Xinzhi Ni

List of Publications by Citations

102 papers	1,926 citations	23 h-index	40 g-index
109 ext. papers	2,404 ext. citations	3.2 avg, IF	4.64 L-index

#	Paper	IF	Citations
102	Identity, regulation, and activity of inducible diterpenoid phytoalexins in maize. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 5455-60	11.5	179
101	Novel acidic sesquiterpenoids constitute a dominant class of pathogen-induced phytoalexins in maize. *Plant Physiology*, **2011**, 156, 2082-97	6.6	156
100	Potential shortfall of pyramided transgenic cotton for insect resistance management. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 5806-11	11.5	123
99	Maize death acids, 9-lipoxygenase-derived cyclopente(a)nones, display activity as cytotoxic phytoalexins and transcriptional mediators. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 11407-12	11.5	83
98	Oxidative responses of resistant and susceptible cereal leaves to symptomatic and nonsymptomatic cereal aphid (Hemiptera: Aphididae) feeding. *Journal of Economic Entomology*, **2001**, 94, 743-51	2.2	77
97	Environmental influences on maize-Aspergillus flavus interactions and aflatoxin production. *Frontiers in Microbiology*, **2014**, 5, 40	5.7	71
96	Physiological and Growth Tolerance in Wheat to Russian Wheat Aphid (Homoptera: Aphididae) Injury. *Environmental Entomology*, **1999**, 28, 787-794	2.1	66
95	Identification of aflatoxin B1 on maize kernel surfaces using hyperspectral imaging. *Food Control*, **2014**, 42, 78-86	6.2	63
94	Physiological, nutritional, and biochemical bases of corn resistance to foliage-feeding fall armyworm. *Journal of Chemical Ecology*, **2009**, 35, 297-306	2.7	53
93	Feasibility of detecting Aflatoxin B1 in single maize kernels using hyperspectral imaging. *Journal of Food Engineering*, **2015**, 166, 182-192	6	45
92	Deciphering drought-induced metabolic responses and regulation in developing maize kernels. *Plant Biotechnology Journal*, **2018**, 16, 1616	11.6	45
91	Field-evolved resistance of Helicoverpa zea (Boddie) to transgenic maize expressing pyramided Cry1A.105/Cry2Ab2 proteins in northeast Louisiana, the United States. *Journal of Invertebrate Pathology*, **2019**, 163, 11-20	2.6	41
90	Near-infrared hyperspectral imaging for detecting Aflatoxin B1 of maize kernels. *Food Control*, **2015**, 51, 347-355	6.2	39
89	Comparative molecular and biochemical characterization of segmentally duplicated 9-lipoxygenase genes ZmLOX4 and ZmLOX5 of maize. *Planta*, **2010**, 231, 1425-37	4.7	37
88	Feasibility of detecting aflatoxin B1 on inoculated maize kernels surface using Vis/NIR hyperspectral imaging. *Journal of Food Science*, **2015**, 80, M116-22	3.4	35
87	Dynamic change in photosynthetic pigments and chlorophyll degradation elicited by cereal aphid feeding. *Entomologia Experimentalis Et Applicata*, **2002**, 105, 43-53	2.1	35
86	Impact of brown stink bug (Heteroptera: Pentatomidae) feeding on corn grain yield components and quality. *Journal of Economic Entomology*, **2010**, 103, 2072-9	2.2	32

85	Microsatellite Markers Reveal a Predominant Sugarcane Aphid (Homoptera: Aphididae) Clone is Found on Sorghum in Seven States and One Territory of the USA. *Crop Science*, **2017**, 57, 2064-2072	2.4	28
84	Stress Sensitivity Is Associated with Differential Accumulation of Reactive Oxygen and Nitrogen Species in Maize Genotypes with Contrasting Levels of Drought Tolerance. *International Journal of Molecular Sciences*, **2015**, 16, 24791-819	6.3	26
83	Functional characterization of cis-acting elements mediating flavone-inducible expression of CYP321A1. *Insect Biochemistry and Molecular Biology*, **2010**, 40, 898-908	4.5	26
