Leda S Chubatsu

List of Publications by Citations

84 papers	2,169 citations	26 h-index	44 g-index
84 ext. papers	2,379 ext. citations	3.7 avg, IF	4.1 L-index

#	Paper	IF	Citations
84	Metallothionein protects DNA from oxidative damage. *Biochemical Journal*, **1993**, 291 (Pt 1), 193-8	3.8	229
83	Genome of Herbaspirillum seropedicae strain SmR1, a specialized diazotrophic endophyte of tropical grasses. *PLoS Genetics*, **2011**, 7, e1002064	6	151
82	Implication of mammalian ribosomal protein S3 in the processing of DNA damage. *Journal of Biological Chemistry*, **1995**, 270, 13620-9	5.4	141
81	Endophytic Herbaspirillum seropedicae expresses nif genes in gramineous plants. *FEMS Microbiology Ecology*, **2003**, 45, 39-47	4.3	114
80	Herbaspirillum-plant interactions: microscopical, histological and molecular aspects. *Plant and Soil*, **2012**, 356, 175-196	4.2	111
79	Dual RNA-seq transcriptional analysis of wheat roots colonized by Azospirillum brasilense reveals up-regulation of nutrient acquisition and cell cycle genes. *BMC Genomics*, **2014**, 15, 378	4.5	96
78	A new P(II) protein structure identifies the 2-oxoglutarate binding site. *Journal of Molecular Biology*, **2010**, 400, 531-9	6.5	62
77	PII signal transduction proteins: pivotal players in post-translational control of nitrogenase activity. *Microbiology (United Kingdom)*, **2012**, 158, 176-190	2.9	57
76	ADP-ribosylation of dinitrogenase reductase in Azospirillum brasilense is regulated by AmtB-dependent membrane sequestration of DraG. *Molecular Microbiology*, **2006**, 59, 326-37	4.1	56
75	V79 Chinese-hamster cells rendered resistant to high cadmium concentration also become resistant to oxidative stress. *Biochemical Journal*, **1988**, 256, 475-9	3.8	56
74	Ternary complex formation between AmtB, GlnZ and the nitrogenase regulatory enzyme DraG reveals a novel facet of nitrogen regulation in bacteria. *Molecular Microbiology*, **2007**, 66, 1523-35	4.1	47
73	Genome structure of the genus Azospirillum. *Journal of Bacteriology*, **2000**, 182, 4113-6	3.5	46
72	RNA-seq transcriptional profiling of Herbaspirillum seropedicae colonizing wheat (Triticum aestivum) roots. *Plant Molecular Biology*, **2016**, 90, 589-603	4.6	44
71	Isolation of a novel lipase from a metagenomic library derived from mangrove sediment from the south Brazilian coast. *Genetics and Molecular Research*, **2010**, 9, 514-23	1.2	44
70	Role of antioxidants in protecting cellular DNA from damage by oxidative stress. *Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis*, **1991**, 250, 95-101	3.3	41
69	Interactions between PII proteins and the nitrogenase regulatory enzymes DraT and DraG in Azospirillum brasilense. *FEBS Letters*, **2006**, 580, 5232-6	3.8	39
68	Expression and functional analysis of an N-truncated NifA protein of Herbaspirillum seropedicae. *FEBS Letters*, **1999**, 447, 283-6	3.8	34

