Zhong-Hua Tang

List of Publications by Year
in descending order

86 papers	1,982 citations	257450 24 h-index	302126 39 g-index
90 all docs	90 docs citations	90 times ranked	2352 citing authors

#	Article	IF	Citations
1	Plant 22-nt siRNAs mediate translational repression and stress adaptation. Nature, 2020, 581, 89-93.	27.8	112
2	Ethylene improves Arabidopsis salt tolerance mainly via retaining K+ in shoots and roots rather than decreasing tissue Na+ content. Environmental and Experimental Botany, 2013, 86, 60-69.	4.2	86
3	The integration of GCâ€“MS and LCâ€“MS to assay the metabolomics profiling in Panax ginseng and Panax quinquefolius reveals a tissue- and species-specific connectivity of primary metabolites and ginsenosides accumulation. Journal of Pharmaceutical and Biomedical Analysis, 2017, 135, 176-185.	2.8	85
4	The improved resistance to high salinity induced by trehalose is associated with ionic regulation and osmotic adjustment in Catharanthus roseus. Plant Physiology and Biochemistry, 2014, 77, 140-148.	5.8	83
5	Ethylene promotes germination of Arabidopsis seed under salinity by decreasing reactive oxygen species: Evidence for the involvement of nitric oxide simulated by sodium nitroprusside. Plant Physiology and Biochemistry, 2013, 73, 211-218.	5.8	73
6	Evolutionary process of saline-water intrusion in Holocene and Late Pleistocene groundwater in southern Laizhou Bay. Science of the Total Environment, 2017, 607-608, 586-599.	8.0	71
7	Ethylene increases accumulation of compatible solutes and decreases oxidative stress to improve plant tolerance to water stress in Arabidopsis. Journal of Plant Biology, 2015, 58, 193-201.	2.1	68
8	Differential Regulation of Anthocyanins in Green and Purple Turnips Revealed by Combined De Novo Transcriptome and Metabolome Analysis. International Journal of Molecular Sciences, 2019, 20, 4387.	4.1	66
9	Exogenous trehalose largely alleviates ionic unbalance, ROS burst, and PCD occurrence induced by high salinity in Arabidopsis seedlings. Frontiers in Plant Science, 2014, 5, 570.	3.6	65
10	Hydrogeochemical Characterization and Suitability Assessment of Groundwater: A Case Study in Central Sindh, Pakistan. International Journal of Environmental Research and Public Health, 2019, 16, 886.	2.6	64
11	Ethylene Improves Root System Development under Cadmium Stress by Modulating Superoxide Anion Concentration in Arabidopsis thaliana. Frontiers in Plant Science, 2017, 8, 253.	3.6	60
12	Differential responses to Cd stress induced by exogenous application of Cu, Zn or Ca in the medicinal plant Catharanthus roseus. Ecotoxicology and Environmental Safety, 2018, 157, 266-275.	6.0	52
13	Gene transcript profiles of the TIA biosynthetic pathway in response to ethylene and copper reveal their interactive role in modulating TIA biosynthesis in Catharanthus roseus. Protoplasma, 2015, 252, 813-824.	2.1	49
14	Combining AHP and genetic algorithms approaches to modify DRASTIC model to assess groundwater vulnerability: a case study from Jianghan Plain, China. Environmental Earth Sciences, 2017, 76, 1.	2.7	48
15	Ethylene Antagonizes Salt-Induced Growth Retardation and Cell Death Process via Transcriptional Controlling of Ethylene-, BAG- and Senescence-Associated Genes in Arabidopsis. Frontiers in Plant Science, 2016, 7, 696.	3.6	45
16	The Combined Effects of Ethylene and MeJA on Metabolic Profiling of Phenolic Compounds in Catharanthus roseus Revealed by Metabolomics Analysis. Frontiers in Physiology, 2016, 7, 217.	2.8	42
17	Comparative Study of Growth, Cadmium Accumulation and Tolerance of Three Chickpea (Cicer) Tj ETQq1 1 0.784314 rgBT /Overlock 10	3.5	41
18	A rapid method for sensitive profiling of bioactive triterpene and flavonoid from Astragalus mongholicus and Astragalus membranaceus by ultra-pressure liquid chromatography with tandem mass spectrometry. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2018, 1085, 110-118.	2.3	39