82	Spatial patterns of aflatoxin levels in relation to ear-feeding insect damage in pre-harvest corn. *Toxins*, **2011**, 3, 920-31	4.9	26
81	Genome-Wide Association Mapping of Anthracnose () Resistance in the U.S. Sorghum Association Panel. *Plant Genome*, **2018**, 11, 170099	4.4	23
80	Changes in life history parameters of Rhopalosiphum maidis (Homoptera: Aphididae) under four different elevated temperature and CO2 combinations. *Journal of Economic Entomology*, **2014**, 107, 1411-8	2.2	23
79	Functional Biology and Molecular Mechanisms of Host-Pathogen Interactions for Aflatoxin Contamination in Groundnut (L.) and Maize (L.). *Frontiers in Microbiology*, **2020**, 11, 227	5.7	22
78	Possible roles of esterase, glutathione S-transferase, and superoxide dismutase activities in understanding aphid□cereal interactions. *Entomologia Experimentalis Et Applicata*, **2003**, 108, 187-195	2.1	22
77	In vitro enzymatic chlorophyll catabolism in wheat elicited by cereal aphid feeding. *Entomologia Experimentalis Et Applicata*, **2001**, 101, 159-166	2.1	22
76	Effect of Wheat Leaf Epicuticular Structure on Host Selection and Probing Rhythm of Russian Wheat Aphid (Homoptera: Aphididae). *Journal of Economic Entomology*, **1997**, 90, 1400-1407	2.2	20
75	Evaluation of fall armyworm resistance in maize germplasm lines using visual leaf injury rating and predator survey. *Insect Science*, **2014**, 21, 541-55	3.6	19
74	Identification of Multiple Ear-Colonizing Insect and Disease Resistance in CIMMYT Maize Inbred Lines with Varying Levels of Silk Maysin. *Journal of Economic Entomology*, **2008**, 101, 1455-1465	2.2	19
73	Hydrolase and Oxido-Reductase Activities in Diuraphis noxia and Rhopalosiphum padi (Hemiptera: Aphididae). *Annals of the Entomological Society of America*, **2000**, 93, 595-601	2	19
72	Aflatoxin Accumulation in BT and Non-BT Maize Testcrosses. *Journal of Crop Improvement*, **2010**, 24, 392-399	1.4	17
71	Chlorotic feeding injury by the black pecan aphid (hemiptera: aphididae) to pecan foliage promotes aphid settling and nymphal development. *Environmental Entomology*, **2009**, 38, 411-6	2.1	17
70	APN1 is a functional receptor of Cry1Ac but not Cry2Ab in Helicoverpa zea. *Scientific Reports*, **2016**, 6, 19179	4.9	17
69	Evaluation of Near-Infrared Hyperspectral Imaging for Detection of Peanut and Walnut Powders in Whole Wheat Flour. *Applied Sciences (Switzerland)*, **2018**, 8, 1076	2.6	17
68	F2 screen for resistance to Bacillus thuringiensis Cry2Ab2-maize in field populations of Spodoptera frugiperda (Lepidoptera: Noctuidae) from the southern United States. *Journal of Invertebrate Pathology*, **2016**, 138, 66-72	2.6	16

67	Foliar Resistance to Fall Armyworm in Corn Germplasm Lines that Confer Resistance to Root- and Ear-Feeding Insects*. *Florida Entomologist*, **2011**, 94, 971-981	1	16
66	Classifying maize kernels naturally infected by fungi using near-infrared hyperspectral imaging. *Infrared Physics and Technology*, **2020**, 105, 103242	2.7	15
65	Identification and quantification of hydroxamic acids in maize seedling root tissue and impact on western corn rootworm (Coleoptera: Chrysomelidae) larval development. *Journal of Economic Entomology*, **2000**, 93, 989-92	2.2	15
64	Evaluation of maize inbred lines for resistance to pre-harvest aflatoxin and fumonisin contamination in the field. *Crop Journal*, **2017**, 5, 259-264	4.6	14
63	A long non-coding RNA regulates cadherin transcription and susceptibility to Bt toxin Cry1Ac in pink bollworm, Pectinophora gossypiella. *Pesticide Biochemistry and Physiology*, **2019**, 158, 54-60	4.9	14
