Ren-Sen Zeng

List of Publications by Year
in descending order

93 papers	4,559 citations	126907 33 h-index	114465 63 g-index
107 all docs	107 docs citations	107 times ranked	4741 citing authors

#	Article	IF	Citations
1	Insect Response to Plant Defensive Protease Inhibitors. Annual Review of Entomology, 2015, 60, 233-252.	11.8	263
2	Priming of jasmonate-mediated antiherbivore defense responses in rice by silicon. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E3631-9.	7.1	261
3	Physiological and cytological mechanisms of siliconâ€induced resistance in rice against blast disease. Physiologia Plantarum, 2008, 134, 324-333.	5.2	237
4	Enhanced tomato disease resistance primed by arbuscular mycorrhizal fungus. Frontiers in Plant Science, 2015, 6, 786.	3.6	211
5	Effects of boron, silicon and their interactions on cadmium accumulation and toxicity in rice plants. Journal of Hazardous Materials, 2019, 367, 447-455.	12.4	210
6	Silicon: Potential to Promote Direct and Indirect Effects on Plant Defense Against Arthropod Pests in Agriculture. Frontiers in Plant Science, 2016, 7, 744.	3.6	204
7	Interplant Communication of Tomato Plants through Underground Common Mycorrhizal Networks. PLoS ONE, 2010, 5, e13324.	2.5	194
8	Improving crop nutrient efficiency through root architecture modifications. Journal of Integrative Plant Biology, 2016, 58, 193-202.	8.5	191
9	The role of cytochrome P450-mediated detoxification in insect adaptation to xenobiotics. Current Opinion in Insect Science, 2021, 43, 103-107.	4.4	139
10	Priming of Anti-Herbivore Defense in Tomato by Arbuscular Mycorrhizal Fungus and Involvement of the Jasmonate Pathway. Journal of Chemical Ecology, 2013, 39, 1036-1044.	1.8	124
11	Control of Panama Disease of Banana by Rotating and Intercropping with Chinese Chive (Allium) Tj ETQq1 1 0.784314 rgBT /Overlock 1	1.8	120
12	Rice Allelopathy Induced by Methyl Jasmonate and Methyl Salicylate. Journal of Chemical Ecology, 2007, 33, 1089-1103.	1.8	105
13	Silencing COI1 in Rice Increases Susceptibility to Chewing Insects and Impairs Inducible Defense. PLoS ONE, 2012, 7, e36214.	2.5	96
14	Hijacking common mycorrhizal networks for herbivore-induced defence signal transfer between tomato plants. Scientific Reports, 2014, 4, 3915.	3.3	88
15	Physiological and Biochemical Mechanism of Allelopathy of Secalonic Acid F on Higher Plants. Agronomy Journal, 2001, 93, 72-79.	1.8	83
16	Activation of CncC pathway by ROS burst regulates cytochrome P450 CYP6AB12 responsible for Î»-cyhalothrin tolerance in Spodoptera litura. Journal of Hazardous Materials, 2020, 387, 121698.	12.4	80
17	A novel cytochrome P450 CYP6AB14 gene in Spodoptera litura (Lepidoptera: Noctuidae) and its potential role in plant allelochemical detoxification. Journal of Insect Physiology, 2015, 75, 54-62.	2.0	73
18	Helicoverpa zea gutâ€associated bacteria indirectly induce defenses in tomato by triggering a salivary elicitor(s). New Phytologist, 2017, 214, 1294-1306.	7.3	72

