Gianpiero Vigani

List of Publications by Year
in descending order

57 papers	2,686 citations	236925 25 h-index	189892 50 g-index
58 all docs	58 docs citations	58 times ranked	3205 citing authors

#	Article	IF	Citations
1	Improved plant resistance to drought is promoted by the rootâ€associated microbiome as a water stressâ€dependent trait. Environmental Microbiology, 2015, 17, 316-331.	3.8	449
2	A Drought Resistance-Promoting Microbiome Is Selected by Root System under Desert Farming. PLoS ONE, 2012, 7, e48479.	2.5	400
3	Rhizospheric organic compounds in the soilâ€“microorganismâ€“plant system: their role in iron availability. European Journal of Soil Science, 2014, 65, 629-642.	3.9	189
4	Signals from chloroplasts and mitochondria for iron homeostasis regulation. Trends in Plant Science, 2013, 18, 305-311.	8.8	102
5	Phosphorus and iron deficiencies induce a metabolic reprogramming and affect the exudation traits of the woody plant<i>Fragaria</i>Ã—<i>ananassa</i>. Journal of Experimental Botany, 2015, 66, 6483-6495.	4.8	94
6	Iron deficiency affects nitrogen metabolism in cucumber (Cucumis sativusL.) plants. BMC Plant Biology, 2012, 12, 189.	3.6	91
7	Are drought-resistance promoting bacteria cross-compatible with different plant models?. Plant Signaling and Behavior, 2013, 8, e26741.	2.4	90
8	Iron availability affects the function of mitochondria in cucumber roots. New Phytologist, 2009, 182, 127-136.	7.3	85
9	Proteomic characterization of iron deficiency responses in Cucumis sativusL. roots. BMC Plant Biology, 2010, 10, 268.	3.6	78
10	The Essential Cytosolic Iron-Sulfur Protein Nbp35 Acts without Cfd1 Partner in the Green Lineage. Journal of Biological Chemistry, 2008, 283, 35797-35804.	3.4	68
11	Molybdenum and iron mutually impact their homeostasis in cucumber (<i>Cucumis sativus</i>) plants. New Phytologist, 2017, 213, 1222-1241.	7.3	65
12	Discovering the role of mitochondria in the iron deficiency-induced metabolic responses of plants. Journal of Plant Physiology, 2012, 169, 1-11.	3.5	62
13	Root bacterial endophytes confer drought resistance and enhance expression and activity of a vacuolar H⁺â€pumping pyrophosphatase in pepper plants. Environmental Microbiology, 2019, 21, 3212-3228.	3.8	60
14	Essential and Detrimental â€" an Update on Intracellular Iron Trafficking and Homeostasis. Plant and Cell Physiology, 2019, 60, 1420-1439.	3.1	52
15	Disentangling the complexity and diversity of crosstalk between sulfur and other mineral nutrients in cultivated plants. Journal of Experimental Botany, 2019, 70, 4183-4196.	4.8	43
16	Interaction Between Sulfur and Iron in Plants. Frontiers in Plant Science, 2021, 12, 670308.	3.6	41
17	Searching iron sensors in plants by exploring the link among 2â€²-OG-dependent dioxygenases, the iron deficiency response and metabolic adjustments occurring under iron deficiency. Frontiers in Plant Science, 2013, 4, 169.	3.6	38
18	Knocking down mitochondrial iron transporter (MIT) reprograms primary and secondary metabolism in rice plants. Journal of Experimental Botany, 2016, 67, 1357-1368.	4.8	36

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19	Cellular iron homeostasis and metabolism in plant. Frontiers in Plant Science, 2013, 4, 490.	3.6	34
20	AtFer4 ferritin is a determinant of iron homeostasis in Arabidopsis thaliana heterotrophic cells. Journal of Plant Physiology, 2010, 167, 1598-1605.	3.5	31
21	Mitochondrial ferritin is a functional iron-storage protein in cucumber (Cucumis sativus) roots. Frontiers in Plant Science, 2013, 4, 316.	3.6	30
22	Impairment of Respiratory Chain under Nutrient Deficiency in Plants: Does it Play a Role in the Regulation of Iron and Sulfur Responsive Genes?. Frontiers in Plant Science, 2015, 6, 1185.	3.6	30
23	Iron-Requiring Enzymes in the Spotlight of Oxygen. Trends in Plant Science, 2018, 23, 874-882.	8.8	30
24	Cellular Fractionation and Nanoscopic X-Ray Fluorescence Imaging Analyses Reveal Changes of Zinc Distribution in Leaf Cells of Iron-Deficient Plants. Frontiers in Plant Science, 2018, 9, 1112.	3.6	29
25	Effect of Fe deficiency on mitochondrial alternative NAD(P)H dehydrogenases in cucumber roots. Journal of Plant Physiology, 2010, 167, 666-669.	3.5	26
26	Metabolic changes of iron uptake in N2-fixing common bean nodules during iron deficiency. Plant Science, 2011, 181, 151-158.	3.6	26
27	Three-Dimensional Reconstruction, by TEM Tomography, of the Ultrastructural Modifications Occurring in Cucumis sativus L. Mitochondria under Fe Deficiency. PLoS ONE, 2015, 10, e0129141.	2.5	26
28	The fate and the role of mitochondria in Fe-deficient roots of Strategy I plants. Plant Signaling and Behavior, 2009, 4, 375-379.	2.4	25
29	A Smart and Sustainable Future for Viticulture Is Rooted in Soil: How to Face Cu Toxicity. Applied Sciences (Switzerland), 2021, 11, 907.	2.5	25
30	Microplastics make their way into the soil and rhizosphere: A review of the ecological consequences. Rhizosphere, 2022, 22, 100542.	3.0	22
31	Immunolocalization of H+-ATPase and IRT1 enzymes in N2-fixing common bean nodules subjected to iron deficiency. Journal of Plant Physiology, 2012, 169, 242-248.	3.5	21
32	Transcriptional Characterization of a Widely-Used Grapevine Rootstock Genotype under Different Iron-Limited Conditions. Frontiers in Plant Science, 2016, 7, 1994.	3.6	21
33	Analysis of Arabidopsis thaliana atfer4-1, atfh and atfer4-1/atfh mutants uncovers frataxin and ferritin contributions to leaf ionome homeostasis. Plant Physiology and Biochemistry, 2015, 94, 65-72.	5.8	20
34	The Geomagnetic Field Is a Contributing Factor for an Efficient Iron Uptake in Arabidopsis thaliana. Frontiers in Plant Science, 2020, 11, 325.	3.6	19
35	Plastic mulch film residues in agriculture: impact on soil suppressiveness, plant growth, and microbial communities. FEMS Microbiology Ecology, 2022, 98, .	2.7	18
36	Plant iron nutrition: the long road from soil to seeds. Journal of Experimental Botany, 2022, 73, 1809-1824.	4.8	18