62	Decreased Cry1Ac activation by midgut proteases associated with Cry1Ac resistance in Helicoverpa zea. *Pest Management Science*, **2019**, 75, 1099-1106	4.6	13
61	Cytotoxicity and binding profiles of activated Cry1Ac and Cry2Ab to three insect cell lines. *Insect Science*, **2018**, 25, 655-666	3.6	12
60	Evaluation of corn germplasm lines for multiple ear-colonizing insect and disease resistance. *Journal of Economic Entomology*, **2012**, 105, 1457-64	2.2	12
59	Distribution of Russian Wheat Aphid (Homoptera: Aphididae) Salivary Sheaths in Resistant and Susceptible Wheat Leaves. *Journal of Economic Entomology*, **1997**, 90, 848-853	2.2	12
58	Identification of Resistance to Aflatoxin Accumulation and Yield Potential in Maize Hybrids in the Southeast Regional Aflatoxin Trials (SERAT). *Crop Science*, **2017**, 57, 202-215	2.4	11
57	Evaluation and classification of five cereal fungi on culture medium using Visible/Near-Infrared (Vis/NIR) hyperspectral imaging. *Infrared Physics and Technology*, **2020**, 105, 103206	2.7	11
56	Differential responses of forage pearl millet genotypes to chinch bug (Heteroptera: Blissidae) feeding. *Journal of Economic Entomology*, **2009**, 102, 1960-9	2.2	10
55	Comparison of DIMBOA concentrations among wheat isolines and corresponding plant introduction lines. *Entomologia Experimentalis Et Applicata*, **2000**, 96, 275-279	2.1	10
54	Identification of multiple ear-colonizing insect and disease resistance in CIMMYT maize inbred lines with varying levels of silk maysin. *Journal of Economic Entomology*, **2008**, 101, 1455-65	2.2	10
53	Changes of oxidase and hydrolase activities in pecan leaves elicited by black pecan aphid (Hemiptera: Aphididae) feeding. *Journal of Economic Entomology*, **2009**, 102, 1262-9	2.2	9
52	Impact of Diuraphis noxia and Rhopalosiphum padi (Hemiptera: Aphididae) on primary physiology of four near-isogenic wheat lines. *Journal of Economic Entomology*, **2009**, 102, 412-21	2.2	9
51	Influence of cereal leaf epicuticular wax on Diuraphis noxia probing behavior and nymphoposition. *Entomologia Experimentalis Et Applicata*, **1998**, 89, 111-118	2.1	9
50	Enzymatic chlorophyll degradation in wheat near-isogenic lines elicited by cereal aphid (Homoptera: Aphididae) feeding. *Journal of Economic Entomology*, **2004**, 97, 661-7	2.2	9

49	Effects of photoperiod and temperature on diapause induction in Conogethes punctiferalis (Lepidoptera: Pyralidae). *Insect Science*, **2014**, 21, 556-63	3.6	8
48	Potential adaptation of a Q biotype whitefly population from poinsettia to field crops. *Insect Science*, **2011**, 18, 719-728	3.6	8
47	The Genes Bm2 and Blmc that Affect Epicuticular Wax Deposition in Sorghum are Allelic. *Crop Science*, **2017**, 57, 1552-1556	2.4	7
46	Diuraphis noxia and Rhopalosiphum padi (Hemiptera: Aphididae) interactions and their injury on resistant and susceptible cereal seedlings. *Journal of Economic Entomology*, **2006**, 99, 551-8	2.2	7
45	Molecular evolution of the plant ECERIFERUM1 and ECERIFERUM3 genes involved in aliphatic hydrocarbon production. *Computational Biology and Chemistry*, **2019**, 80, 1-9	3.6	7
44	The Environment Strongly Affects Estimates of Heterosis in Hybrid Sweet Sorghum. *Sugar Tech*, **2018**, 20, 261-274	1.9	6
43	Field screening of experimental corn hybrids and inbred lines for multiple ear-feeding insect resistance. *Journal of Economic Entomology*, **2007**, 100, 1704-13	2.2	6
42	Aphid (Hemiptera: Aphididae) resistance in wheat near-isogenic lines. *Journal of Economic Entomology*, **2004**, 97, 646-53	2.2	6
