptide. Biochimie, 1989, 71, 491-495.	1.3	10
46	Crystallization and preliminary X-ray analysis of Î³-aminobutyric acid transaminase. Journal of Molecular Biology, 1990, 214, 821-823.	2.0	10
47	A chromophore in glutamate decarâ˜ylase has been wrongly identified as PQQ. FEBS Letters, 1991, 278, 120-122.	1.3	10
48	Lethality of Brucella microti in a murine model of infection depends on the wbkE gene involved in O-polysaccharide synthesis. Virulence, 2019, 10, 868-878.	1.8	10
49	Mechanism of inactivation and identification of sites of modification of ornithine aminotransferase by 4-aminohex-5-ynoate. Biochemistry, 1991, 30, 2239-2246.	1.2	9
50	The critical structural role of a highly conserved histidine residue in group II amino acid decarboxylases. FEBS Letters, 2003, 554, 41-44.	1.3	9
51	Activators of the Glutamate-Dependent Acid Resistance System Alleviate Deleterious Effects of YidC Depletion inEscherichia coli. Journal of Bacteriology, 2011, 193, 1308-1316.	1.0	7
52	The Elusive but Pathogenic Peptidoglycan of Chlamydiae. European Journal of Inflammation, 2013, 11, 257-260.	0.2	5
53	Enzymatic kinetic resolution of desmethylphosphinothricin indicates that phosphinic group is a bioisostere of carboxyl group. Communications Chemistry, 2020, 3, .	2.0	5
54	Crystallization and preliminary X-ray analysis of the Î²-isoform of glutamate decarboxylase from Escherichia coli. Acta Crystallographica Section D: Biological Crystallography, 1998, 54, 1020-1022.	2.5	4

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55	On the effect of alkaline pH and cofactor availability in the conformational and oligomeric state ofEscherichia coliglutamate decarboxylase. Protein Engineering, Design and Selection, 2017, 30, 235-244.	1.0	3
56	Convenient syntheses of phosphinic analogues of Î³-aminobutyric- and glutamic acids. Russian Journal of Bioorganic Chemistry, 2016, 42, 672-676.	0.3	2
57	C-C Bond Formation and Decarboxylation. , 2012, , 263-295.		1
58	Editorial: Microbial Stress: From Sensing to Intracellular and Population Responses. Frontiers in Microbiology, 2020, 11, 1667.	1.5	1
59	Glutamate decarboxylase in bacteria.. , 2017, , 15-28.		1
60	Environmental Stimuli and Regulatory Factors Affecting the Expression of the Glutamic Acid Decarboxylase System in Escherichia coli. , 2000, , 41-46.		1
61	Impact of the Gastrointestinal Tract Microbiota on Cardiovascular Health and Pathophysiology. Journal of Cardiovascular Pharmacology, 2022, Publish Ahead of Print, .	0.8	1
62	Management of Chronic Stable Angina: Modern Microbiomedical Research Provides Insights Into Traditional Chinese Medicine Treatments. Journal of Cardiovascular Pharmacology, 2021, 77, 421-423.	0.8	0
63	Nanotechnology inspired biosensor with photo-responsive liquid crystals. , 2021, , .		0
64	Stress survival islets contribute to clonal and serotype-specific differences in L. monocytogenes. IOP Conference Series: Earth and Environmental Science, 2021, 854, 012050.	0.2	0
65	Editorial: Microbial Stress: From Model Organisms to Applications in Food, Microbiotechnology and Medicine. Frontiers in Microbiology, 0, 13, .	1.5	0