Wade H Elmer

List of Publications by Year
in descending order

70 papers	4,608 citations	109321 35 h-index	102487 66 g-index
72 all docs	72 docs citations	72 times ranked	3723 citing authors

#	Article	IF	Citations
1	A review of the use of engineered nanomaterials to suppress plant disease and enhance crop yield. Journal of Nanoparticle Research, 2015, 17, 1.	1.9	501
2	Recent advances in nano-enabled fertilizers and pesticides: a critical review of mechanisms of action. Environmental Science: Nano, 2019, 6, 2002-2030.	4.3	314
3	The Future of Nanotechnology in Plant Pathology. Annual Review of Phytopathology, 2018, 56, 111-133.	7.8	271
4	The use of metallic oxide nanoparticles to enhance growth of tomatoes and eggplants in disease infested soil or soilless medium. Environmental Science: Nano, 2016, 3, 1072-1079.	4.3	251
5	Effect of Biochar Amendments on Mycorrhizal Associations and Fusarium Crown and Root Rot of Asparagus in Replant Soils. Plant Disease, 2011, 95, 960-966.	1.4	224
6	Zinc oxide nanoparticles alleviate drought-induced alterations in sorghum performance, nutrient acquisition, and grain fortification. Science of the Total Environment, 2019, 688, 926-934.	8.0	196
7	Nanoparticle and Ionic Zn Promote Nutrient Loading of Sorghum Grain under Low NPK Fertilization. Journal of Agricultural and Food Chemistry, 2017, 65, 8552-8559.	5.2	169
8	Effect of Metalloid and Metal Oxide Nanoparticles on Fusarium Wilt of Watermelon. Plant Disease, 2018, 102, 1394-1401.	1.4	135
9	Copper Based Nanomaterials Suppress Root Fungal Disease in Watermelon (<i>Citrullus lanatus</i>): Role of Particle Morphology, Composition and Dissolution Behavior. ACS Sustainable Chemistry and Engineering, 2018, 6, 14847-14856.	6.7	133
10	Facile Coating of Urea With Low-Dose ZnO Nanoparticles Promotes Wheat Performance and Enhances Zn Uptake Under Drought Stress. Frontiers in Plant Science, 2020, 11, 168.	3.6	120
11	Phylogenomic Analysis of a 55.1-kb 19-Gene Dataset Resolves a Monophyletic<i>Fusarium</i>that Includes the<i>Fusarium solani</i>Species Complex. Phytopathology, 2021, 111, 1064-1079.	2.2	107
12	Interactive effects of drought, organic fertilizer, and zinc oxide nanoscale and bulk particles on wheat performance and grain nutrient accumulation. Science of the Total Environment, 2020, 722, 137808.	8.0	104
13	Advanced material modulation of nutritional and phytohormone status alleviates damage from soybean sudden death syndrome. Nature Nanotechnology, 2020, 15, 1033-1042.	31.5	98
14	Epidemiology and Management of the Diseases Causal to Asparagus Decline.. Plant Disease, 1996, 80, 117.	1.4	96
15	Role of Cerium Compounds in Fusarium Wilt Suppression and Growth Enhancement in Tomato (<i>Solanum lycopersicum</i>). Journal of Agricultural and Food Chemistry, 2018, 66, 5959-5970.	5.2	91
16	Effects of Manganese Nanoparticle Exposure on Nutrient Acquisition in Wheat (Triticum aestivum L.). Agronomy, 2018, 8, 158.	3.0	91
17	Nanoparticles for plant disease management. Current Opinion in Environmental Science and Health, 2018, 6, 66-70.	4.1	89
18	Chitosan-Coated Mesoporous Silica Nanoparticle Treatment of <i>Citrullus lanatus</i> (Watermelon): Enhanced Fungal Disease Suppression and Modulated Expression of Stress-Related Genes. ACS Sustainable Chemistry and Engineering, 2019, 7, 19649-19659.	6.7	80

