

Vasileios Fotopoulos

List of Publications by Year in descending order

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Version: 2024-02-01

96
papers

7,819
citations

53794

45
h-index

53230

85
g-index

112
all docs

112
docs citations

112
times ranked

7522
citing authors

#	ARTICLE	IF	CITATIONS
1	Reactive Oxygen Species and Antioxidant Defense in Plants under Abiotic Stress: Revisiting the Crucial Role of a Universal Defense Regulator. <i>Antioxidants</i> , 2020, 9, 681.	5.1	1,288
2	Chemical Priming of Plants Against Multiple Abiotic Stresses: Mission Possible?. <i>Trends in Plant Science</i> , 2016, 21, 329-340.	8.8	467
3	The potential implications of reclaimed wastewater reuse for irrigation on the agricultural environment: The knowns and unknowns of the fate of antibiotics and antibiotic resistant bacteria and resistance genes – A review. <i>Water Research</i> , 2017, 123, 448-467.	11.3	400
4	Hydrogen sulfide induces systemic tolerance to salinity and non-ionic osmotic stress in strawberry plants through modification of reactive species biosynthesis and transcriptional regulation of multiple defence pathways. <i>Journal of Experimental Botany</i> , 2013, 64, 1953-1966.	4.8	304
5	Titanium dioxide nanoparticles (TiO ₂ NPs) promote growth and ameliorate salinity stress effects on essential oil profile and biochemical attributes of <i>Dracocephalum moldavica</i> . <i>Scientific Reports</i> , 2020, 10, 912.	3.3	289
6	Oxidative and nitrosative-based signaling and associated post-translational modifications orchestrate the acclimation of citrus plants to salinity stress. <i>Plant Journal</i> , 2012, 72, 585-599.	5.7	255
7	Melatonin systemically ameliorates drought stress-induced damage in <i>Medicago sativa</i> plants by modulating nitro-oxidative homeostasis and proline metabolism. <i>Journal of Pineal Research</i> , 2017, 62, e12401.	7.4	244
8	The Monosaccharide Transporter Gene, AtSTP4, and the Cell-Wall Invertase, AtFru1, Are Induced in Arabidopsis during Infection with the Fungal Biotroph <i>Erysiphe cichoracearum</i> . <i>Plant Physiology</i> , 2003, 132, 821-829.	4.8	222
9	Polyamines reprogram oxidative and nitrosative status and the proteome of citrus plants exposed to salinity stress. <i>Plant, Cell and Environment</i> , 2014, 37, 864-885.	5.7	173
10	Sodium hydrosulfide induces systemic thermotolerance to strawberry plants through transcriptional regulation of heat shock proteins and aquaporin. <i>BMC Plant Biology</i> , 2014, 14, 42.	3.6	165
11	Proline and reactive oxygen/nitrogen species metabolism is involved in the tolerant response of the invasive plant species <i>Ailanthus altissima</i> to drought and salinity. <i>Environmental and Experimental Botany</i> , 2014, 97, 1-10.	4.2	165
12	Ranking of crop plants according to their potential to uptake and accumulate contaminants of emerging concern. <i>Environmental Research</i> , 2019, 170, 422-432.	7.5	127
13	Oxidative and nitrosative signaling in plants. <i>Plant Signaling and Behavior</i> , 2011, 6, 210-214.	2.4	116
14	The nitric oxide donor sodium nitroprusside regulates polyamine and proline metabolism in leaves of <i>Medicago truncatula</i> plants. <i>Free Radical Biology and Medicine</i> , 2013, 56, 172-183.	2.9	116
15	Nitrosative responses in citrus plants exposed to six abiotic stress conditions. <i>Plant Physiology and Biochemistry</i> , 2013, 68, 118-126.	5.8	111
16	Influence of Heavy Metals (Ni, Cu, and Zn) on Nitro-Oxidative Stress Responses, Proteome Regulation and Allergen Production in Basil (<i>Ocimum basilicum</i> L.) Plants. <i>Frontiers in Plant Science</i> , 2018, 9, 862.	3.6	108
17	Unravelling chemical priming machinery in plants: the role of reactive oxygen-nitrogen-sulfur species in abiotic stress tolerance enhancement. <i>Current Opinion in Plant Biology</i> , 2016, 33, 101-107.	7.1	104
18	Altered stomatal dynamics in ascorbate oxidase over-expressing tobacco plants suggest a role for dehydroascorbate signalling. <i>Journal of Experimental Botany</i> , 2008, 59, 729-737.	4.8	103

