Luz E De Bashan

List of Publications by Year
in descending order

70 papers	9,470 citations	81900 39 h-index	95266 68 g-index
70 all docs	70 docs citations	70 times ranked	8616 citing authors

#	Article	IF	Citations
1	Heterotrophic cultures of microalgae: Metabolism and potential products. Water Research, 2011, 45, 11-36.	11.3	1,324
2	Recent advances in removing phosphorus from wastewater and its future use as fertilizer (1997â€"2003). Water Research, 2004, 38, 4222-4246.	11.3	1,110
3	Advances in plant growth-promoting bacterial inoculant technology: formulations and practical perspectives (1998â€"2013). Plant and Soil, 2014, 378, 1-33.	3.7	827
4	Azospirillum-plant relationships: physiological, molecular, agricultural, and environmental advances (1997-2003). Canadian Journal of Microbiology, 2004, 50, 521-577.	1.7	727
5	Immobilized microalgae for removing pollutants: Review of practical aspects. Bioresource Technology, 2010, 101, 1611-1627.	9.6	634
6	How the Plant Growth-Promoting Bacterium Azospirillum Promotes Plant Growthâ€"A Critical Assessment. Advances in Agronomy, 2010, , 77-136.	5.2	571
7	Microalgae growth-promoting bacteria as â€œhelpersâ€• for microalgae: a novel approach for removing ammonium and phosphorus from municipal wastewater. Water Research, 2004, 38, 466-474.	11.3	316
8	Removal of ammonium and phosphorus ions from synthetic wastewater by the microalgae Chlorella vulgaris coimmobilized in alginate beads with the microalgae growth-promoting bacterium Azospirillum brasilense. Water Research, 2002, 36, 2941-2948.	11.3	277
9	Tricalcium phosphate is inappropriate as a universal selection factor for isolating and testing phosphate-solubilizing bacteria that enhance plant growth: a proposal for an alternative procedure. Biology and Fertility of Soils, 2013, 49, 465-479.	4.3	240
10	Increased pigment and lipid content, lipid variety, and cell and population size of the microalgae Chlorella spp. when co-immobilized in alginate beads with the microalgae-growth-promoting bacterium Azospirillum brasilense. Canadian Journal of Microbiology, 2002, 48, 514-521.	1.7	199
11	Chlorella sorokiniana UTEX 2805, a heat and intense, sunlight-tolerant microalga with potential for removing ammonium from wastewater. Bioresource Technology, 2008, 99, 4980-4989.	9.6	184
12	Alginate beads provide a beneficial physical barrier against native microorganisms in wastewater treated with immobilized bacteria and microalgae. Applied Microbiology and Biotechnology, 2012, 93, 2669-2680.	3.6	180
13	INVOLVEMENT OF INDOLEâ€3â€ACETIC ACID PRODUCED BY THE GROWTHâ€PROMOTING BACTERIUM <i>AZOSPIRILLUM</i> SPP<i>.</i> IN PROMOTING GROWTH OF <i>CHLORELLA VULGARIS</i>¹. Journal of Phycology, 2008, 44, 938-947.	2.3	173
14	Starvation enhances phosphorus removal from wastewater by the microalga Chlorella spp. co-immobilized with Azospirillum brasilense. Enzyme and Microbial Technology, 2006, 38, 190-198.	3.2	138
15	Everything you must know about Azospirillum and its impact on agriculture and beyond. Biology and Fertility of Soils, 2020, 56, 461-479.	4.3	138
16	Growth promotion of the freshwater microalga Chlorella vulgaris by the nitrogen-fixing, plant growth-promoting bacterium Bacillus pumilus from arid zone soils. European Journal of Soil Biology, 2009, 45, 88-93.	3.2	136
17	EFFICIENCY OF GROWTH AND NUTRIENT UPTAKE FROM WASTEWATER BY HETEROTROPHIC, AUTOTROPHIC, AND MIXOTROPHIC CULTIVATION OF CHLORELLAâ€ƒVULGARIS IMMOBILIZED WITH AZOSPIRILLUMâ€ƒBRASILENSE1. Journal of Phycology, 2010, 46, 800-812.	2.3	127
18	Assessment of affinity and specificity of Azospirillum for plants. Plant and Soil, 2016, 399, 389-414.	3.7	112