67	Maize root lectins mediate the interaction with Herbaspirillum seropedicae via N-acetyl glucosamine residues of lipopolysaccharides. *PLoS ONE*, **2013**, 8, e77001	3.7	34
66	Nitrogen fixation control in Herbaspirillum seropedicae. *Plant and Soil*, **2012**, 356, 197-207	4.2	33
65	Glutathione is the antioxidant responsible for resistance to oxidative stress in V79 Chinese hamster fibroblasts rendered resistant to cadmium. *Chemico-Biological Interactions*, **1992**, 82, 99-110	5	32
64	Genomic comparison of the endophyte Herbaspirillum seropedicae SmR1 and the phytopathogen Herbaspirillum rubrisubalbicans M1 by suppressive subtractive hybridization and partial genome sequencing. *FEMS Microbiology Ecology*, **2012**, 80, 441-51	4.3	31
63	Crystal structure of the GlnZ-DraG complex reveals a different form of PII-target interaction. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 18972-6	11.5	31
62	In vitro interactions between the PII proteins and the nitrogenase regulatory enzymes dinitrogenase reductase ADP-ribosyltransferase (DraT) and dinitrogenase reductase-activating glycohydrolase (DraG) in Azospirillum brasilense. *Journal of Biological Chemistry*, **2009**, 284, 6674-82	5.4	28
61	Recent developments in the structural organization and regulation of nitrogen fixation genes in Herbaspirillum seropedicae. *Journal of Biotechnology*, **2001**, 91, 189-95	3.7	28
60	Search for novel targets of the PII signal transduction protein in Bacteria identifies the BCCP component of acetyl-CoA carboxylase as a PII binding partner. *Molecular Microbiology*, **2014**, 91, 751-61	4.1	27
59	GlnB is specifically required for Azospirillum brasilense NifA activity in Escherichia coli. *Research in Microbiology*, **2004**, 155, 491-5	4	27
58	Identification of proteins associated with polyhydroxybutyrate granules from Herbaspirillum seropedicae SmR1--old partners, new players. *PLoS ONE*, **2013**, 8, e75066	3.7	25
57	Different responses of the GlnB and GlnZ proteins upon in vitro uridylylation by the Azospirillum brasilense GlnD protein. *Brazilian Journal of Medical and Biological Research*, **2008**, 41, 289-94	2.8	23
56	In-trans regulation of the N-truncated-NIFA protein of Herbaspirillum seropedicae by the N-terminal domain. *FEMS Microbiology Letters*, **1999**, 180, 157-61	2.9	19
55	Proteomic analysis of Herbaspirillum seropedicae reveals ammonium-induced AmtB-dependent membrane sequestration of PII proteins. *FEMS Microbiology Letters*, **2010**, 308, 40-7	2.9	18
54	Draft genome sequence of Herbaspirillum lusitanum P6-12, an endophyte isolated from root nodules of Phaseolus vulgaris. *Journal of Bacteriology*, **2012**, 194, 4136-7	3.5	18
53	Influence of the ADP/ATP ratio, 2-oxoglutarate and divalent ions on Azospirillum brasilense PII protein signalling. *Microbiology (United Kingdom)*, **2012**, 158, 1656-1663	2.9	17
52	Role of PII proteins in nitrogen fixation control of Herbaspirillum seropedicae strain SmR1. *BMC Microbiology*, **2011**, 11, 8	4.5	16
51	Regulation of glnB gene promoter expression in Azospirillum brasilense by the NtrC protein. *FEMS Microbiology Letters*, **2003**, 223, 33-40	2.9	16
50	In vitro uridylylation of the Azospirillum brasilense N-signal transducing GlnZ protein. *Protein Expression and Purification*, **2004**, 33, 19-24	2	16