#	Article	IF	Citations
19	Nanotechnology and Plant Viruses: An Emerging Disease Management Approach for Resistant Pathogens. ACS Nano, 2021, 15, 6030-6037.	14.6	73
20	Time-Dependent Transcriptional Response of Tomato (<i>Solanum lycopersicum</i> L.) to Cu Nanoparticle Exposure upon Infection with <i>Fusarium oxysporum</i> f. sp. <i>lycopersici</i>. ACS Sustainable Chemistry and Engineering, 2019, 7, 10064-10074.	6.7	69
21	Influence of Earthworm Activity on Soil Microbes and Soilborne Diseases of Vegetables. Plant Disease, 2009, 93, 175-179.	1.4	63
22	Addition-omission of zinc, copper, and boron nano and bulk oxide particles demonstrate element and size -specific response of soybean to micronutrients exposure. Science of the Total Environment, 2019, 665, 606-616.	8.0	62
23	Elemental Sulfur Nanoparticles Enhance Disease Resistance in Tomatoes. ACS Nano, 2021, 15, 11817-11827.	14.6	60
24	Effect of verticillium wilt on gas exchange of entire eggplants. Canadian Journal of Botany, 1995, 73, 557-565.	1.1	57
25	Exposure to Weathered and Fresh Nanoparticle and Ionic Zn in Soil Promotes Grain Yield and Modulates Nutrient Acquisition in Wheat (<i>Triticum aestivum</i> L.). Journal of Agricultural and Food Chemistry, 2018, 66, 9645-9656.	5.2	56
26	Seed Biofortification by Engineered Nanomaterials: A Pathway To Alleviate Malnutrition?. Journal of Agricultural and Food Chemistry, 2020, 68, 12189-12202.	5.2	53
27	Silica Nanoparticle Dissolution Rate Controls the Suppression of <i>Fusarium Wilt</i> of Watermelon (<i>Citrullus lanatus</i>). Environmental Science & Technology, 2021, 55, 13513-13522.	10.0	52
28	Nutritional Status of Tomato (<i>Solanum lycopersicum</i>) Fruit Grown in <i>Fusarium</i>-Infested Soil: Impact of Cerium Oxide Nanoparticles. Journal of Agricultural and Food Chemistry, 2020, 68, 1986-1997.	5.2	51
29	Seeds as Vehicles for Pathogen Importation. Biological Invasions, 2001, 3, 263-271.	2.4	48
30	Copper Oxide Nanoparticle-Embedded Hydrogels Enhance Nutrient Supply and Growth of Lettuce (<i>Lactuca sativa</i>) Infected with <i>Fusarium oxysporum</i> f. sp. <i>lactucae</i>. Environmental Science & Technology, 2021, 55, 13432-13442.	10.0	46
31	Association Between Mn-Reducing Root Bacteria and NaCl Applications in Suppression of Fusarium Crown and Root Rot of Asparagus. Phytopathology, 1995, 85, 1461.	2.2	46
32	Copper Nanomaterial Morphology and Composition Control Foliar Transfer through the Cuticle and Mediate Resistance to Root Fungal Disease in Tomato (<i>Solanum lycopersicum</i>). Journal of Agricultural and Food Chemistry, 2020, 68, 11327-11338.	5.2	42
33	Efficacy of integrating biologicals with fungicides for the suppression of Fusarium wilt of cyclamen. Crop Protection, 2004, 23, 909-914.	2.1	40
34	Indirect effects of nonâ€native <i><scp>S</scp>partina alterniflora</i> and its fungal pathogen (<i><scp>F</scp>usarium palustre</i>) on native saltmarsh plants in <scp>C</scp>hina. Journal of Ecology, 2014, 102, 1112-1119.	4.0	40
35	Influence of Inoculum Density of Fusarium oxysporum f. sp. cyclaminis and Sodium Chloride on Cyclamen and the Development of Fusarium Wilt. Plant Disease, 2002, 86, 389-393.	1.4	39
36	New species of <i>Fusarium</i> associated with dieback of <i>Spartina alterniflora</i> in Atlantic salt marshes. Mycologia, 2011, 103, 806-819.	1.9	39