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19	Proven and potential involvement of vitamins in interactions of plants with plant growth-promoting bacteriaâ€”an overview. Biology and Fertility of Soils, 2014, 50, 415-432.	4.3	111
20	A proposal for isolating and testing phosphate-solubilizing bacteria that enhance plant growth. Biology and Fertility of Soils, 2013, 49, 1-2.	4.3	97
21	Bacillus pumilus ES4: Candidate plant growth-promoting bacterium to enhance establishment of plants in mine tailings. Environmental and Experimental Botany, 2010, 69, 343-352.	4.2	87
22	Biological deterioration of alginate beads containing immobilized microalgae and bacteria during tertiary wastewater treatment. Applied Microbiology and Biotechnology, 2013, 97, 9847-9858.	3.6	85
23	Enhanced performance of the microalga Chlorella sorokiniana remotely induced by the plant growth-promoting bacteria Azospirillum brasilense and Bacillus pumilus. Scientific Reports, 2017, 7, 41310.	3.3	85
24	Enhanced accumulation of starch and total carbohydrates in alginate-immobilized Chlorella spp. induced by Azospirillum brasilense: II. Heterotrophic conditions. Enzyme and Microbial Technology, 2012, 51, 300-309.	3.2	80
25	Joint Immobilization of Plant Growth-Promoting Bacteria and Green Microalgae in Alginate Beads as an Experimental Model for Studying Plant-Bacterium Interactions. Applied and Environmental Microbiology, 2008, 74, 6797-6802.	3.1	77
26	Cultivation factors and population size control the uptake of nitrogen by the microalgae Chlorella vulgaris when interacting with the microalgae growth-promoting bacterium Azospirillum brasilense. FEMS Microbiology Ecology, 2005, 54, 197-203.	2.7	74
27	Recycling waste debris of immobilized microalgae and plant growth-promoting bacteria from wastewater treatment as a resource to improve fertility of eroded desert soil. Environmental and Experimental Botany, 2012, 75, 65-73.	4.2	66
28	Development of two culture media for mass cultivation of Azospirillum spp. and for production of inoculants to enhance plant growth. Biology and Fertility of Soils, 2011, 47, 963-969.	4.3	60
29	Tryptophan, thiamine and indole-3-acetic acid exchange between<i>Chlorella sorokiniana</i>and the plant growth-promoting bacterium<i>Azospirillum brasilense</i>. FEMS Microbiology Ecology, 2016, 92, fiw077.	2.7	60
30	Establishment of stable synthetic mutualism without co-evolution between microalgae and bacteria demonstrated by mutual transfer of metabolites (NanoSIMS isotopic imaging) and persistent physical association (Fluorescent in situ hybridization). Algal Research, 2016, 15, 179-186.	4.6	59
31	Enhanced accumulation of starch and total carbohydrates in alginate-immobilized Chlorella spp. induced by Azospirillum brasilense: I. Autotrophic conditions. Enzyme and Microbial Technology, 2012, 51, 294-299.	3.2	58
32	CELLâ€CELL INTERACTION IN THE EUKARYOTEâ€PROKARYOTE MODEL OF THE MICROALGAE <i>CHLORELLA VULGARIS</i> AND THE BACTERIUM <i>AZOSPIRILLUM BRASILENSE</i> IMMOBILIZED IN POLYMER BEADS¹. Journal of Phycology, 2011, 47, 1350-1359.	2.3	55
33	Evidence that fresh weight measurement is imprecise for reporting the effect of plant growth-promoting (rhizo)bacteria on growth promotion of crop plants. Biology and Fertility of Soils, 2017, 53, 199-208.	4.3	55
34	Enhanced activity of ADP glucose pyrophosphorylase and formation of starch induced by Azospirillum brasilense in Chlorella vulgaris. Journal of Biotechnology, 2014, 177, 22-34.	3.8	46
35	Involvement of indole-3-acetic acid produced by Azospirillum brasilense in accumulating intracellular ammonium in Chlorella vulgaris. Research in Microbiology, 2015, 166, 72-83.	2.1	45
