

# Valeria Souza Saldivar

## List of Publications by Year in descending order

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101  
papers

6,471  
citations

94433

37  
h-index

69250

77  
g-index

116  
all docs

116  
docs citations

116  
times ranked

7273  
citing authors

#	ARTICLE	IF	CITATIONS
1	The Sorcerer II Global Ocean Sampling Expedition: Northwest Atlantic through Eastern Tropical Pacific. PLoS Biology, 2007, 5, e77.	5.6	1,757
2	Stress-Induced Mutagenesis in Bacteria. Science, 2003, 300, 1404-1409.	12.6	508
3	Biodiversity and biogeography of phages in modern stromatolites and thrombolites. Nature, 2008, 452, 340-343.	27.8	251
4	Timing and rate of speciation in Agave (Agavaceae). Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 9124-9129.	7.1	230
5	Metagenomic and stable isotopic analyses of modern freshwater microbialites in Cuatro Ci�negas, Mexico. Environmental Microbiology, 2009, 11, 16-34.	3.8	204
6	An endangered oasis of aquatic microbial biodiversity in the Chihuahuan desert. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 6565-6570.	7.1	197
7	Understanding the evolutionary relationships and major traits of Bacillus through comparative genomics. BMC Genomics, 2010, 11, 332.	2.8	143
8	Ecoenzymatic stoichiometry at the extremes: How microbes cope in an ultra-oligotrophic desert soil. Soil Biology and Biochemistry, 2015, 87, 34-42.	8.8	134
9	Effects of phosphorus enrichment and grazing snails on modern stromatolitic microbial communities. Freshwater Biology, 2005, 50, 1808-1825.	2.4	116
10	Rhizobium etli and Rhizobium gallicum Nodulate Common Bean ( Phaseolus vulgaris ) in a Traditionally Managed Milpa Plot in Mexico: Population Genetics and Biogeographic Implications. Applied and Environmental Microbiology, 2003, 69, 884-893.	3.1	105
11	The genome of <i>Bacillus coahuilensis</i> reveals adaptations essential for survival in the relic of an ancient marine environment. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 5803-5808.	7.1	94
12	Antagonism influences assembly of a <i>Bacillus</i> guild in a local community and is depicted as a food-chain network. ISME Journal, 2013, 7, 487-497.	9.8	94
13	Phenotyping and Genotyping of Sporothrix schenckii Isolates According to Geographic Origin and Clinical Form of Sporotrichosis. Journal of Clinical Microbiology, 2002, 40, 3004-3011.	3.9	87
14	Evolutionary genetics and biogeographic structure of Rhizobium gallicum sensu lato, a widely distributed bacterial symbiont of diverse legumes. Molecular Ecology, 2005, 14, 4033-4050.	3.9	87
15	Molecular Diversity of Rabies Viruses Associated with Bats in Mexico and Other Countries of the Americas. Journal of Clinical Microbiology, 2006, 44, 1697-1710.	3.9	87
16	Microbial endemism: does phosphorus limitation enhance speciation?. Nature Reviews Microbiology, 2008, 6, 559-564.	28.6	87
17	The Cuatro Ci�negas Basin in Coahuila, Mexico: An Astrobiological Precambrian Park. Astrobiology, 2012, 12, 641-647.	3.0	86
18	Comparative Metagenomics of Two Microbial Mats at Cuatro Ci�negas Basin I: Ancient Lessons on How to Cope with an Environment Under Severe Nutrient Stress. Astrobiology, 2012, 12, 648-658.	3.0	85