49	Importance of Poly-3-Hydroxybutyrate Metabolism to the Ability of Herbaspirillum seropedicae To Promote Plant Growth. *Applied and Environmental Microbiology*, **2019**, 85,	4.8	15
48	A simple and efficient method for poly-3-hydroxybutyrate quantification in diazotrophic bacteria within 5 minutes using flow cytometry. *Brazilian Journal of Medical and Biological Research*, **2017**, 50, e5492	2.8	14
47	Interaction of GlnK with the GAF domain of Herbaspirillum seropedicae NifA mediates NH□-regulation. *Biochimie*, **2012**, 94, 1041-7	4.6	14
46	Identification and characterization of PhbF: a DNA binding protein with regulatory role in the PHB metabolism of Herbaspirillum seropedicae SmR1. *BMC Microbiology*, **2011**, 11, 230	4.5	14
45	Characterization of the orf1glnKamtB operon of Herbaspirillum seropedicae. *Archives of Microbiology*, **2006**, 185, 55-62	3	14
44	Control of autogenous activation of Herbaspirillum seropedicae nifA promoter by the IHF protein. *FEMS Microbiology Letters*, **2002**, 212, 177-82	2.9	14
43	Use of lactose to induce expression of soluble NifA protein domains of Herbaspirillum seropedicae in Escherichia coli. *Canadian Journal of Microbiology*, **2000**, 46, 1087-90	3.2	14
42	Backup Expression of the PhaP2 Phasin Compensates for phaP1 Deletion in Herbaspirillum seropedicae, Maintaining Fitness and PHB Accumulation. *Frontiers in Microbiology*, **2016**, 7, 739	5.7	14
41	The transcriptional regulator NtrC controls glucose-6-phosphate dehydrogenase expression and polyhydroxybutyrate synthesis through NADPH availability in Herbaspirillum seropedicae. *Scientific Reports*, **2017**, 7, 13546	4.9	12
40	In vitro interaction between the ammonium transport protein AmtB and partially uridylylated forms of the P(II) protein GlnZ. *Biochimica Et Biophysica Acta - Proteins and Proteomics*, **2011**, 1814, 1203-9	4	12
39	Effect of the over-expression of PII and PZ proteins on the nitrogenase activity of Azospirillum brasilense. *FEMS Microbiology Letters*, **2005**, 253, 47-54	2.9	12
38	The NtrY-NtrX two-component system is involved in controlling nitrate assimilation in Herbaspirillum seropedicae strain SmR1. *FEBS Journal*, **2016**, 283, 3919-3930	5.7	11
37	Effects of over-expression of the regulatory enzymes DraT and DraG on the ammonium-dependent post-translational regulation of nitrogenase reductase in Azospirillum brasilense. *Archives of Microbiology*, **2005**, 183, 209-17	3	10
36	RNA-seq analyses reveal insights into the function of respiratory nitrate reductase of the diazotroph Herbaspirillum seropedicae. *Environmental Microbiology*, **2016**, 18, 2677-88	5.2	10
35	Uridylylation of Herbaspirillum seropedicae GlnB and GlnK proteins is differentially affected by ATP, ADP and 2-oxoglutarate in vitro. *Archives of Microbiology*, **2012**, 194, 643-52	3	9
34	Role of conserved cysteine residues in Herbaspirillum seropedicae NifA activity. *Research in Microbiology*, **2009**, 160, 389-95	4	9
33	Identification of NH4+-regulated genes of Herbaspirillum seropedicae by random insertional mutagenesis. *Archives of Microbiology*, **2007**, 187, 379-86	3	9
32	Expression, purification, and DNA-binding activity of the Herbaspirillum seropedicae RecX protein. *Protein Expression and Purification*, **2004**, 35, 298-303	2	9

31	A NodD-like protein activates transcription of genes involved with naringenin degradation in a flavonoid-dependent manner in Herbaspirillum seropedicae. *Environmental Microbiology*, **2017**, 19, 1030-1040	5.2	8
30	The involvement of the nif-associated ferredoxin-like genes fdxA and fdxN of Herbaspirillum seropedicae in nitrogen fixation. *Journal of Microbiology*, **2010**, 48, 77-83	3	8
29	The glnAntrBC operon of Herbaspirillum seropedicae is transcribed by two oppositely regulated promoters upstream of glnA. *Canadian Journal of Microbiology*, **2007**, 53, 100-5	3.2	8
28	Inter-domain cross-talk controls the NifA protein activity of Herbaspirillum seropedicae. *FEBS Letters*, **2001**, 508, 1-4	3.8	8
27	Comparative molecular analysis of Herbaspirillum strains by RAPD, RFLP, and 16S rDNA sequencing. *Genetics and Molecular Biology*, **2003**, 26, 537-543	2	8
26	2-Oxoglutarate levels control adenosine nucleotide binding by Herbaspirillum seropedicae PII proteins. *FEBS Journal*, **2015**, 282, 4797-809	5.7	7
25	Structural characterization of the RNA chaperone Hfq from the nitrogen-fixing bacterium Herbaspirillum seropedicae SmR1. *Biochimica Et Biophysica Acta - Proteins and Proteomics*, **2012**, 1824, 359-65	4	7
24	The RecX protein interacts with the RecA protein and modulates its activity in Herbaspirillum seropedicae. *Brazilian Journal of Medical and Biological Research*, **2012**, 45, 1127-34	2.8	7
23	The expression of nifB gene from Herbaspirillum seropedicae is dependent upon the NifA and RpoN proteins. *Canadian Journal of Microbiology*, **2006**, 52, 1199-207	3.2	7
22	Expression, purification, and functional analysis of the C-terminal domain of Herbaspirillum seropedicae NifA protein. *Protein Expression and Purification*, **2003**, 27, 313-8	2	7
21	The recX gene product is involved in the SOS response in Herbaspirillum seropedicae. *Canadian Journal of Microbiology*, **2003**, 49, 145-50	3.2	7
20	Fnr is involved in oxygen control of Herbaspirillum seropedicae N-truncated NifA protein activity in Escherichia coli. *Applied and Environmental Microbiology*, **2003**, 69, 1527-31	4.8	7
19	Characteristics of an Aeromonas trota strain isolated from cerebrospinal fluid. *Microbial Pathogenesis*, **2018**, 116, 109-112	3.8	6
18	Effect of ATP and 2-oxoglutarate on the in vitro interaction between the NifA GAF domain and the GlnB protein of Azospirillum brasilense. *Brazilian Journal of Medical and Biological Research*, **2012**, 45, 1135-40	2.8	6
17	NAD biosynthesis in bacteria is controlled by global carbon/nitrogen levels via PII signaling. *Journal of Biological Chemistry*, **2020**, 295, 6165-6176	5.4	5
16	Structural organization of the glnBA region of the Azospirillum brasilense genome. *European Journal of Soil Biology*, **2009**, 45, 100-105	2.9	5
15	Draft Genome Sequence of Herbaspirillum huttiense subsp. putei IAM 15032, a Strain Isolated from Well Water. *Genome Announcements*, **2013**, 1,		4
14	Azospirillum brasilense PII proteins GlnB and GlnZ do not form heterotrimers and GlnB shows a unique trimeric uridylylation pattern. *European Journal of Soil Biology*, **2009**, 45, 94-99	2.9	4