41	A Sugarcane Aphid 'Super-Clone' Predominates on Sorghum and Johnsongrass from Four US States. *Crop Science*, **2018**, 58, 2533-2541	2.4	6
40	Influence of host plant nitrogen fertilization on hemolymph protein profiles of herbivore Spodoptera exigua and development of its endoparasitoid Cotesia marginiventris. *Biological Control*, **2014**, 70, 9-16	3.8	5
39	A re-examination of corn (Zea mays L.) ear volatiles. *Phytochemistry Letters*, **2015**, 14, 280-286	1.9	4
38	Structure-reactivity relationships between the fluorescent chromophores and antioxidant activity of grain and sweet sorghum seeds. *Food Science and Nutrition*, **2016**, 4, 811-817	3.2	4
37	Impact of applying edible oils to silk channels on ear pests of sweet corn. *Journal of Economic Entomology*, **2011**, 104, 956-64	2.2	4
36	Comparison of Hindwing Hamuli from Five Species of Cereal Aphids (Hemiptera: Aphididae). *Annals of the Entomological Society of America*, **2002**, 95, 109-114	2	4
35	Field Evaluation of Pearl Millet for Chinch Bug (Heteroptera: Blissidae) Resistance. *Journal of Entomological Science*, **2007**, 42, 467-480	0.4	4
34	Effect of DNA Gyrase Inhibitors in the Nl Diet on Biological Fitness of the Western Tarnished Plant Bug (Heteroptera: Miridae). *Journal of Entomological Science*, **2008**, 43, 86-94	0.4	4
33	Combining host plant resistance and foliar insecticide application to manage Melanaphis sacchari (Hemiptera: Aphididae) in grain sorghum. *International Journal of Pest Management*, **2021**, 67, 10-19	1.5	4
32	A Sugarcane Aphid (Hemiptera: Aphididae) 'Super-Clone' Remains on U.S. Sorghum and Johnsongrass and Feeds on Giant Miscanthus. *Journal of Entomological Science*, **2021**, 56, 43-52	0.4	4

31	Populations of (Boddie) in the Southeastern United States are Commonly Resistant to Cry1Ab, but Still Susceptible to Vip3Aa20 Expressed in MIR 162 Corn. *Toxins*, **2021**, 13,	4.9	4
30	Growth Identification of Aspergillus flavus and Aspergillus parasiticus by Visible/Near-Infrared Hyperspectral Imaging. *Applied Sciences (Switzerland)*, **2018**, 8, 513	2.6	4
29	Genome Size Reversely Correlates With Host Plant Range in Species. *Frontiers in Physiology*, **2019**, 10, 29	4.6	3
28	Useful Bicistronic Reporter System for Studying Poly(A) Site-Defining cis Elements and Regulation of Alternative Polyadenylation. *International Journal of Molecular Sciences*, **2018**, 19,	6.3	3
27	Influence of brown stink bug feeding, planting date and sampling time on common smut infection of maize. *Insect Science*, **2014**, 21, 564-71	3.6	3
26	Evaluation of Resistance to Chinch Bug in Pearl Millet in Temperate and Subtropical Environments. *Plant Health Progress*, **2009**, 10, 31	1.2	3
25	Efficacy of Insecticides for Control of Insect Pests of Pearl Millet for Grain Production. *Plant Health Progress*, **2007**, 8, 26	1.2	3
24	Evaluation of strains of Beauveria bassiana and Isaria fumosorosea to control sugarcane aphids on grain sorghum **2020**, 3, e20047		3
23	Extended investigation of field-evolved resistance of the corn earworm Helicoverpa zea(Lepidoptera: Noctuidae) to Bacillus thuringiensis Cry1A.105 and Cry2Ab2 proteins in thesoutheastern United States. *Journal of Invertebrate Pathology*, **2021**, 183, 107560	2.6	3
22	Monitoring of brown stink bug (Hemiptera: Pentatomidae) population dynamics in corn to predict its abundance using weather data. *Insect Science*, **2019**, 26, 536-544	3.6	3
21	Characterization of the First W-Specific Protein-Coding Gene for Sex Identification in. *Frontiers in Genetics*, **2020**, 11, 649	4.5	2