#	Article	IF	Citations
19	Exogenous ethylene enhanced the cadmium resistance and changed the alkaloid biosynthesis in Catharanthus roseus seedlings. Acta Physiologiae Plantarum, 2017, 39, 1.	2.1	38
20	Ethylene antagonizes the inhibition of germination in Arabidopsis induced by salinity by modulating the concentration of hydrogen peroxide. Acta Physiologiae Plantarum, 2012, 34, 1895-1904.	2.1	35
21	NO Promotes Seed Germination and Seedling Growth Under High Salt May Depend on EIN3 Protein in Arabidopsis. Frontiers in Plant Science, 2015, 6, 1203.	3.6	35
22	An Insight into Abiotic Stress and Influx Tolerance Mechanisms in Plants to Cope in Saline Environments. Biology, 2022, 11, 597.	2.8	32
23	GC-MS Metabolomic Analysis to Reveal the Metabolites and Biological Pathways Involved in the Developmental Stages and Tissue Response of Panax ginseng. Molecules, 2017, 22, 496.	3.8	28
24	Metabolomics Analysis Reveals that Ethylene and Methyl Jasmonate Regulate Different Branch Pathways to Promote the Accumulation of Terpenoid Indole Alkaloids in <i>Catharanthus roseus</i>. Journal of Natural Products, 2018, 81, 335-342.	3.0	28
25	Discrete Fracture Network Modelling in a Naturally Fractured Carbonate Reservoir in the Jingbei Oilfield, China. Energies, 2017, 10, 183.	3.1	27
26	Transcriptomics comparison reveals the diversity of ethylene and methyl-jasmonate in roles of TIA metabolism in Catharanthus roseus. BMC Genomics, 2018, 19, 508.	2.8	27
27	Physiological responses of Catharanthus roseus to different nitrogen forms. Acta Physiologiae Plantarum, 2012, 34, 589-598.	2.1	25
28	UV-B Radiation Largely Promoted the Transformation of Primary Metabolites to Phenols in Astragalus mongholicus Seedlings. Biomolecules, 2020, 10, 504.	4.0	25
29	The impacts of increased nitrate supply on<i>Catharanthus roseus</i>growth and alkaloid accumulations under ultraviolet-B stress. Journal of Plant Interactions, 2014, 9, 640-646.	2.1	23
30	The Different Resistance of Two <i>Astragalus</i> Plants to UVâ€B Stress is Tightly Associated with the Organâ€specific Isoflavone Metabolism. Photochemistry and Photobiology, 2018, 94, 115-125.	2.5	22
31	Ethylene-Induced Vinblastine Accumulation Is Related to Activated Expression of Downstream TIA Pathway Genes in<i>Catharanthus roseus</i>. BioMed Research International, 2016, 2016, 1-8.	1.9	21
32	A Comparative Metabolomics Analysis Reveals the Tissue-Specific Phenolic Profiling in Two Acanthopanax Species. Molecules, 2018, 23, 2078.	3.8	20
33	Multivariate Analysis and Geochemical Signatures of Shallow Groundwater in the Main Urban Area of Chongqing, Southwestern China. Water (Switzerland), 2020, 12, 2833.	2.7	20
34	Alkaloid variations in Catharanthus roseus seedlings treated by different temperatures in short term and long term. Journal of Forestry Research, 2007, 18, 313-315.	3.6	19
35	Twoâ€dimensional flow response to tidal fluctuation in a heterogeneous aquiferâ€aquitard system. Hydrological Processes, 2015, 29, 927-935.	2.6	19
36	Simultaneous determination of six active metabolites in Astragalus mongholicus (Fisch.) Bge. under salt stress by ultra-pressure liquid chromatography with tandem mass spectrometry. SpringerPlus, 2016, 5, 927.	1.2	18