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19	Comparative Metagenomics of Two Microbial Mats at Cuatro Ci�negas Basin II: Community Structure and Composition in Oligotrophic Environments. <i>Astrobiology</i> , 2012, 12, 659-673.	3.0	83
20	Microbial macroecology: highly structured prokaryotic soil assemblages in a tropical deciduous forest. <i>Global Ecology and Biogeography</i> , 2005, 14, 241-248.	5.8	77
21	Diversity of culturable thermo-resistant aquatic bacteria along an environmental gradient in Cuatro Ci�negas, Coahuila, M�xico. <i>Antonie Van Leeuwenhoek</i> , 2011, 99, 303-318.	1.7	62
22	Nutrient Stoichiometry Shapes Microbial Community Structure in an Evaporitic Shallow Pond. <i>Frontiers in Microbiology</i> , 2017, 8, 949.	3.5	62
23	How To Live with Phosphorus Scarcity in Soil and Sediment: Lessons from Bacteria. <i>Applied and Environmental Microbiology</i> , 2016, 82, 4652-4662.	3.1	60
24	Bacterial Communities and the Nitrogen Cycle in the Gypsum Soils of Cuatro Ci�negas Basin, Coahuila: A Mars Analogue. <i>Astrobiology</i> , 2012, 12, 699-709.	3.0	59
25	Enrichment experiment changes microbial interactions in an ultra-oligotrophic environment. <i>Frontiers in Microbiology</i> , 2015, 6, 246.	3.5	57
26	High diversity and suggested endemism of culturable Actinobacteria in an extremely oligotrophic desert oasis. <i>PeerJ</i> , 2017, 5, e3247.	2.0	57
27	Molecular epizootiology of rabies associated with terrestrial carnivores in Mexico. <i>Virus Research</i> , 2005, 111, 13-27.	2.2	55
28	<i>Bacillus coahuilensis</i> sp. nov., a moderately halophilic species from a desiccation lagoon in the Cuatro Cienegas Valley in Coahuila, Mexico. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2008, 58, 919-923.	1.7	52
29	Detection of Genetic Variation in <i>Taenia solium</i> . <i>Journal of Parasitology</i> , 2003, 89, 1250-1254.	0.7	51
30	The lost world of Cuatro Ci�negas Basin, a relictual bacterial niche in a desert oasis. <i>ELife</i> , 2018, 7, .	6.0	51
31	An analysis of the evolutionary relationships of integron integrases, with emphasis on the prevalence of class 1 integrons in <i>Escherichia coli</i> isolates from clinical and environmental origins. <i>Microbiology (United Kingdom)</i> , 2008, 154, 94-102.	1.8	50
32	Divergence and Phylogeny of Firmicutes from the Cuatro Ci�negas Basin, Mexico: A Window to an Ancient Ocean. <i>Astrobiology</i> , 2012, 12, 674-684.	3.0	50
33	From Isozymes to Genomics: Population Genetics and Conservation of Agave in M�xico. <i>Botanical Review</i> , The, 2013, 79, 483-506.	3.9	50
34	Microbial secondary succession in soil microcosms of a desert oasis in the Cuatro Cienegas Basin, Mexico. <i>PeerJ</i> , 2013, 1, e47.	2.0	50
35	Water�sediment niche differentiation in ancient marine lineages of <i>Exiguobacterium</i> endemic to the Cuatro Cienegas Basin. <i>Environmental Microbiology</i> , 2012, 14, 2323-2333.	3.8	48
36	Diversity of aquatic prokaryotic communities in the Cuatro Cienegas basin. <i>FEMS Microbiology Ecology</i> , 2008, 65, 50-60.	2.7	45

