Jorge A Zavala

List of Publications by Year
in descending order

54 papers	3,572 citations	201674 27 h-index	175258 52 g-index
55 all docs	55 docs citations	55 times ranked	4002 citing authors

#	Article	IF	Citations
1	Biotic stress globally downregulates photosynthesis genes. Plant, Cell and Environment, 2010, 33, 1597-1613.	5.7	508
2	Climate Change: Resetting Plant-Insect Interactions. Plant Physiology, 2012, 160, 1677-1685.	4.8	302
3	Manipulation of Endogenous Trypsin Proteinase Inhibitor Production in Nicotiana attenuata Demonstrates Their Function as Antiherbivore Defenses. Plant Physiology, 2004, 134, 1181-1190.	4.8	231
4	Constitutive and inducible trypsin proteinase inhibitor production incurs large fitness costs in Nicotiana attenuata. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 1607-1612.	7.1	202
5	Indirect suppression of photosynthesis on individual leaves by arthropod herbivory. Annals of Botany, 2009, 103, 655-663.	2.9	200
6	Anthropogenic increase in carbon dioxide compromises plant defense against invasive insects. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 5129-5133.	7.1	197
7	Molecular Interactions between the Specialist Herbivore Manduca sexta (Lepidoptera, Sphingidae) and Its Natural Host Nicotiana attenuata. VII. Changes in the Plant's Proteome. Plant Physiology, 2006, 142, 1621-1641.	4.8	174
8	An Emerging Understanding of Mechanisms Governing Insect Herbivory Under Elevated CO₂. Annual Review of Entomology, 2013, 58, 79-97.	11.8	166
9	ECOLOGICAL COSTS AND BENEFITS CORRELATED WITH TRYPSIN PROTEASE INHIBITOR PRODUCTION IN NICOTIANA ATTENUATA. Ecology, 2003, 84, 79-90.	3.2	125
10	Gut bacteria facilitate adaptation to crop rotation in the western corn rootworm. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 11917-11922.	7.1	122
11	Perception of solar UVB radiation by phytophagous insects: Behavioral responses and ecosystem implications. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 980-985.	7.1	112
12	Soybean resistance to stink bugs (<scp><i>N</i></scp><i>ezara viridula</i> and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 312 Td (<scp><i <scp>UV</scp>â€<scp>B</scp> radiation and correlates with isoflavonoid content in pods under field conditions. Plant, Cell and Environment, 2015, 38, 920-928.	5.7	90
13	Insect perception of ambient ultraviolet-B radiation. Ecology Letters, 2002, 5, 722-726.	6.4	89
14	Transcriptional profiling reveals elevated CO₂ and elevated O₃ alter resistance of soybean (<i>Glycine max</i>) to Japanese beetles (<i>Popillia japonica</i>). Plant, Cell and Environment, 2008, 31, 419-434.	5.7	78
15	Glyphosate affects the larval development of honey bees depending on the susceptibility of colonies. PLoS ONE, 2018, 13, e0205074.	2.5	74
16	Fitness benefits of trypsin proteinase inhibitor expression in Nicotiana attenuata are greater than their costs when plants are attacked. BMC Ecology, 2004, 4, 11.	3.0	67
17	Herbivore induction of jasmonic acid and chemical defences reduce photosynthesis in Nicotiana attenuata. Journal of Experimental Botany, 2013, 64, 685-694.	4.8	65
18	Impact of Elevated Levels of Atmospheric CO2 and Herbivory on Flavonoids of Soybean (Glycine max) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.8	59