#	Article	IF	Citations
37	Profiling of ginsenosides in the two medicinal Panax herbs based on ultra-performance liquid chromatography-electrospray ionizationâ€"mass spectrometry. SpringerPlus, 2016, 5, 1770.	1.2	17
38	A bZIP transcription factor, CaLMF, mediated light-regulated camptothecin biosynthesis in Camptotheca acuminata. Tree Physiology, 2019, 39, 372-380.	3.1	17
39	Effects of Exogenous Calcium on Adaptive Growth, Photosynthesis, Ion Homeostasis and Phenolics of Gleditsia sinensis Lam. Plants under Salt Stress. Agriculture (Switzerland), 2021, 11, 978.	3.1	17
40	Determination of Alkaloids in<i>Catharanthus roseus</i>and<i>Vinca minor</i>by High-Performance Liquid Chromatographyâ€"Tandem Mass Spectrometry. Analytical Letters, 2016, 49, 1143-1153.	1.8	16
41	Comparison of the global metabolic responses to UV-B radiation between two medicinal Astragalus species: An integrated metabolomics strategy. Environmental and Experimental Botany, 2020, 176, 104094.	4.2	16
42	Variations of vinblastine accumulation and redox state affected by exogenous H2O2 in Catharanthus roseus (L.) G. Don. Plant Growth Regulation, 2009, 57, 15-20.	3.4	15
43	The inhibited seed germination by ABA and MeJA is associated with the disturbance of reserve utilizations in <i>Astragalus membranaceus</i>. Journal of Plant Interactions, 2018, 13, 388-397.	2.1	15
44	Transcriptome and proteome analysis suggest enhanced photosynthesis in tetraploid <i>Liriodendron sino-americanum</i>. Tree Physiology, 2021, 41, 1953-1971.	3.1	14
45	The influence of different forms and concentrations of potassium nutrition on growth and alkaloid metabolism in <i>Catharanthus roseus</i> seedlings. Journal of Plant Interactions, 2014, 9, 370-377.	2.1	13
46	Application of virus-induced gene silencing approach in Camptotheca acuminata. Plant Cell, Tissue and Organ Culture, 2016, 126, 533-540.	2.3	13
47	Light enhanced the biosynthesis of terpenoid indole alkaloids to meet the opening of cotyledons in process of photomorphogenesis of Catharanthus roseus. Plant Growth Regulation, 2018, 84, 617-626.	3.4	13
48	Responses of submarine groundwater to silty-sand coast reclamation: A case study in south of Laizhou Bay, China. Estuarine, Coastal and Shelf Science, 2016, 181, 51-60.	2.1	12
49	Loss-of-function mutation of EIN2 in Arabidopsis exaggerates oxidative stress induced by salinity. Acta Physiologiae Plantarum, 2013, 35, 1319-1328.	2.1	11
50	The specific responses to mechanical wound in leaves and roots of Catharanthus roseus seedlings by metabolomics. Journal of Plant Interactions, 2018, 13, 450-460.	2.1	11
51	Tideâ€induced groundwater head fluctuation in a coastal aquifer system with a submarine outcrop covered by a thin silt layer. Hydrological Processes, 2008, 22, 605-610.	2.6	10
52	Comparative metabolomics of two saline-alkali tolerant plants <i>Suaeda glauca</i> and <i>Puccinellia tenuiflora</i> based on GC-MS platform. Natural Product Research, 2021, 35, 499-502.	1.8	10
53	Correlation of cultivation time of Panax ginseng with metabolic profiles of nine ginsenosides and mRNA expression of genes encoding major biosynthetic enzymes. Acta Physiologiae Plantarum, 2016, 38, 1.	2.1	9
54	Seed metabolite profiling of Vicia species from China via GC-MS. Natural Product Research, 2018, 32, 1863-1866.	1.8	9

#	Article	IF	Citations
55	Arbuscular mycorrhizal fungal diversity is affected by soil salinity and soil nutrients in typical saline-sodic grasslands dominated by Leymus chinensis. Arid Land Research and Management, 2020, 34, 68-82.	1.6	9
56	Comparative analysis of metabolite profiles from Panax herbs in specific tissues and cultivation conditions reveals the strategy of accumulation. Journal of Pharmaceutical and Biomedical Analysis, 2020, 188, 113368.	2.8	9
57	The effects of soil metals on the composition of oil of<i>Paeonia ostii</i>seeds. Journal of Plant Interactions, 2015, 10, 288-295.	2.1	8
58	Differential Metabolite Accumulation in Different Tissues of Gleditsia sinensis under Water Stress and Rehydration Conditions. Forests, 2020, 11, 542.	2.1	7
59	Investigation of bioactivities of <i>Taxus chinensis</i>, <i>Taxus cuspidata</i>, and <i>Taxus Ã— media</i> by gas chromatography-mass spectrometry. Open Life Sciences, 2021, 16, 287-296.	1.4	7
60	A source-sink model explains the difference in the metabolic mechanism of mechanical damage to young and senescing leaves in Catharanthus roseus. BMC Plant Biology, 2021, 21, 154.	3.6	7
61	A comprehensive analysis of transcriptome and phenolic compound profiles suggests the role of flavonoids in cotyledon greening in Catharanthus roseus seedling. Plant Physiology and Biochemistry, 2021, 167, 185-197.	5.8	7
62	A role for Ethylene-Insensitive3 in the regulation of hydrogen peroxide production during seed germination under high salinity in Arabidopsis. Acta Physiologiae Plantarum, 2013, 35, 1701-1706.	2.1	6
63	Metabolomics Analysis Reveals Potential Mechanisms in Bupleurum L. (Apiaceae) Induced by Three Levels of Nitrogen Fertilization. Agronomy, 2021, 11, 2291.	3.0	6
64	Comparative Analysis of Endogenous Hormones and Metabolite Profiles in Early-Spring Flowering Plants and Unflowered Plants Revealing the Strategy of Blossom. Journal of Plant Growth Regulation, 2022, 41, 2421-2434.	5.1	5
65	Comparative study on metabolites and elements of two dominant plant communities in saline-alkali grassland. Environmental and Experimental Botany, 2021, 190, 104587.	4.2	5
66	Ionomic and Metabolomic Analyses Reveal Different Response Mechanisms to Salineâ€"Alkali Stress Between Suaeda salsa Community and Puccinellia tenuiflora Community. Frontiers in Plant Science, 2021, 12, 774284.	3.6	5
67	Visualization of Aqueous Geochemical Data Using Python and <scp>WQChartPy</scp>. Ground Water, 2022, 60, 555-564.	1.3	5
68	Network during light-induced cotyledons opening and greening in <i>Astragalus membranaceus</i>. Journal of Plant Interactions, 2020, 15, 358-370.	2.1	4
69	Cotyledon loss of Astragalus membranaceus hindered seedling establishment through mineral element reallocation and carbohydrate depletion. Plant Physiology and Biochemistry, 2021, 167, 481-491.	5.8	4
70	Changes in Growth and Photosynthetic Parameters and Medicinal Compounds in Eleutherococcus senticosus Harms under Drought Stress. Hortscience: A Publication of the American Society for Hortcultural Science, 2019, 54, 2202-2208.	1.0	4
71	Groundwater response to dual tidal fluctuations in a peninsula or an elongated island. International Journal for Numerical and Analytical Methods in Geomechanics, 2013, 37, 2456-2470.	3.3	3
72	High NaHCO3 stress causes direct injury to Nicotiana tabacum roots. Journal of Plant Interactions, 2014, 9, 56-61.	2.1	3