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19	Effect of drought and rewatering on the cellular status and antioxidant response of <i>Medicago truncatula</i> plants. <i>Plant Signaling and Behavior</i> , 2011, 6, 270-277.	2.4	103
20	Primary Metabolism in Fresh Fruits During Storage. <i>Frontiers in Plant Science</i> , 2020, 11, 80.	3.6	103
21	Over-expression of a tomato N-acetyl-L-glutamate synthase gene (SINAGS1) in <i>Arabidopsis thaliana</i> results in high ornithine levels and increased tolerance in salt and drought stresses. <i>Journal of Experimental Botany</i> , 2009, 60, 1859-1871.	4.8	100
22	Priming against environmental challenges and proteomics in plants: Update and agricultural perspectives. <i>Frontiers in Plant Science</i> , 2012, 3, 216.	3.6	92
23	Effect of ascorbate oxidase over-expression on ascorbate recycling gene expression in response to agents imposing oxidative stress. <i>Journal of Experimental Botany</i> , 2006, 57, 3933-3943.	4.8	87
24	Systemic mitigation of salt stress by hydrogen peroxide and sodium nitroprusside in strawberry plants via transcriptional regulation of enzymatic and non-enzymatic antioxidants. <i>Environmental and Experimental Botany</i> , 2014, 107, 46-54.	4.2	84
25	Roles of sodium hydrosulfide and sodium nitroprusside as priming molecules during drought acclimation in citrus plants. <i>Plant Molecular Biology</i> , 2015, 89, 433-450.	3.9	84
26	Biostimulants for the Regulation of Reactive Oxygen Species Metabolism in Plants under Abiotic Stress. <i>Cells</i> , 2021, 10, 2537.	4.1	84
27	Stress-related phenomena and detoxification mechanisms induced by common pharmaceuticals in alfalfa (<i>Medicago sativa</i> L.) plants. <i>Science of the Total Environment</i> , 2016, 557-558, 652-664.	8.0	77
28	Hydrogen Sulfide: A Potent Tool in Postharvest Fruit Biology and Possible Mechanism of Action. <i>Frontiers in Plant Science</i> , 2018, 9, 1375.	3.6	77
29	Modified multiwall carbon nanotubes display either phytotoxic or growth promoting and stress protecting activity in <i>Ocimum basilicum</i> L. in a concentration-dependent manner. <i>Chemosphere</i> , 2020, 249, 126171.	8.2	76
30	Can the pharmaceutically active compounds released in agroecosystems be considered as emerging plant stressors?. <i>Environment International</i> , 2018, 114, 360-364.	10.0	73
31	Exploring the Potential of Nitric Oxide and Hydrogen Sulfide (NOSH)-Releasing Synthetic Compounds as Novel Priming Agents against Drought Stress in <i>Medicago sativa</i> Plants. <i>Biomolecules</i> , 2020, 10, 120.	4.0	70
32	Antioxidant gene enzyme responses in <i>Medicago truncatula</i> genotypes with different degree of sensitivity to salinity. <i>Physiologia Plantarum</i> , 2011, 141, 201-214.	5.2	69
33	Interaction between hydrogen peroxide and sodium nitroprusside following chemical priming of <i>Ocimum basilicum</i> L. against salt stress. <i>Physiologia Plantarum</i> , 2020, 168, 361-373.	5.2	68
34	Proteomics in the fruit tree science arena: New insights into fruit defense, development, and ripening. <i>Proteomics</i> , 2013, 13, 1871-1884.	2.2	67
35	Facing Climate Change: Biotechnology of Iconic Mediterranean Woody Crops. <i>Frontiers in Plant Science</i> , 2019, 10, 427.	3.6	67
36	<i>Polyamine oxidase 5</i> loss-of-function mutations in <i>Arabidopsis thaliana</i> trigger metabolic and transcriptional reprogramming and promote salt stress tolerance. <i>Plant, Cell and Environment</i> , 2017, 40, 527-542.	5.7	66