#	Article	IF	Citations
19	Jasmonic acid signalling and herbivore resistance traits constrain regrowth after herbivore attack in Nicotiana attenuata. Plant, Cell and Environment, 2006, 29, 1751-1760.	5.7	57
20	Title is missing!. Plant Ecology, 2002, 161, 185-191.	1.6	55
21	Role of cysteine proteinase inhibitors in preference of Japanese beetles (Popillia japonica) for soybean (Glycine max) leaves of different ages and grown under elevated CO2. Oecologia, 2009, 161, 35-41.	2.0	51
22	Allocation of photoassimilates to biomass, resin and carbohydrates in Grindelia chiloensis as affected by light intensity. Field Crops Research, 2001, 69, 143-149.	5.1	45
23	Characterized non-transient microbiota from stinkbug (Nezara viridula) midgut deactivates soybean chemical defenses. PLoS ONE, 2018, 13, e0200161.	2.5	38
24	Differential Elicitation of Two Processing Proteases Controls the Processing Pattern of the Trypsin Proteinase Inhibitor Precursor in Nicotiana attenuata. Plant Physiology, 2005, 139, 375-388.	4.8	34
25	Early perception of stink bug damage in developing seeds of fieldâ€grown soybean induces chemical defences and reduces bug attack. Pest Management Science, 2016, 72, 1585-1594.	3.4	32
26	Digestive Duet: Midgut Digestive Proteinases of Manduca sexta Ingesting Nicotiana attenuata with Manipulated Trypsin Proteinase Inhibitor Expression. PLoS ONE, 2008, 3, e2008.	2.5	32
27	Anthropogenic increase in carbon dioxide modifies plant-insect interactions. Annals of Applied Biology, 2017, 170, 68-77.	2.5	31
28	Herbivore perception decreases photosynthetic carbon assimilation and reduces stomatal conductance by engaging 12â€oxoâ€phytodienoic acid, mitogenâ€activated protein kinase 4 and cytokinin perception. Plant, Cell and Environment, 2017, 40, 1039-1056.	5.7	29
29	Abnormally high digestive enzyme activity and gene expression explain the contemporary evolution of a <i>Diabrotica</i> biotype able to feed on soybeans. Ecology and Evolution, 2012, 2, 2005-2017.	1.9	27
30	Both Volatiles and Cuticular Plant Compounds Determine Oviposition of the Willow Sawfly Nematus oligospilus on Leaves of Salix spp. (Salicaceae). Journal of Chemical Ecology, 2015, 41, 985-996.	1.8	26
31	Impact of solar UV-B radiation on seedling emergence, chlorophyll fluorescence, and growth and yield of radish (Raphanus sativus). Functional Plant Biology, 2002, 29, 797.	2.1	26
32	Fluctuating temperatures terminate dormancy inCynara cardunculusseeds by turning off ABA synthesis and reducing ABA signalling, but not stimulating GA synthesis or signalling. Seed Science Research, 2014, 24, 79-89.	1.7	22
33	Solar <scp>UVâ€B</scp> radiation and ethylene play a key role in modulating effective defenses against <scp><i>Anticarsia gemmatalis</i></scp> larvae in fieldâ€grown soybean. Plant, Cell and Environment, 2018, 41, 383-394.	5.7	20
34	Leaf temperature of soybean grown under elevated CO2 increases Aphis glycines (Hemiptera: Aphididae) population growth. Insect Science, 2011, 18, 419-425.	3.0	18
35	Solar UV-B radiation modulates chemical defenses against Anticarsia gemmatalis larvae in leaves of field-grown soybean. Phytochemistry, 2017, 141, 27-36.	2.9	16
36	Digestive activity and organic compounds of Nezara viridula watery saliva induce defensive soybean seed responses. Scientific Reports, 2020, 10, 15468.	3.3	16

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37	The effect of irrigation regime on biomass and resin production in Grindelia chiloensis. Field Crops Research, 2001, 69, 227-236.	5.1	15
38	The use of Leaf Surface Contact Cues During Oviposition Explains Field Preferences in the Willow Sawfly Nematus oligospilus. Scientific Reports, 2019, 9, 4946.	3.3	15
39	Field-grown soybean induces jasmonates and defensive compounds in response to thrips feeding and solar UV-B radiation. Environmental and Experimental Botany, 2018, 156, 1-7.	4.2	14
40	Plant volatiles guide the new pest <i>Dichelops furcatus</i> to feed on corn seedlings. Pest Management Science, 2021, 77, 2444-2453.	3.4	12
41	Patterns of differential gene expression in adult rotationâ€resistant and wildâ€type western corn rootworm digestive tracts. Evolutionary Applications, 2015, 8, 692-704.	3.1	11
42	Solar UVB-inducible ethylene alone induced isoflavonoids in pods of field-grown soybean, an important defense against stink bugs. Environmental and Experimental Botany, 2020, 178, 104167.	4.2	10
43	Role of reactive oxygen species and isoflavonoids in soybean resistance to the attack of the southern green stink bug. PeerJ, 2020, 8, e9956.	2.0	9
44	Different soybean cultivars respond differentially to damage in a herbivore-specific manner and decreas herbivore performance. Arthropod-Plant Interactions, 2020, 14, 89-99.	1.1	8
45	An Early Sensitive Period Induces Long-Lasting Plasticity in the Honeybee Nervous System. Frontiers in Behavioral Neuroscience, 2018, 12, 11.	2.0	7
46	Stink bug nezara viridula sustains late MAPKs phosphorylation status and induces expression of genes related with cell wall rearrangement in developing soybean seeds. Arthropod-Plant Interactions, 2018, 12, 531-541.	1.1	6
47	Proteases inhibitors-insensitive cysteine proteases allow Nezara viridula to feed on growing seeds of field-grown soybean. Journal of Insect Physiology, 2021, 132, 104250.	2.0	6
48	Salt stress on Lotus tenuis triggers cell wall polysaccharide changes affecting their digestibility by ruminants. Plant Physiology and Biochemistry, 2021, 166, 405-415.	5.8	6
49	The stink bug <i>Dichelops furcatus</i>: a new pest of corn that emerges from soybean stubble. Pest Management Science, 2022, 78, 2113-2120.	3.4	5
50	Feeding on soybean crops changed gut bacteria diversity of the southern green stinkbug (<i>Nezara) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 78, 4608-4617.	3.4	5
51	Correction for Zavala <i>et al.</i> , Anthropogenic increase in carbon dioxide compromises plant defense against invasive insects. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 10631-10631.	7.1	2
52	Evaluating the Impact of Post-Emergence Weed Control in Honeybee Colonies Located in Different Agricultural Surroundings. Insects, 2021, 12, 163.	2.2	2
53	Linking Primary and Secondary Metabolism A Mechanistic Hypothesis for how Elevated CO2 Modulates Defenses. , 2018, , 93-112.		2
54	Impacts of Anthropogenic Carbon Dioxide Emissions on Plant-Insect Interactions. , 2015, , 205-221.		0