#	Article	IF	Citations
37	Fusarium wilts of ornamental crops and their management. Crop Protection, 2015, 73, 50-59.	2.1	37
38	Preventing spread of Fusarium wilt of Hiemalis begonias in the greenhouse. Crop Protection, 2008, 27, 1078-1083.	2.1	35
39	Management of Fusarium crown and root rot of asparagus. Crop Protection, 2015, 73, 2-6.	2.1	35
40	Metalloid and Metal Oxide Nanoparticles Suppress Sudden Death Syndrome of Soybean. Journal of Agricultural and Food Chemistry, 2020, 68, 77-87.	5.2	34
41	Suppression of Fusarium Crown and Root Rot of Asparagus with Sodium Chloride. Phytopathology, 1992, 82, 97.	2.2	34
42	Influence of Formononetin and NaCl on Mycorrhizal Colonization and Fusarium Crown and Root Rot of Asparagus. Plant Disease, 2002, 86, 1318-1324.	1.4	33
43	Role of Nanoscale Hydroxyapatite in Disease Suppression of <i>Fusarium</i>-Infected Tomato. Environmental Science & Technology, 2021, 55, 13465-13476.	10.0	33
44	Local and Systemic Effects of NaCl on Root Composition, Rhizobacteria, and Fusarium Crown and Root Rot of Asparagus. Phytopathology, 2003, 93, 186-192.	2.2	32
45	Fusarium Fruit Rot of Pumpkin in Connecticut. Plant Disease, 1996, 80, 131.	1.4	32
46	Effects of acibenzolar-S-methyl on the suppression of Fusarium wilt of cyclamen. Crop Protection, 2006, 25, 671-676.	2.1	31
47	Foliar Application of Copper Oxide Nanoparticles Suppresses Fusarium Wilt Development on Chrysanthemum. Environmental Science & Technology, 2021, 55, 10805-10810.	10.0	31
48	Therapeutic Delivery of Nanoscale Sulfur to Suppress Disease in Tomatoes: In Vitro Imaging and Orthogonal Mechanistic Investigation. ACS Nano, 2022, 16, 11204-11217.	14.6	28
49	Soil and foliar exposure of soybean (Glycine max) to Cu: Nanoparticle coating-dependent plant responses. NanoImpact, 2022, 26, 100406.	4.5	22
50	Association Between Fusarium spp. on Spartina alterniflora and Dieback Sites in Connecticut and Massachusetts. Estuaries and Coasts, 2012, 35, 436-444.	2.2	21
51	Biomolecular corona formation on CuO nanoparticles in plant xylem fluid. Environmental Science: Nano, 2021, 8, 1067-1080.	4.3	18
52	Impact of engineered nanomaterials on rice (Oryza sativa L.): A critical review of current knowledge. Environmental Pollution, 2022, 297, 118738.	7.5	18
53	A Tripartite Interaction Between <i>Spartina alterniflora</i>, <i>Fusarium palustre</i>, and the Purple Marsh Crab (<i>Sesarma reticulatum</i>) Contributes to Sudden Vegetation Dieback of Salt Marshes in New England. Phytopathology, 2014, 104, 1070-1077.	2.2	15
54	Influence of Single and Combined Mixtures of Metal Oxide Nanoparticles on Eggplant Growth, Yield, and Verticillium Wilt Severity. Plant Disease, 2021, 105, 1153-1161.	1.4	15

#	Article	IF	Citations
55	Biodegradable Polymer Nanocomposites Provide Effective Delivery and Reduce Phosphorus Loss during Plant Growth. ACS Agricultural Science and Technology, 2021, 1, 529-539.	2.3	12
56	Epidemiology and Management of Fusarium Wilt of China Asters. Plant Disease, 2013, 97, 530-536.	1.4	11
57	Vegetative compatibility groups in <i>Fusarium proliferatum</i> from asparagus in Australia. Mycologia, 1999, 91, 650-654.	1.9	10
58	Response of Sediment Bacterial Communities to Sudden Vegetation Dieback in a Coastal Wetland. Phytobiomes Journal, 2017, 1, 5-13.	2.7	10
59	Effects of engineered lignin-graft-PLGA and zein-based nanoparticles on soybean health. NanoImpact, 2021, 23, 100329.	4.5	9
60	Role of Foliar Biointerface Properties and Nanomaterial Chemistry in Controlling Cu Transfer into Wild-Type and Mutant <i>Arabidopsis thaliana</i> Leaf Tissue. Journal of Agricultural and Food Chemistry, 2022, 70, 4267-4278.	5.2	8
61	Vegetative Compatibility Groups in Fusarium proliferatum from Asparagus in Australia. Mycologia, 1999, 91, 650.	1.9	6
62	Heuchera root rot, a new disease for <i>Plectosphaerella cucumerina</i>. Journal of Phytopathology, 2020, 168, 56-62.	1.0	6
63	Pathogenic Microfungi Associated with Spartina in Salt Marshes. Fungal Biology, 2016, , 615-630.	0.6	5
64	Incidence of Fusarium spp. on the invasive Spartina alterniflora on Chongming Island, Shanghai, China. Biological Invasions, 2016, 18, 2221-2227.	2.4	4
65	Interactions and consequences of silicon, nitrogen, and Fusarium palustre on herbivory and DMSP levels of Spartina alterniflora. Estuarine, Coastal and Shelf Science, 2017, 198, 106-113.	2.1	4
66	Diseases of Tulip. Handbook of Plant Disease Management, 2017, , 1-26.	0.5	4
67	Diseases of Chrysanthemum. Handbook of Plant Disease Management, 2018, , 439-502.	0.5	3
68	Cultural Methods for Greenhouse Pest and Disease Management. , 2020, , 285-330.		3
69	From nanotoxicology to nano-enabled agriculture: Following the science at the Connecticut Agricultural Experiment Station (CAES). , 2022, 1, 100007.		2
70	Diseases of Tulip. Handbook of Plant Disease Management, 2018, , 1313-1337.	0.5	1