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37	Investigating the effect of belowground microbial volatiles on plant nutrient status: perspective and limitations. Journal of Plant Interactions, 2020, 15, 188-195.	2.1	17
38	Mitochondria dysfunctions under Fe and S deficiency: is citric acid involved in the regulation of adaptive responses?. Plant Physiology and Biochemistry, 2018, 126, 86-96.	5.8	16
39	Harnessing the new emerging imaging technologies to uncover the role of Ca²⁺ signalling in plant nutrient homeostasis. Plant, Cell and Environment, 2019, 42, 2885-2901.	5.7	16
40	Arbuscular Mycorrhizal Symbiosis Differentially Affects the Nutritional Status of Two Durum Wheat Genotypes under Drought Conditions. Plants, 2022, 11, 804.	3.5	16
41	Network Topological Analysis for the Identification of Novel Hubs in Plant Nutrition. Frontiers in Plant Science, 2021, 12, 629013.	3.6	14
42	Application of the split root technique to study iron uptake in cucumber plants. Plant Physiology and Biochemistry, 2012, 57, 168-174.	5.8	10
43	WHIRLY2 plays a key role in mitochondria morphology, dynamics, and functionality in Arabidopsis thaliana. Plant Direct, 2020, 4, e00229.	1.9	10
44	cDNA-AFLP analysis reveals a set of new genes differentially expressed in cucumber root apexes in response to iron deficiency. Biologia Plantarum, 2012, 56, 502-508.	1.9	9
45	Formate dehydrogenase takes part in molybdenum and iron homeostasis and affects dark-induced senescence in plants. Journal of Plant Interactions, 2020, 15, 386-397.	2.1	9
46	Fe deficiency differentially affects the vacuolar proton pumps in cucumber and soybean roots. Frontiers in Plant Science, 2013, 4, 326.	3.6	8
47	The maize pentatricopeptide repeat gene empty pericarp4 (emp4) is required for proper cellular development in vegetative tissues. Plant Science, 2014, 223, 25-35.	3.6	8
48	The Geomagnetic Field (GMF) Modulates Nutrient Status and Lipid Metabolism during Arabidopsis thaliana Plant Development. Plants, 2020, 9, 1729.	3.5	8
49	Presence of a Mitovirus Is Associated with Alteration of the Mitochondrial Proteome, as Revealed by Proteinâ€“Protein Interaction (PPI) and Co-Expression Network Models in Chenopodium quinoa Plants. Biology, 2022, 11, 95.	2.8	8
50	Geomagnetic Field (GMF)-Dependent Modulation of Iron-Sulfur Interplay in Arabidopsis thaliana. International Journal of Molecular Sciences, 2021, 22, 10166.	4.1	7
51	Does a Similar Metabolic Reprogramming Occur in Fe-Deficient Plant Cells and Animal Tumor Cells?. Frontiers in Plant Science, 2012, 3, 47.	3.6	6
52	Formate dehydrogenase contributes to the early Arabidopsis thaliana responses against Xanthomonas campestris pv campestris infection. Physiological and Molecular Plant Pathology, 2021, 114, 101633.	2.5	5
53	METAL HOMEOSTASIS IN PLANT MITOCHONDRIA. , 0, , 111-142.		5
54	Modulation of iron responsive gene expression and enzymatic activities in response to changes of the iron nutritional status in _Cucumis sativus_ L.. Nature Precedings, 2010, , .	0.1	4

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55	Modulation of photorespiration and nitrogen recycling in Fe-deficient cucumber leaves. Plant Physiology and Biochemistry, 2020, 154, 142-150.	5.8	4
56	Plasticity, exudation and microbiome-association of the root system of Pellitory-of-the-wall plants grown in environments impaired in iron availability. Plant Physiology and Biochemistry, 2021, 168, 27-42.	5.8	3
57	Temporal Responses to Direct and Induced Iron Deficiency in Parietaria judaica. Agronomy, 2020, 10, 1037.	3.0	2