#	Article	IF	Citations
73	Statistical verification of hydraulic units in a heterogeneous reservoir of the Liaohe Oilfield. Journal of Earth Science (Wuhan, China), 2014, 25, 991-1002.	3.2	3
74	Embryo and seedling morphology of some Trigonella L. species (Fabaceae) and their taxonomic importance. Flora: Morphology, Distribution, Functional Ecology of Plants, 2017, 230, 57-65.	1.2	3
75	Impacts of salinity on CO 2 spatial distribution and storage amount in the formation with different dip angles. Environmental Science and Pollution Research, 2019, 26, 22173-22188.	5.3	3
76	Targeted Development-Dependent Metabolomics Profiling of Bioactive Compounds in <i>Acanthopanax senticosus</i> by UPLC-ESI-MS. Natural Product Communications, 2020, 15, 1934578X2091055.	0.5	3
77	Metabolic differences of two constructive species in saline-alkali grassland in China. BMC Plant Biology, 2022, 22, 53.	3.6	3
78	Study on the Effects of Salt Tolerance Type, Soil Salinity and Soil Characteristics on the Element Composition of Chenopodiaceae Halophytes. Plants, 2022, 11, 1288.	3.5	3
79	Gas chromatography mass spectrometryâ€"based metabolite profiling of two sweet-clover vetches via multivariate data analyses. Botany Letters, 2017, 164, 385-391.	1.4	2
80	Taxonomic implication of embryoÂmicromorphology inÂthe genus Vicia L. (Fabaceae). Plant Systematics and Evolution, 2018, 304, 33-42.	0.9	2
81	Impacts of injection temperature on the CO2 injection capacity in the different sloping formations. Environmental Science and Pollution Research, 2020, 27, 33773-33791.	5.3	2
82	Metabolite Profiles Provide Insights into Underlying Mechanism in Bupleurum (Apiaceae) in Response to Three Levels of Phosphorus Fertilization. Plants, 2022, 11, 752.	3.5	2
83	Risk Evaluation for Production-Injection Recompletion and Sidetrack. Energy Exploration and Exploitation, 2011, 29, 235-249.	2.3	1
84	Influence of Holoparasitic Plant Cuscuta japonica on Growth and Alkaloid Content of Its Host Shrub Catharanthus roseus: A Field Experiment. Arabian Journal for Science and Engineering, 2018, 43, 93-100.	3.0	1
85	Integrated Analyses of Metabolomic Profiling and Associated Gene Expression of Catharanthus roseus Seedling Reveal the Metabolic Alternations of Primary Metabolites and Flavonoids During the Apical Hook Opening Phase. Journal of Plant Growth Regulation, 0, , 1.	5.1	1
86	Stability analysis on roof of rock foundation with Karst cave and karst cave — surrounding rock. , 2011, , .		0