Honghong Wu

List of Publications by Year
in descending order

55 papers	4,143 citations	159525 30 h-index	161767 54 g-index
57 all docs	57 docs citations	57 times ranked	3617 citing authors

#	Article	IF	Citations
1	Nano-Biotechnology in Agriculture: Use of Nanomaterials to Promote Plant Growth and Stress Tolerance. Journal of Agricultural and Food Chemistry, 2020, 68, 1935-1947.	2.4	363
2	Nanobiotechnology approaches for engineering smart plant sensors. Nature Nanotechnology, 2019, 14, 541-553.	15.6	337
3	Anionic Cerium Oxide Nanoparticles Protect Plant Photosynthesis from Abiotic Stress by Scavenging Reactive Oxygen Species. ACS Nano, 2017, 11, 11283-11297.	7.3	307
4	It is not all about sodium: revealing tissue specificity and signalling roles of potassium in plant responses to salt stress. Plant and Soil, 2018, 431, 1-17.	1.8	245
5	Nanoparticle Charge and Size Control Foliar Delivery Efficiency to Plant Cells and Organelles. ACS Nano, 2020, 14, 7970-7986.	7.3	204
6	Salt stress sensing and early signalling events in plant roots: Current knowledge and hypothesis. Plant Science, 2015, 241, 109-119.	1.7	189
7	Plant salt tolerance and Na+ sensing and transport. Crop Journal, 2018, 6, 215-225.	2.3	182
8	Cell-Type-Specific H⁺-ATPase Activity in Root Tissues Enables K⁺ Retention and Mediates Acclimation of Barley (<i>Hordeum vulgare</i>) to Salinity Stress. Plant Physiology, 2016, 172, 2445-2458.	2.3	158
9	Hydroxyl radical scavenging by cerium oxide nanoparticles improves <i>Arabidopsis</i> salinity tolerance by enhancing leaf mesophyll potassium retention. Environmental Science: Nano, 2018, 5, 1567-1583.	2.2	147
10	Monitoring Plant Health with Near-Infrared Fluorescent H₂O₂ Nanosensors. Nano Letters, 2020, 20, 2432-2442.	4.5	142
11	K⁺ retention in leaf mesophyll, an overlooked component of salinity tolerance mechanism: A case study for barley. Journal of Integrative Plant Biology, 2015, 57, 171-185.	4.1	132
12	Ability of leaf mesophyll to retain potassium correlates with salinity tolerance in wheat and barley. Physiologia Plantarum, 2013, 149, 515-527.	2.6	113
13	Targeted delivery of nanomaterials with chemical cargoes in plants enabled by a biorecognition motif. Nature Communications, 2020, 11, 2045.	5.8	107
14	Emerging investigator series: molecular mechanisms of plant salinity stress tolerance improvement by seed priming with cerium oxide nanoparticles. Environmental Science: Nano, 2020, 7, 2214-2228.	2.2	97
15	Linking salinity stress tolerance with tissue-specific Na+ sequestration in wheat roots. Frontiers in Plant Science, 2015, 6, 71.	1.7	86
16	Haem oxygenase-1 is involved in salicylic acid-induced alleviation of oxidative stress due to cadmium stress in Medicago sativa. Journal of Experimental Botany, 2012, 63, 5521-5534.	2.4	80
17	Root vacuolar Na⁺ sequestration but not exclusion from uptake correlates with barley salt tolerance. Plant Journal, 2019, 100, 55-67.	2.8	80
18	Na+ extrusion from the cytosol and tissue-specific Na+ sequestration in roots confer differential salt stress tolerance between durum and bread wheat. Journal of Experimental Botany, 2018, 69, 3987-4001.	2.4	73