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19	Induction of DIMBOA accumulation and systemic defense responses as a mechanism of enhanced resistance of mycorrhizal corn (Zea mays L.) to sheath blight. Mycorrhiza, 2011, 21, 721-731.	2.8	71
20	Allelopathy - The Solution is Indirect. Journal of Chemical Ecology, 2014, 40, 515-516.	1.8	68
21	GmEXPB2, a Cell Wall Î²-Expansin Gene, Affects Soybean Nodulation through Modifying Root Architecture and Promoting Nodule Formation and Development. Plant Physiology, 2015, 169, pp.01029.2015.	4.8	67
22	Silicon Supplementation Alters the Composition of Herbivore Induced Plant Volatiles and Enhances Attraction of Parasitoids to Infested Rice Plants. Frontiers in Plant Science, 2017, 8, 1265.	3.6	67
23	Defoliation of interior Douglas-fir elicits carbon transfer and stress signalling to ponderosa pine neighbors through ectomycorrhizal networks. Scientific Reports, 2015, 5, 8495.	3.3	62
24	Identification and Characterization of CYP9A40 from the Tobacco Cutworm Moth (Spodoptera litura), a Cytochrome P450 Gene Induced by Plant Allelochemicals and Insecticides. International Journal of Molecular Sciences, 2015, 16, 22606-22620.	4.1	58
25	Identification of a novel cytochrome P450 CYP321B1 gene from tobacco cutworm (Spodoptera) Tj ETQq1 1 0.784314 rgBT /Overl 2017, 24, 235-247.	3.0	56
26	Allelochemical Induction of Cytochrome P450 Monooxygenases and Amelioration of Xenobiotic Toxicity in Helicoverpa zea. Journal of Chemical Ecology, 2007, 33, 449-461.	1.8	55
27	Aflatoxin B1 detoxification by CYP321A1 in Helicoverpa zea. Archives of Insect Biochemistry and Physiology, 2008, 69, 32-45.	1.5	53
28	Ecological Significance of Induction of Broad-Substrate Cytochrome P450s by Natural and Synthetic Inducers in Helicoverpa zea. Journal of Chemical Ecology, 2009, 35, 183-189.	1.8	52
29	Herbivore Oral Secreted Bacteria Trigger Distinct Defense Responses in Preferred and Non-Preferred Host Plants. Journal of Chemical Ecology, 2016, 42, 463-474.	1.8	44
30	Growth stimulation of ectomycorrhizal fungi by root exudates of Brassicaceae plants: role of degraded compounds of indole glucosinolates. Journal of Chemical Ecology, 2003, 29, 1337-1355.	1.8	40
31	Interactions between Nitrogen and Silicon in Rice and Their Effects on Resistance toward the Brown Planthopper Nilaparvata lugens. Frontiers in Plant Science, 2017, 8, 28.	3.6	40
32	Copper exposure enhances Spodoptera litura larval tolerance to Î²-cypermethrin. Pesticide Biochemistry and Physiology, 2019, 160, 127-135.	3.6	39
33	Deficiency in Silicon Transporter Lsi1 Compromises Inducibility of Anti-herbivore Defense in Rice Plants. Frontiers in Plant Science, 2019, 10, 652.	3.6	38
34	Expression Analysis of Two P450 Monooxygenase Genes of the Tobacco Cutworm Moth (Spodoptera) Tj ETQq0 0 0 rgBT /Overlock 10 T Chemical Ecology, 2015, 41, 111-119.	1.8	36
35	Identification of a cytochrome P450 CYP6AB60 gene associated with tolerance to multi-plant allelochemicals from a polyphagous caterpillar tobacco cutworm (Spodoptera litura). Pesticide Biochemistry and Physiology, 2019, 154, 60-66.	3.6	36
36	Toxicity of Aflatoxin B1 to Helicoverpa zea and Bioactivation by Cytochrome P450 Monooxygenases. Journal of Chemical Ecology, 2006, 32, 1459-1471.	1.8	35

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37	Selected Ectomycorrhizal Fungi of Black Spruce (Picea mariana) can Detoxify Phenolic Compounds of Kalmia angustifolia. Journal of Chemical Ecology, 2006, 32, 1473-1489.	1.8	33
38	Copper-induced H2O2 accumulation confers larval tolerance to xanthotoxin by modulating CYP6B50 expression in Spodoptera litura. Pesticide Biochemistry and Physiology, 2019, 159, 118-126.	3.6	33
39	Silicon enhances photochemical efficiency and adjusts mineral nutrient absorption in Magnaporthe oryzae infected rice plants. Acta Physiologiae Plantarum, 2011, 33, 675-682.	2.1	32
40	Adipokinetic Hormone Receptor Mediates Trehalose Homeostasis to Promote Vitellogenin Uptake by Oocytes in Nilaparvata lugens. Frontiers in Physiology, 2018, 9, 1904.	2.8	32
41	The roles of jasmonate signalling in nitrogen uptake and allocation in rice (Oryza sativa L.). Plant, Cell and Environment, 2019, 42, 659-672.	5.7	32
42	Priming and filtering of antiherbivore defences among <scp>Nicotiana attenuata</scp> plants connected by mycorrhizal networks. Plant, Cell and Environment, 2019, 42, 2945-2961.	5.7	30
43	Simulated Acid Rain Accelerates Litter Decomposition and Enhances the Allelopathic Potential of the Invasive PlantWedelia trilobata(Creeping Daisy). Weed Science, 2012, 60, 462-467.	1.5	27
44	Earthworm gut bacteria increase silicon bioavailability and acquisition by maize. Soil Biology and Biochemistry, 2018, 125, 215-221.	8.8	27
45	Plant allelochemicals affect tolerance of polyphagous lepidopteran pest Helicoverpa armigera (HÃ¼bner) against insecticides. Pesticide Biochemistry and Physiology, 2019, 154, 32-38.	3.6	27
46	Sugarcane Ratooning Ability: Research Status, Shortcomings, and Prospects. Biology, 2021, 10, 1052.	2.8	26
47	Intraspecific variations in cadmium tolerance and phytoaccumulation in giant duckweed (Spirodela) Tj ETQq1 1 0.784314 rgBT /Overl	12.4	24
48	Enhanced Toxicity and Induction of Cytochrome P450s Suggest a Cost of â€œEavesdroppingâ€• in a Multitrophic Interaction. Journal of Chemical Ecology, 2009, 35, 526-532.	1.8	23
49	Inhibition of hepatocyte nuclear factor 4 confers imidacloprid resistance in Nilaparvata lugens via the activation of cytochrome P450 and UDP-glycosyltransferase genes. Chemosphere, 2021, 263, 128269.	8.2	22
50	Phytochemical Flavone Confers Broad-Spectrum Tolerance to Insecticides in Spodoptera litura by Activating ROS/CncC-Mediated Xenobiotic Detoxification Pathways. Journal of Agricultural and Food Chemistry, 2021, 69, 7429-7445.	5.2	21
51	Activation of the ROS/CncC and 20-Hydroxyecdysone Signaling Pathways Is Associated with Xanthotoxin-Induced Tolerance to Î»-Cyhalothrin in Spodoptera litura. Journal of Agricultural and Food Chemistry, 2021, 69, 13425-13435.	5.2	21
52	Molecular mechanisms of insect adaptation to plant defense: Lessons learned from a Bruchid beetle. Insect Science, 2008, 15, 477-481.	3.0	20
53	RNA-Seq Analyses of Midgut and Fat Body Tissues Reveal the Molecular Mechanism Underlying Spodoptera litura Resistance to Tomatine. Frontiers in Physiology, 2019, 10, 8.	2.8	20
54	Transcription factor OsbZIP49 controls tiller angle and plant architecture through the induction of indoleâ€3â€acetic acidâ€amido synthetases in rice. Plant Journal, 2021, 108, 1346-1364.	5.7	20