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37	Parallel Evolution and Horizontal Gene Transfer of the <i>pst</i> Operon in <i>Firmicutes</i> from Oligotrophic Environments. <i>International Journal of Evolutionary Biology</i> , 2011, 2011, 1-10.	1.0	45
38	Understanding the Mechanisms Behind the Response to Environmental Perturbation in Microbial Mats: A Metagenomic-Network Based Approach. <i>Frontiers in Microbiology</i> , 2018, 9, 2606.	3.5	41
39	A genomic population genetics analysis of the pathogenic enterocyte effacement island in <i>Escherichia coli</i> : The search for the unit of selection. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 1542-1547.	7.1	36
40	<i>Pseudomonas cuatrocienegasensis</i> sp. nov., isolated from an evaporating lagoon in the Cuatro Ciénegas valley in Coahuila, Mexico. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2009, 59, 1416-1420.	1.7	35
41	Variability of rRNA Operon Copy Number and Growth Rate Dynamics of <i>Bacillus</i> Isolated from an Extremely Oligotrophic Aquatic Ecosystem. <i>Frontiers in Microbiology</i> , 2015, 6, 1486.	3.5	35
42	MEBS, a software platform to evaluate large (meta)genomic collections according to their metabolic machinery: unraveling the sulfur cycle. <i>GigaScience</i> , 2017, 6, 1-17.	6.4	35
43	Spatial heterogeneity of physicochemical properties explains differences in microbial composition in arid soils from Cuatro Ciénegas, Mexico. <i>PeerJ</i> , 2016, 4, e2459.	2.0	35
44	Evolutionary Dynamics of Insertion Sequences in Relation to the Evolutionary Histories of the Chromosome and Symbiotic Plasmid Genes of <i>Rhizobium etli</i> Populations. <i>Applied and Environmental Microbiology</i> , 2010, 76, 6504-6513.	3.1	34
45	Spatially Resolved Genomic, Stable Isotopic, and Lipid Analyses of a Modern Freshwater Microbialite from Cuatro Ciénegas, Mexico. <i>Astrobiology</i> , 2012, 12, 685-698.	3.0	33
46	Nutrient Dependent Cross-Kingdom Interactions: Fungi and Bacteria From an Oligotrophic Desert Oasis. <i>Frontiers in Microbiology</i> , 2018, 9, 1755.	3.5	33
47	Two-role model of an interaction network of free-living $\delta^{13}\text{C}$ -proteobacteria from an oligotrophic environment. <i>Environmental Microbiology</i> , 2014, 16, 1366-1377.	3.8	31
48	Travel, Sex, and Food: What's Speciation Got to Do with It?. <i>Astrobiology</i> , 2012, 12, 634-640.	3.0	30
49	Response of a Stoichiometrically Imbalanced Ecosystem to Manipulation of Nutrient Supplies and Ratios. <i>PLoS ONE</i> , 2015, 10, e0123949.	2.5	30
50	Relationship between soil P fractions and microbial biomass in an oligotrophic grassland-desert scrub system. <i>Ecological Research</i> , 2014, 29, 463-472.	1.5	28
51	The genomic sequence of <i>Exiguobacterium chiriqhucha</i> str. N139 reveals a species that thrives in cold waters and extreme environmental conditions. <i>PeerJ</i> , 2017, 5, e3162.	2.0	27
52	Characterization of a novel biosurfactant producing <i>Pseudomonas koreensis</i> lineage that is endemic to Cuatro Ciénegas Basin. <i>Systematic and Applied Microbiology</i> , 2011, 34, 531-535.	2.8	26
53	Editorial: The Role of Microbial Communities in Tropical Ecosystems. <i>Frontiers in Microbiology</i> , 2016, 7, 1805.	3.5	24
54	Mesocosms of Aquatic Bacterial Communities from the Cuatro Ciénegas Basin (Mexico): A Tool to Test Bacterial Community Response to Environmental Stress. <i>Microbial Ecology</i> , 2012, 64, 346-358.	2.8	23

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55	Phylogenetic and molecular clock inferences of cyanobacterial strains within Rivulariaceae from distant environments. <i>FEMS Microbiology Letters</i> , 2011, 316, 90-99.	1.8	22
56	Vegetation-soil system controls soil mechanisms for nitrogen transformations in an oligotrophic Mexican desert. <i>Journal of Arid Environments</i> , 2015, 114, 62-69.	2.4	22
57	Bacterial Diversity and Interaction Networks of Agave lechuguilla Rhizosphere Differ Significantly From Bulk Soil in the Oligotrophic Basin of Cuatro Ciénegas. <i>Frontiers in Plant Science</i> , 2020, 11, 1028.	3.6	22
58	Diversity across Seasons of Culturable <i>Pseudomonas</i> from a Desiccation Lagoon in Cuatro Ciénegas, Mexico. <i>International Journal of Microbiology</i> , 2012, 2012, 1-10.	2.3	21
59	Phenotypic Microdiversity and Phylogenetic Signal Analysis of Traits Related to Social Interaction in <i>Bacillus</i> spp. from Sediment Communities. <i>Frontiers in Microbiology</i> , 2017, 8, 29.	3.5	21
60	Genomic adaptations in information processing underpin trophic strategy in a whole-ecosystem nutrient enrichment experiment. <i>ELife</i> , 2020, 9, .	6.0	21
61	Multivariate and Phylogenetic Analyses Assessing the Response of Bacterial Mat Communities from an Ancient Oligotrophic Aquatic Ecosystem to Different Scenarios of Long-Term Environmental Disturbance. <i>PLoS ONE</i> , 2015, 10, e0119741.	2.5	20
62	Aquatic bacterial assemblage structure in Pozas Azules, Cuatro Ciénegas Basin, Mexico: Deterministic vs. stochastic processes. <i>International Microbiology</i> , 2015, 18, 105-15.	2.4	20
63	Soil aggregates in a tropical deciduous forest: effects on C and N dynamics, and microbial communities as determined by t-RFLPs. <i>Biogeochemistry</i> , 2008, 89, 209-220.	3.5	19
64	Microfungal oasis in an oligotrophic desert: diversity patterns and community structure in three freshwater systems of Cuatro Ciénegas, Mexico. <i>PeerJ</i> , 2016, 4, e2064.	2.0	19
65	Microevolution Analysis of <i>Bacillus coahuilensis</i> Unveils Differences in Phosphorus Acquisition Strategies and Their Regulation. <i>Frontiers in Microbiology</i> , 2016, 7, 58.	3.5	17
66	Drastic changes in aquatic bacterial populations from the Cuatro Ciénegas Basin (Mexico) in response to long-term environmental stress. <i>Antonie Van Leeuwenhoek</i> , 2013, 104, 1159-1175.	1.7	16
67	In vitro anticancer activity of methanolic extract of <i>Granulocystopsis</i> sp., a microalgae from an oligotrophic oasis in the Chihuahuan desert. <i>PeerJ</i> , 2020, 8, e8686.	2.0	15
68	Population expansions shared among coexisting bacterial lineages are revealed by genetic evidence. <i>PeerJ</i> , 2014, 2, e696.	2.0	14
69	Agricultural land-use change in a Mexican oligotrophic desert depletes ecosystem stability. <i>PeerJ</i> , 2016, 4, e2365.	2.0	13
70	Evidence of biogeography in surface ocean bacterioplankton assemblages. <i>Marine Genomics</i> , 2008, 1, 55-61.	1.1	12
71	Plant species identity and soil P forms in an oligotrophic grassland-desert scrub system. <i>Journal of Arid Environments</i> , 2014, 108, 29-37.	2.4	12
72	Genetic Characterization of Atypical <i>Citrobacter freundii</i> . <i>PLoS ONE</i> , 2013, 8, e74120.	2.5	12