#	Article	IF	Citations
19	Cerium oxide nanoparticles improve cotton salt tolerance by enabling better ability to maintain cytosolic K+/Na+ ratio. Journal of Nanobiotechnology, 2021, 19, 153.	4.2	71
20	Recent advances in nano-enabled agriculture for improving plant performance. Crop Journal, 2022, 10, 1-12.	2.3	68
21	Endogenous Hydrogen Peroxide Plays a Positive Role in the Upregulation of Heme Oxygenase and Acclimation to Oxidative Stress in Wheat Seedling Leaves. Journal of Integrative Plant Biology, 2009, 51, 951-960.	4.1	67
22	Seed priming with gibberellic acid and melatonin in rapeseed: Consequences for improving yield and seed quality under drought and non-stress conditions. Industrial Crops and Products, 2020, 156, 112850.	2.5	63
23	Cadmium-induced heme oxygenase-1 gene expression is associated with the depletion of glutathione in the roots of Medicago sativa. BioMetals, 2011, 24, 93-103.	1.8	60
24	ROS Homeostasis and Plant Salt Tolerance: Plant Nanobiotechnology Updates. Sustainability, 2021, 13, 3552.	1.6	59
25	The Importance of Clâˆ’ Exclusion and Vacuolar Clâˆ’ Sequestration: Revisiting the Role of Clâˆ’ Transport in Plant Salt Tolerance. Frontiers in Plant Science, 2019, 10, 1418.	1.7	56
26	Nano-enabled agriculture: How do nanoparticles cross barriers in plants?. Plant Communications, 2022, 3, 100346.	3.6	54
27	Maintenance of mesophyll potassium and regulation of plasma membrane H+-ATPase are associated with physiological responses of tea plants to drought and subsequent rehydration. Crop Journal, 2018, 6, 611-620.	2.3	53
28	Durum and Bread Wheat Differ in Their Ability to Retain Potassium in Leaf Mesophyll: Implications for Salinity Stress Tolerance. Plant and Cell Physiology, 2014, 55, 1749-1762.	1.5	48
29	Nanoceria seed priming enhanced salt tolerance in rapeseed through modulating ROS homeostasis and Î±-amylase activities. Journal of Nanobiotechnology, 2021, 19, 276.	4.2	47
30	Standoff Optical Glucose Sensing in Photosynthetic Organisms by a Quantum Dot Fluorescent Probe. ACS Applied Materials & Interfaces, 2018, 10, 28279-28289.	4.0	45
31	Molecular basis of cerium oxide nanoparticle enhancement of rice salt tolerance and yield. Environmental Science: Nano, 2021, 8, 3294-3311.	2.2	36
32	Ca 2+ and CaM are involved in Al 3+ pretreatment-promoted fluoride accumulation in tea plants () Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	2.8	30
33	<i>In Vivo</i> Delivery of Nanoparticles into Plant Leaves. Current Protocols in Chemical Biology, 2017, 9, 269-284.	1.7	28
34	Carbon-Based Nanomaterials for Sustainable Agriculture: Their Application as Light Converters, Nanosensors, and Delivery Tools. Plants, 2022, 11, 511.	1.6	28
35	Mesophyll cellsâ€™ ability to maintain potassium is correlated with drought tolerance in tea (Camellia) Tj ETQq1 1 0.784314 rgBT /Ov	2.8	27
36	Developing and validating a high-throughput assay for salinity tissue tolerance in wheat and barley. Planta, 2015, 242, 847-857.	1.6	26

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37	Chloroplast-generated ROS dominate NaCl⁻induced K⁺efflux in wheat leaf mesophyll. Plant Signaling and Behavior, 2015, 10, e1013793.	1.2	23
38	Plant Salinity Stress Response and Nano-Enabled Plant Salt Tolerance. Frontiers in Plant Science, 2022, 13, 843994.	1.7	22
39	CeO2 nanoparticles improved cucumber salt tolerance is associated with its induced early stimulation on antioxidant system. Chemosphere, 2022, 299, 134474.	4.2	22
40	Anion Channel Inhibitor NPPB-Inhibited Fluoride Accumulation in Tea Plant (Camellia sinensis) Is Related to the Regulation of Ca2+, CaM and Depolarization of Plasma Membrane Potential. International Journal of Molecular Sciences, 2016, 17, 57.	1.8	17
41	Al³⁺ -promoted fluoride accumulation in tea plants (<i>Camellia sinensis</i>) was inhibited by an anion channel inhibitor DIDS. Journal of the Science of Food and Agriculture, 2016, 96, 4224-4230.	1.7	17
42	Catalytic Scavenging of Plant Reactive Oxygen Species In Vivo by Anionic Cerium Oxide Nanoparticles. Journal of Visualized Experiments, 2018, , .	0.2	17
43	Chloride and amino acids are associated with K+-alleviated drought stress in tea (Camellia sinesis). Functional Plant Biology, 2020, 47, 398.	1.1	16
44	CeO₂ Nanoparticles Seed Priming Increases Salicylic Acid Level and ROS Scavenging Ability to Improve Rapeseed Salt Tolerance. Global Challenges, 2022, 6, .	1.8	16
45	CeO₂ nanoparticles modulate Cuâ€“Zn superoxide dismutase and lipoxygenase-IV isozyme activities to alleviate membrane oxidative damage to improve rapeseed salt tolerance. Environmental Science: Nano, 2022, 9, 1116-1132.	2.2	13
46	Presence of CP4-EPSPS Component in Roundup Ready Soybean-Derived Food Products. International Journal of Molecular Sciences, 2012, 13, 1919-1932.	1.8	12
47	The Combination of Quantitative PCR and Western Blot Detecting CP4â€EPSPS Component in Roundup Ready Soy Plant Tissues and Commercial Soyâ€Related Foodstuffs. Journal of Food Science, 2012, 77, C603-8.	1.5	12
48	Root plasma membrane H+-ATPase is involved in low pH-inhibited nitrogen accumulation in tea plants (Camellia sinensis L.). Plant Growth Regulation, 2018, 86, 423-432.	1.8	12
49	Editorial: New Insights Into Salinity Sensing, Signaling and Adaptation in Plants. Frontiers in Plant Science, 2020, 11, 604139.	1.7	12
50	Efficient iron plaque formation on tea (<i>Camellia sinensis</i>) roots contributes to acidic stress tolerance. Journal of Integrative Plant Biology, 2019, 61, 155-167.	4.1	7
51	Higher ROS scavenging ability and plasma membrane H⁺â€ATPase activity are associated with potassium retention in drought tolerant tea plants. Journal of Plant Nutrition and Soil Science, 2020, 183, 406-415.	1.1	4
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55	MIFE Technique-based Screening for Mesophyll K+ Retention for Crop Breeding for Salinity Tolerance. Bio-protocol, 2015, 5, .	0.2	2