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55	Aflatoxin B1: Toxicity, bioactivation and detoxification in the polyphagous caterpillar Trichoplusia ni. Insect Science, 2013, 20, 318-328.	3.0	19
56	Gut-Associated Bacteria of Helicoverpa zea Indirectly Trigger Plant Defenses in Maize. Journal of Chemical Ecology, 2018, 44, 690-699.	1.8	19
57	Seed priming with calcium chloride enhances wheat resistance against wheat aphid Schizaphis graminum<scp>Rondani</scp>. Pest Management Science, 2021, 77, 4709-4718.	3.4	19
58	Exposure of Helicoverpa armigera Larvae to Plant Volatile Organic Compounds Induces Cytochrome P450 Monooxygenases and Enhances Larval Tolerance to the Insecticide Methomyl. Insects, 2021, 12, 238.	2.2	18
59	Antagonistic Regulation, Yet Synergistic Defense: Effect of Bergapten and Protease Inhibitor on Development of Cowpea Bruchid Callosobruchus maculatus. PLoS ONE, 2012, 7, e41877.	2.5	18
60	A pivotal role of vacuolar H+-ATPase in regulation of lipid production in Phaeodactylum tricornutum. Scientific Reports, 2016, 6, 31319.	3.3	16
61	Ratoon rice generated from primed parent plants exhibit enhanced herbivore resistance. Plant, Cell and Environment, 2017, 40, 779-787.	5.7	16
62	Nitrogen Supply Alters Rice Defense Against the Striped Stem Borer Chilo suppressalis. Frontiers in Plant Science, 2021, 12, 691292.	3.6	16
63	DISEASE RESISTANCE IN PLANTS THROUGH MYCORRHIZAL FUNGI INDUCED ALLELOCHEMICALS. , 2006, , 181-192.		15
64	UV-irradiation enhances rice allelopathic potential in rhizosphere soil. Plant Growth Regulation, 2013, 71, 21-29.	3.4	15
65	A trail pheromone mediates the mutualism between ants and aphids. Current Biology, 2021, 31, 4738-4747.e4.	3.9	14
66	Bioactivation of aflatoxin B1 by a cytochrome P450, CYP6AE19 induced by plant signaling methyl jasmonate in Helicoverpa armigra (HÃ¼bner). Pesticide Biochemistry and Physiology, 2019, 157, 211-218.	3.6	13
67	Activation of the NR2E nuclear receptor HR83 leads to metabolic detoxification-mediated chlorpyrifos resistance in Nilaparvata lugens. Pesticide Biochemistry and Physiology, 2021, 173, 104800.	3.6	13
68	Modelling tritrophic interactions mediated by induced defence volatiles. Ecological Modelling, 2009, 220, 3241-3247.	2.5	12
69	Control of Panama disease of banana by intercropping with Chinese chive (Allium tuberosum Rottler): cultivar differences. BMC Plant Biology, 2020, 20, 432.	3.6	12
70	Siliconâ€mediated multiple interactions: Simultaneous induction of rice defense and inhibition of larval performance and insecticide tolerance of Chilo suppressalis by sodium silicate. Ecology and Evolution, 2020, 10, 4816-4827.	1.9	12
71	Activiation of the nitric oxide cycle by citrulline and arginine restores susceptibility of resistant brown planthoppers to the insecticide imidacloprid. Journal of Hazardous Materials, 2020, 396, 122755.	12.4	12
72	Geographically isolated Colorado potato beetle mediating distinct defense responses in potato is associated with the alteration of gut microbiota. Journal of Pest Science, 2020, 93, 379-390.	3.7	11