36	Title is missing!. European Journal of Plant Pathology, 2002, 108, 821-829.	1.7	43

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37	ROLE OF GLUTAMATE DEHYDROGENASE AND GLUTAMINE SYNTHETASE IN <i>CHLORELLA VULGARIS</i> DURING ASSIMILATION OF AMMONIUM WHEN JOINTLY IMMOBILIZED WITH THE MICROALGAEâ€GROWTHâ€PROMOTING BACTERIUM <i>AZOSPIRILLUM BRASILENSE</i>¹. Journal of Phycology, 2008, 44, 1188-1196.	2.3	43
38	Accumulation fatty acids of in Chlorella vulgaris under heterotrophic conditions in relation to activity of acetyl-CoA carboxylase, temperature, and co-immobilization with Azospirillum brasilense. Die Naturwissenschaften, 2014, 101, 819-830.	1.6	43
39	Growth of Quailbush in Acidic, Metalliferous Desert Mine Tailings: Effect of Azospirillum brasilense Sp6 on Biomass Production and Rhizosphere Community Structure. Microbial Ecology, 2010, 60, 915-927.	2.8	42
40	Enhanced molecular visualization of root colonization and growth promotion by Bacillus subtilis EA-CB0575 in different growth systems. Microbiological Research, 2018, 217, 69-80.	5.3	39
41	Toward the Enhancement of Microalgal Metabolite Production through Microalgaeâ€“Bacteria Consortia. Biology, 2021, 10, 282.	2.8	39
42	Indole-3-acetic acid from Azosprillum brasilense promotes growth in green algae at the expense of energy storage products. Algal Research, 2020, 47, 101845.	4.6	38
43	Designing a multi-species inoculant of phosphate rock-solubilizing bacteria compatible with arbuscular mycorrhizae for plant growth promotion in low-P soil amended with PR. Biology and Fertility of Soils, 2020, 56, 521-536.	4.3	35
44	A need for disclosure of the identity of microorganisms, constituents, and application methods when reporting tests with microbe-based or pesticide-based products. Biology and Fertility of Soils, 2016, 52, 283-284.	4.3	33
45	Influence of tryptophan and indole-3-acetic acid on starch accumulation in the synthetic mutualistic Chlorella sorokinianaâ€“Azospirillum brasilense system under heterotrophic conditions. Research in Microbiology, 2016, 167, 367-379.	2.1	33
46	Accumulation of intra-cellular polyphosphate in Chlorella vulgaris cells is related to indole-3-acetic acid produced by Azospirillum brasilense. Research in Microbiology, 2015, 166, 399-407.	2.1	29
47	Activity of acetyl-CoA carboxylase is not directly linked to accumulation of lipids when Chlorella vulgaris is co-immobilised with Azospirillum brasilense in alginate under autotrophic and heterotrophic conditions. Annals of Microbiology, 2015, 65, 339-349.	2.6	29
48	Riboflavin and lumichrome exuded by the bacterium Azospirillum brasilense promote growth and changes in metabolites in Chlorella sorokiniana under autotrophic conditions. Algal Research, 2019, 44, 101696.	4.6	29
49	Disclosure of exact protocols of fermentation, identity of microorganisms within consortia, formation of advanced consortia with microbe-based products. Biology and Fertility of Soils, 2020, 56, 443-445.	4.3	29
50	Root growth improvement of mesquite seedlings and bacterial rhizosphere and soil community changes are induced by inoculation with plant growthâ€promoting bacteria and promote restoration of eroded desert soil. Land Degradation and Development, 2018, 29, 1453-1466.	3.9	28
51	Amendment of degraded desert soil with wastewater debris containing immobilized Chlorella sorokiniana and Azospirillum brasilense significantly modifies soil bacterial community structure, diversity, and richness. Biology and Fertility of Soils, 2013, 49, 1053-1063.	4.3	26