20	Integrated pest management is the lucrative bridge connecting the ever emerging knowledge islands of genetics and ecology. *Insect Science*, **2014**, 21, 537-40	3.6	2
19	Evaluation of spatial and temporal patterns of insect damage and aflatoxin level in the pre-harvest corn fields to improve management tactics. *Insect Science*, **2014**, 21, 572-83	3.6	2
18	Crop Stress and Aflatoxin Contamination: Perspectives and Prevention Strategies **2012**, 399-427		2
17	Insect-attracting and antimicrobial properties of antifreeze for monitoring insect pests and natural enemies in stored corn. *Journal of Economic Entomology*, **2008**, 101, 631-6	2.2	2
16	Parasitism of Melanaphis sacchari (Hemiptera: Aphididae) by Lysiphlebus testaceipes (Hymenoptera: Braconidae) in the Greenhouse and Field. *Journal of Entomological Science*, **2020**, 55, 14	0.4	2
15	Non-destructive discrimination of Illicium verum from poisonous adulterant using Vis/NIR hyperspectral imaging combined with chemometrics. *Infrared Physics and Technology*, **2020**, 111, 103509	2.7	2
14	Diurnal Activities of the Brown Stink Bug (Hemiptera: Pentatomidae) in and near Tasseling Corn Fields. *Journal of Entomological Science*, **2016**, 51, 226-237	0.4	2

13	Evaluation of Elite Maize Inbred Lines for Reduced Aspergillus flavus Infection, Aflatoxin Accumulation, and Agronomic Traits. *Crop Science*, **2019**, 59, 2562-2571	2.4	2
12	Assessing spatio-temporal patterns of sugarcane aphid (Hemiptera: Aphididae) infestations on silage sorghum yield using unmanned aerial systems (UAS). *Crop Protection*, **2021**, 146, 105681	2.7	2
11	Evaluation of Whorl Damage by Fall Armyworm (Lepidoptera: Noctuidae) on Field- and Greenhouse-Grown Sweet Sorghum Plants. *Journal of Entomological Science*, **2015**, 50, 14-27	0.4	1
10	Spatio-temporal patterns of Aspergillus flavus infection and aflatoxin B biosynthesis on maize kernels probed by SWIR hyperspectral imaging and synchrotron FTIR microspectroscopy.. *Food Chemistry*, **2022**, 382, 132340	8.5	1
9	Metamorphosis of Cisgenic Insect Resistance Research in the Transgenic Crop Era **2011**, 258-279		1
8	Recent advancement in near infrared spectroscopy and hyperspectral imaging techniques for quality and safety assessment of agricultural and food products in the China Agricultural University. *NIR News*, **2018**, 29, 19-23	0.8	1
7	Melanaphis sorghi (Hemiptera: Aphididae) Clonal Diversity in the United States and Brazil. *Insects*, **2022**, 13, 416	2.8	1
6	The sorghum epicuticular wax locus Bloomless2 reduces plant damage in P898012 caused by the sugarcane aphid **2020**, 3, e20008		0
5	A sorghum genome-wide association study (GWAS) identifies a WRKY transcription factor as a candidate gene underlying sugarcane aphid (Melanaphis sacchari) resistance.. *Planta*, **2022**, 255, 37	4.7	0
4	Using Nutrient Solutions to Trap the Almond Moth (Lepidoptera: Pyralidae) in a Peanut Shelling and Storage Facility. *Journal of Entomological Science*, **2006**, 41, 285-291	0.4	
3	Inductive and synergistic interactions between plant allelochemical flavone and Bt toxin Cry1Ac in Helicoverpa armigera. *Insect Science*, **2021**, 28, 1756-1765	3.6	
2	Evaluation of growth characteristics ofAspergillus parasiticusinoculated in different culture media by shortwave infrared (SWIR) hyperspectral imaging. *Journal of Innovative Optical Health Sciences*, **2018**, 11, 1850031	1.2	
1	Spontaneous transposition of HzSINE1 into CYP321A2 is undetectable in the field populations of Helicoverpa zea. *Journal of Asia-Pacific Entomology*, **2021**, 24, 882-888	1.4	