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73	Effect of hepatocyte nuclear factor 4 on the fecundity of Nilaparvata lugens: Insights from RNA interference combined with transcriptomic analysis. Genomics, 2020, 112, 4585-4594.	2.9	11
74	High nitrogen in maize enriches gut microbiota conferring insecticide tolerance in lepidopteran pest Spodoptera litura. IScience, 2022, 25, 103726.	4.1	11
75	Allelopathy of Aspergillus japonicus on Crops. Agronomy Journal, 2001, 93, 60-64.	1.8	10
76	Allelopathy in Chinese Ancient and Modern Agriculture. , 2008, , 39-59.		10
77	Diterpenoids with herbicidal and antifungal activities from hulls of rice (Oryza sativa). FÃ¬toterapÃ¬Ã¢, 2019, 136, 104183.	2.2	10
78	Olfactory perception of herbivoreâ€induced plant volatiles elicits counterâ€defences in larvae of the tobacco cutworm. Functional Ecology, 2021, 35, 384-397.	3.6	10
79	Soil microorganisms alleviate the allelopathic effect of Eucalyptus grandis Ã— E. urophylla leachates on Brassica chinensis. Journal of Forestry Research, 2017, 28, 1203-1207.	3.6	8
80	Enhancement of Jasmonate-Mediated Antiherbivore Defense Responses in Tomato by Acetic Acid, a Potent Inducer for Plant Protection. Frontiers in Plant Science, 2019, 10, 764.	3.6	8
81	Phosphoinositide 3-Kinase Promotes Oxidative Burst, Stomatal Closure and Plant Immunity in Bacterial Invasion. Frontiers in Plant Science, 2019, 10, 1740.	3.6	7
82	Regulation of NlE74A on vitellogenin may be mediated by angiotensin converting enzyme through a fecundity-related SNP in the brown planthopper, Nilaparvata lugens. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2018, 225, 26-32.	1.8	7
83	Priming of rice defense against a sap-sucking insect pest brown planthopper by silicon. Journal of Pest Science, 2022, 95, 1371-1385.	3.7	7
84	Cadmium transfer between maize and soybean plants via common mycorrhizal networks. Ecotoxicology and Environmental Safety, 2022, 232, 113273.	6.0	7
85	Exposure to Herbicides Prime P450-Mediated Detoxification of Helicoverpa armigera against Insecticide and Fungal Toxin. Insects, 2019, 10, 28.	2.2	6
86	Parasitoid Causes Cascading Effects on Plant-Induced Defenses Mediated Through the Gut Bacteria of Host Caterpillars. Frontiers in Microbiology, 2021, 12, 708990.	3.5	6
87	Enhanced anti-herbivore defense of tomato plants against Spodoptera litura by their rhizosphere bacteria. BMC Plant Biology, 2022, 22, .	3.6	6
88	The KNRL nuclear receptor controls hydrolaseâ€mediated vitellin breakdown during embryogenesis in the brown planthopper, Nilaparvata lugens. Insect Science, 2021, 28, 1633-1650.	3.0	4
89	Effect of Toxins Isolated from Exserohilum monoceras (Drechsler) Leonard and Suggs on Echinochloa crus-galli (L.) Beauv.. Agricultural Sciences in China, 2009, 8, 972-978.	0.6	3
90	Transcriptomic Profiling Reveals Shared Signalling Networks Between Flower Development and Herbivory-Induced Responses in Tomato. Frontiers in Plant Science, 2021, 12, 722810.	3.6	3

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91	Molecular, biochemical and bioassay based evidence of lower allelopathic potential in genetically modified rice. Plant Growth Regulation, 2014, 74, 73-82.	3.4	2
92	Colorado potato beetle exploits frassâ€associated bacteria to suppress defense responses in potato plants. Pest Management Science, 2022, , .	3.4	2
93	Autotoxicity in Agriculture and Forestry. , 2008, , 283-301.		1