52	The maize mycorrhizosphere as a source for isolation of arbuscular mycorrhizae-compatible phosphate rock-solubilizing bacteria. Plant and Soil, 2020, 451, 169-186.	3.7	26
53	Microalga Growth-Promoting Bacteria (MGPB): A formal term proposed for beneficial bacteria involved in microalgalâ€“bacterial interactions. Algal Research, 2022, 61, 102585.	4.6	26
54	Early Changes in Nutritional Conditions Affect Formation of Synthetic Mutualism Between Chlorella sorokiniana and the Bacterium Azospirillum brasilense. Microbial Ecology, 2019, 77, 980-992.	2.8	25

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55	Chlorella sorokiniana (formerly C. vulgaris) UTEX 2714, a non-thermotolerant microalga useful for biotechnological applications and as a reference strain. Journal of Applied Phycology, 2016, 28, 113-121.	2.8	24
56	A proposal for avoiding fresh-weight measurements when reporting the effect of plant growth-promoting (rhizo)bacteria on growth promotion of plants. Biology and Fertility of Soils, 2017, 53, 1-2.	4.3	24
57	Soil Type Affects Organic Acid Production and Phosphorus Solubilization Efficiency Mediated by Several Native Fungal Strains from Mexico. Microorganisms, 2020, 8, 1337.	3.6	20
58	The <scp><i>Azospirillum brasilense</i></scp> type <scp>VI</scp> secretion system promotes cell aggregation, biocontrol protection against phytopathogens and attachment to the microalgae <scp><i>Chlorella sorokiniana</i></scp>. Environmental Microbiology, 2021, 23, 6257-6274.	3.8	20
59	Construction of probe of the plant growth-promoting bacteria Bacillus subtilis useful for fluorescence in situ hybridization. Journal of Microbiological Methods, 2016, 128, 125-129.	1.6	18
60	Enhancement of thiamine release during synthetic mutualism between Chlorella sorokiniana and Azospirillum brasilense growing under stress conditions. Journal of Applied Phycology, 2016, 28, 1521-1531.	2.8	18
61	Functional metabolic diversity of the bacterial community in undisturbed resource island soils in the southern Sonoran Desert. Land Degradation and Development, 2018, 29, 1467-1477.	3.9	18
62	Azospirillum brasilense reduces oxidative stress in the green microalgae Chlorella sorokiniana under different stressors. Journal of Biotechnology, 2021, 325, 179-185.	3.8	18
63	Success of long-term restoration of degraded arid land using native trees planted 11Âyears earlier. Plant and Soil, 2017, 421, 83-92.	3.7	13
64	Immobilization of microalgae cells in alginate facilitates isolation of DNA and RNA. Journal of Microbiological Methods, 2017, 135, 96-104.	1.6	12
65	Root-Associated Fungal Communities in Two Populations of the Fully Mycoheterotrophic Plant Arachnitis uniflora Phil. (Corsiaceae) in Southern Chile. Microorganisms, 2019, 7, 586.	3.6	12
66	Application of beneficial microorganisms and their effects on soil, plants, and the environment: the scientific legacy of Professor Yoav Bashan. Biology and Fertility of Soils, 2020, 56, 439-442.	4.3	8
67	The immediate effect of riboflavin and lumichrome on the mitigation of saline stress in the microalga Chlorella sorokiniana by the plant-growth-promoting bacterium Azospirillum brasilense. Algal Research, 2021, 58, 102424.	4.6	7
68	Interaction of Azospirillum spp. with Microalgae: A Basic Eukaryoticâ€"Prokaryotic Model and Its Biotechnological Applications. , 2015, , 367-388.		6
69	Microbiome: A Tool for Plant Stress Management in Future Production Systems. Stresses, 2022, 2, 210-212.	4.8	2
70	Differences in Exudates Between Strains of Chlorella sorokiniana Affect the Interaction with the Microalga Growth-Promoting Bacteria Azospirillum brasilense. Microbial Ecology, 2022, , 1.	2.8	2