13	Molecular characterisation of Salmonella strains isolated from outbreaks and sporadic cases of diarrhoea occurred in Paran State, South of Brazil. *Epidemiology and Infection*, **2017**, 145, 1953-1960	4.3	3
12	Effect of point mutations on Herbaspirillum seropedicae NifA activity. *Brazilian Journal of Medical and Biological Research*, **2015**, 48, 683-90	2.8	3
11	Expression, purification, and DNA-binding activity of the solubilized NtrC protein of Herbaspirillum seropedicae. *Protein Expression and Purification*, **2003**, 30, 117-23	2	3
10	Use of lactose to induce expression of soluble NifA protein domains of Herbaspirillum seropedicae in Escherichia coli. *Canadian Journal of Microbiology*, **2000**, 46, 1087-1090	3.2	3
9	The Protein-Protein Interaction Network Reveals a Novel Role of the Signal Transduction Protein PII in the Control of c-di-GMP Homeostasis in Azospirillum brasilense. *MSystems*, **2020**, 5,	7.6	3
8	Genome Analysis of Entomopathogenic Bacillus sp. ABP14 Isolated from a Lignocellulosic Compost. *Genome Biology and Evolution*, **2019**, 11, 1658-1662	3.9	2
7	Polyhydroxybutyrate in Azospirillum brasilense **2015**, 241-250		2
6	Expression and characterization of an N-truncated form of the NifA protein of Azospirillum brasilense. *Brazilian Journal of Medical and Biological Research*, **2012**, 45, 113-7	2.8	2
5	Isolation of recombinant plasmids for rapid analysis using a sodium dodecyl sulfate/potassium chloride precipitation. *Analytical Biochemistry*, **2001**, 292, 169-70	3.1	2
4	Complete Genome Sequence of Herbaspirillum hiltneri N3 (DSM 17495), Isolated from Surface-Sterilized Wheat Roots. *Genome Announcements*, **2015**, 3,		1
3	Repressor mutant forms of the Azospirillum brasilense NtrC protein. *Applied and Environmental Microbiology*, **2004**, 70, 6320-3	4.8	1
2	Expression, purification and DNA-binding activities of two putative ModE proteins of Herbaspirillum seropedicae (Burkholderiales, Oxalobacteraceae). *Genetics and Molecular Biology*, **2008**, 31, 743-750	2	1
1	The deuridylylation activity of Herbaspirillum seropedicae GlnD protein is regulated by the glutamine:2-oxoglutarate ratio. *Biochimica Et Biophysica Acta - Proteins and Proteomics*, **2018**, 1866, 1216-1223	4	1