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37	Impact of two arbuscular mycorrhizal fungi on <i>Arundo donax</i> L. response to salt stress. <i>Planta</i> , 2018, 247, 573-585.	3.2	62
38	Advanced nanomaterials in agriculture under a changing climate: The way to the future?. <i>Environmental and Experimental Botany</i> , 2020, 176, 104048.	4.2	60
39	Regulation of ascorbate-glutathione cycle by exogenous nitric oxide and hydrogen peroxide in soybean roots under arsenate stress. <i>Journal of Hazardous Materials</i> , 2021, 409, 123686.	12.4	59
40	Hydrogen sulfide and nitric oxide signal integration and plant development under stressed/non-stressed conditions. <i>Physiologia Plantarum</i> , 2020, 168, 239-240.	5.2	58
41	Polyamines: Emerging Hubs Promoting Drought and Salt Stress Tolerance in Plants. <i>Current Molecular Biology Reports</i> , 2017, 3, 28-36.	1.6	55
42	Alternative oxidase 1 (Aox1) gene expression in roots of <i>Medicago truncatula</i> is a genotype-specific component of salt stress tolerance. <i>Journal of Plant Physiology</i> , 2013, 170, 111-114.	3.5	50
43	Interplay between GST and nitric oxide in the early response of soybean (<i>Glycine max</i> L.) plants to salinity stress. <i>Journal of Plant Physiology</i> , 2014, 171, 1740-1747.	3.5	50
44	REVIEW ARTICLE Hydrogen sulphide: a versatile tool for the regulation of growth and defence responses in horticultural crops. <i>Journal of Horticultural Science and Biotechnology</i> , 2015, 90, 227-234.	1.9	49
45	Improvement of plant performance under water deficit with the employment of biological and chemical priming agents. <i>Journal of Agricultural Science</i> , 2018, 156, 680-688.	1.3	49
46	Putrescine-functionalized carbon quantum dot (put-CQD) nanoparticles effectively prime grapevine (<i>Vitis vinifera</i> cv. "Sultana"™) against salt stress. <i>BMC Plant Biology</i> , 2021, 21, 120.	3.6	48
47	Involvement of AsA/DHA and GSH/GSSG Ratios in Gene and Protein Expression and in the Activation of Defence Mechanisms Under Abiotic Stress Conditions. , 2010, , 265-302.		45
48	Transcriptome analysis approaches for the isolation of trichome-specific genes from the medicinal plant <i>Cistus creticus</i> subsp. <i>creticus</i> . <i>Plant Molecular Biology</i> , 2008, 68, 633-651.	3.9	41
49	Global Metabolic Profiling of <i>Arabidopsis</i> Polyamine Oxidase 4 (AtPAO4) Loss-of-Function Mutants Exhibiting Delayed Dark-Induced Senescence. <i>Frontiers in Plant Science</i> , 2016, 7, 173.	3.6	41
50	Metabolic and transcriptional elucidation of the carotenoid biosynthesis pathway in peel and flesh tissue of loquat fruit during on-tree development. <i>BMC Plant Biology</i> , 2017, 17, 102.	3.6	40
51	New approaches to improve crop tolerance to biotic and abiotic stresses. <i>Physiologia Plantarum</i> , 2022, 174, .	5.2	38
52	Altered apoplastic ascorbate redox state in tobacco plants via ascorbate oxidase overexpression results in delayed dark-induced senescence in detached leaves. <i>Plant Physiology and Biochemistry</i> , 2013, 73, 154-160.	5.8	37
53	Enhanced tolerance to salinity stress in grapevine plants through application of carbon quantum dots functionalized by proline. <i>Environmental Science and Pollution Research</i> , 2021, 28, 42877-42890.	5.3	37
54	Uptake and bioaccumulation of three widely prescribed pharmaceutically active compounds in tomato fruits and mediated effects on fruit quality attributes. <i>Science of the Total Environment</i> , 2019, 647, 1169-1178.	8.0	36