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73	Spent media from cultures of environmental isolates of <i>Escherichia coli</i> can suppress the deficiency of biofilm formation under anoxic conditions of laboratory <i>E. coli</i> strains. <i>FEMS Microbiology Ecology</i> , 2006, 58, 414-424.	2.7	11
74	Hierarchical clustering of genetic diversity associated to different levels of mutation and recombination in <i>Escherichia coli</i> : A study based on Mexican isolates. <i>Infection, Genetics and Evolution</i> , 2013, 13, 187-197.	2.3	11
75	Selection for Phage Resistance Reduces Virulence of <i>Shigella flexneri</i> . <i>Applied and Environmental Microbiology</i> , 2022, 88, AEM0151421.	3.1	11
76	Two <i>Pseudomonas aeruginosa</i> clonal groups belonging to the PA14 clade are indigenous to the Churince system in Cuatro Ci�negas Coahuila, M�xico. <i>Environmental Microbiology</i> , 2019, 21, 2964-2976.	3.8	10
77	Trophic analysis of the fish community in the Ci�nega Churince, Cuatro Ci�negas, Coahuila. <i>PeerJ</i> , 2017, 5, e3637.	2.0	10
78	The response of soil microbial communities to variation in annual precipitation depends on soil nutritional status in an oligotrophic desert. <i>PeerJ</i> , 2017, 5, e4007.	2.0	10
79	Diversity of an uncommon elastic hypersaline microbial mat along a small-scale transect. <i>PeerJ</i> , 0, 10, e13579.	2.0	10
80	Understanding microbial community diversity metrics derived from metagenomes: performance evaluation using simulated data sets. <i>FEMS Microbiology Ecology</i> , 2012, 82, 37-49.	2.7	9
81	Low Mitochondrial Dna Sequence Variation in the Microendemic Cuatro Ci�negas Platyfish <i>Xiphophorus gordonii</i> . <i>Western North American Naturalist</i> , 2013, 73, 224-229.	0.4	9
82	Theoretical analysis of the cost of antagonistic activity for aquatic bacteria in oligotrophic environments. <i>Frontiers in Microbiology</i> , 2015, 6, 490.	3.5	9
83	Microbial Stowaways: Inimitable Survivors or Hopeless Pioneers?. <i>Astrobiology</i> , 2012, 12, 710-715.	3.0	8
84	Methane dynamics in the subsaline ponds of the Chihuahuan Desert: A first assessment. <i>Science of the Total Environment</i> , 2019, 666, 1255-1264.	8.0	8
85	In the Beginning, There Was Fire: Cuatro Ci�negas Basin (CCB) and the Long History of Life on Earth. <i>Cuatro Cielnegas Basin: an Endangered Hyperdiverse Oasis</i> , 2018, , 21-33.	0.4	8
86	Mitochondrial DNA Diversity and Phylogeography of <i>Lucania interioris</i> Inform Biodiversity Conservation in the Cuatro Ci�negas Basin, M�xico. <i>Western North American Naturalist</i> , 2015, 75, 200-208.	0.4	7
87	Population genomics of <i>Vibrionaceae</i> isolated from an endangered oasis reveals local adaptation after an environmental perturbation. <i>BMC Genomics</i> , 2020, 21, 418.	2.8	6
88	The Effect of Nutrients and N:P Ratio on Microbial Communities: Testing the Growth Rate Hypothesis and Its Extensions in Lagunita Pond (Churince). <i>Cuatro Cielnegas Basin: an Endangered Hyperdiverse Oasis</i> , 2018, , 31-41.	0.4	6
89	Toward a Comprehensive Understanding of Environmental Perturbations in Microbial Mats from the Cuatro Cienegas Basin by Network Inference. <i>Cuatro Cielnegas Basin: an Endangered Hyperdiverse Oasis</i> , 2018, , 85-97.	0.4	6
90	The Sulfur Cycle as the Gear of the "Clock of Life": The Point of Convergence Between Geological and Genomic Data in the Cuatro Cienegas Basin. <i>Cuatro Cielnegas Basin: an Endangered Hyperdiverse Oasis</i> , 2018, , 67-83.	0.4	5