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55	Deciphering the Epigenetic Alphabet Involved in Transgenerational Stress Memory in Crops. International Journal of Molecular Sciences, 2021, 22, 7118.	4.1	36
56	Developmental stage- and concentration-specific sodium nitroprusside application results in nitrate reductase regulation and the modification of nitrate metabolism in leaves of <i>Medicago truncatula</i> plants. Plant Signaling and Behavior, 2013, 8, e25479.	2.4	35
57	Investigating Correlation among NDVI Index Derived by Unmanned Aerial Vehicle Photography and Grain Yield under Late Drought Stress Conditions. Procedia Environmental Sciences, 2015, 29, 225-226.	1.4	34
58	Kresoxim-methyl primes <i>Medicago truncatula</i> plants against abiotic stress factors via altered reactive oxygen and nitrogen species signalling leading to downstream transcriptional and metabolic readjustment. Journal of Experimental Botany, 2016, 67, 1259-1274.	4.8	33
59	Hexavalent chromium leads to differential hormetic or damaging effects in alfalfa (<i>Medicago sativa</i>) Tj ETQq1 1 0.784314 rgBT /Overload Environmental Pollution, 2020, 267, 115379.	7.5	33
60	Protective effects of cerium oxide nanoparticles in grapevine (<i>Vitis vinifera</i> L.) cv. Flame Seedless under salt stress conditions. Ecotoxicology and Environmental Safety, 2021, 220, 112402.	6.0	31
61	Exogenous application of melatonin to plants, algae, and harvested products to sustain agricultural productivity and enhance nutritional and nutraceutical value: A meta-analysis. Environmental Research, 2021, 200, 111746.	7.5	29
62	Behaviours of <i>Medicago truncatula</i> – <i>Sinorhizobium meliloti</i> Symbioses Under Osmotic Stress in Relation with the Symbiotic Partner Input: Effects on Nodule Functioning and Protection. Journal of Agronomy and Crop Science, 2009, 195, 225-231.	3.5	28
63	Functionalized Magnetic Nanomaterials in Agricultural Applications. Nanomaterials, 2021, 11, 3106.	4.1	28
64	NO loading: Efficiency assessment of five commonly used application methods of sodium nitroprusside in <i>Medicago truncatula</i> plants. Plant Physiology and Biochemistry, 2012, 60, 115-118.	5.8	26
65	Regulation of On-Tree Vitamin E Biosynthesis in Olive Fruit during Successive Growing Years: The Impact of Fruit Development and Environmental Cues. Frontiers in Plant Science, 2016, 7, 1656.	3.6	24
66	Impact of an arbuscular mycorrhizal fungal inoculum and exogenous MeJA on fenugreek secondary metabolite production under water deficit. Environmental and Experimental Botany, 2020, 176, 104096.	4.2	23
67	Plant Acclimation to Environmental Stress Using Priming Agents. , 2013, , 1-27.		22
68	Melatonin delays dark-induced leaf senescence by inducing <i>miR171b</i> expression in tomato. Journal of Pineal Research, 2022, 72, .	7.4	22
69	Strobilurins as growth-promoting compounds: how Strobilurins regulates Arabidopsis leaf growth. Plant, Cell and Environment, 2017, 40, 1748-1760.	5.7	21
70	Comprehensive approaches reveal key transcripts and metabolites highlighting metabolic diversity among three oriental tobacco varieties. Industrial Crops and Products, 2020, 143, 111933.	5.2	21
71	Uptake of hexavalent chromium by <i>Lactuca sativa</i> and <i>Triticum aestivum</i> plants and mediated effects on their performance, linked with associated public health risks. Chemosphere, 2021, 267, 128912.	8.2	20
72	Establishment of a rapid, inexpensive protocol for extraction of high quality RNA from small amounts of strawberry plant tissues and other recalcitrant fruit crops. Gene, 2014, 537, 169-173.	2.2	19

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73	Temporal analysis reveals a key role for VTE5 in vitamin E biosynthesis in olive fruit during on-tree development. <i>Frontiers in Plant Science</i> , 2015, 6, 871.	3.6	15
74	Involvement of Polyamine Metabolism in the Response of <i>Medicago truncatula</i> Genotypes to Salt Stress. <i>Plants</i> , 2021, 10, 269.	3.5	15
75	Systems biology reveals key tissue-specific metabolic and transcriptional signatures involved in the response of <i>Medicago truncatula</i> plant genotypes to salt stress. <i>Computational and Structural Biotechnology Journal</i> , 2021, 19, 2133-2147.	4.1	15
76	Deciphering the interplay among genotype, maturity stage and low-temperature storage on phytochemical composition and transcript levels of enzymatic antioxidants in <i>Prunus persica</i> fruit. <i>Plant Physiology and Biochemistry</i> , 2017, 119, 189-199.	5.8	14
77	Uptake of hexavalent chromium by tomato (<i>Solanum lycopersicum</i> L.) plants and mediated effects on their physiology and productivity, along with fruit quality and safety. <i>Environmental and Experimental Botany</i> , 2021, 189, 104564.	4.2	13
78	Genotype-dependent regulation of vitamin E biosynthesis in olive fruits as revealed through metabolic and transcriptional profiles. <i>Plant Biology</i> , 2019, 21, 604-614.	3.8	11
79	Application of sodium nitroprusside results in distinct antioxidant gene expression patterns in leaves of mature and senescing <i>Medicago truncatula</i> plants. <i>Protoplasma</i> , 2014, 251, 973-978.	2.1	10
80	Response to stress and allergen production caused by metal ions (Ni, Cu and Zn) in oregano (<i>Origanum vulgare</i> L.) plants. <i>Journal of Biotechnology</i> , 2020, 324, 171-182.	3.8	10
81	Effects of biochar derived from the pyrolysis of either biosolids, manure or spent coffee grounds on the growth, physiology and quality attributes of field-grown lettuce plants. <i>Environmental Technology and Innovation</i> , 2022, 26, 102263.	6.1	10
82	Transgenerational hormesis: What do parents sacrifice for their offspring?. <i>Current Opinion in Environmental Science and Health</i> , 2022, 29, 100380.	4.1	10
83	Two Inexpensive and Non-destructive Techniques to Correct for Smaller-Than-Gasket Leaf Area in Gas Exchange Measurements. <i>Frontiers in Plant Science</i> , 2018, 9, 548.	3.6	9
84	Dissection of the incidence and severity of purple spot physiological disorder in loquat fruit through a physiological and molecular approach. <i>Plant Physiology and Biochemistry</i> , 2020, 155, 980-986.	5.8	9
85	Potential Role of Beneficial Soil Microorganisms in Plant Tolerance to Abiotic Stress Factors. , 2017, , 191-207.		8
86	Spatial response of <i>Medicago truncatula</i> plants to drought and spider mite attack. <i>Plant Physiology and Biochemistry</i> , 2018, 130, 658-662.	5.8	6
87	Linking integrative plant physiology with agronomy to sustain future plant production. <i>Environmental and Experimental Botany</i> , 2020, 178, 104125.	4.2	6
88	Tissue-specific elucidation of lycopene metabolism in commercial tomato fruit cultivars during ripening. <i>Scientia Horticulturae</i> , 2021, 284, 110144.	3.6	6
89	The efficacy of acetylsalicylic acid, spermidine and calcium preharvest foliar spray applications on yield efficiency, incidence of physiological disorders and shelf-life performance of loquat fruit. <i>Scientia Horticulturae</i> , 2021, 289, 110439.	3.6	6
90	Spectrophotometric Quantification of Reactive Oxygen, Nitrogen and Sulfur Species in Plant Samples. <i>Methods in Molecular Biology</i> , 2018, 1694, 155-161.	0.9	5

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91	Safeguarding food security: Hormesis-based plant priming to the rescue. <i>Current Opinion in Environmental Science and Health</i> , 2022, 28, 100374.	4.1	5
92	Immobilized Ag-nanoparticles (INPs) for environmental applications: Elucidation of immobilized silver-induced inhibition mechanism of <i>Escherichia coli</i> . <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 106001.	6.7	4
93	Isolation, cloning and expression analysis of EcPMA1, a putative plasma membrane H ⁺ -ATPase transporter gene from the biotrophic pathogenic fungus <i>Erysiphe cichoracearum</i> . <i>Mycological Research</i> , 2006, 110, 28-37.	2.5	3
94	Never say dye. <i>Plant Signaling and Behavior</i> , 2012, 7, 342-344.	2.4	3
95	The diverse roles of vitamin E, its occurrence and regulation in different plant tissues. <i>Acta Horticulturae</i> , 2020, 125, 113-126.	0.1	2
96	The physiological disorder of purple spot in loquat fruit: etiology, possible causes and mitigation measures. <i>Acta Horticulturae</i> , 2021, , 577-582.	0.2	0