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91	Evolutionary Rescue of an Environmental <i>Pseudomonas otitidis</i> in Response to Anthropogenic Perturbation. <i>Frontiers in Microbiology</i> , 2020, 11, 563885.	3.5	5
92	Cuatro Ciénegas as an Archaean Astrobiology Park. <i>Cuatro Ciénegas Basin: an Endangered Hyperdiverse Oasis</i> , 2020, , 219-228.	0.4	5
93	Recent Differentiation of Aquatic Bacterial Communities in a Hydrological System in the Cuatro Ciénegas Basin, After a Natural Perturbation. <i>Frontiers in Microbiology</i> , 2022, 13, 825167.	3.5	4
94	Cytogenetic study of a group of workers exposed to thinner. <i>Mutation Research - Genetic Toxicology Testing and Biomonitoring of Environmental Or Occupational Exposure</i> , 1987, 189, 357-362.	1.2	3
95	The Importance of the Rare Biosphere for Astrobiological Studies and the Diversification and Resilience of Life on Earth. <i>Cuatro Ciénegas Basin: an Endangered Hyperdiverse Oasis</i> , 2020, , 135-148.	0.4	3
96	Involvement of cyclodipeptides in the competition of bacterial communities in the oligotrophic Churince aquatic system of Cuatro Ciénegas Basin dominated by Gammaproteobacteria. <i>Extremophiles</i> , 2018, 22, 73-85.	2.3	2
97	How Divergent Is the Cuatro Ciénegas Oasis? Genomic Studies of Microbial Populations and Niche Differentiation. <i>Cuatro Ciénegas Basin: an Endangered Hyperdiverse Oasis</i> , 2018, , 57-71.	0.4	2
98	Experimental Analysis of Interactions Among Saprotrophic Fungi from A Phosphorous-Poor Desert Oasis in the Chihuahuan Desert. <i>Mycobiology</i> , 2020, 48, 410-417.	1.7	2
99	The Effect of Nutrient Availability on the Ecological Role of Filamentous Microfungi: Lessons from Elemental Stoichiometry. <i>Cuatro Ciénegas Basin: an Endangered Hyperdiverse Oasis</i> , 2018, , 43-53.	0.4	2
100	MicNet toolbox: Visualizing and unraveling a microbial network. <i>PLoS ONE</i> , 2022, 17, e0259756.	2.5	1
101	The Niche at the Edge of Life or the Microbial Ecology (Including Microfungi) of Cuatro Ciénegas: Mutualisms with Locals, Antagonisms Against Foreigners. <i>Cuatro Ciénegas Basin: an Endangered Hyperdiverse Oasis</i> , 2018, , 73-82.	0.4	0