Jean-FranÃ§ois Briat

List of Publications by Year
in descending order

100 papers	13,850 citations	22099 59 h-index	34900 98 g-index
103 all docs	103 docs citations	103 times ranked	8285 citing authors

#	Article	IF	Citations
1	Reappraisal of the central role of soil nutrient availability in nutrient management in light of recent advances in plant nutrition at crop and molecular levels. European Journal of Agronomy, 2020, 116, 126069.	1.9	51
2	Transcriptional integration of the responses to iron availability in Arabidopsis by the bHLH factor ILR3. New Phytologist, 2019, 223, 1433-1446.	3.5	92
3	Intracellular Distribution of Manganese by the <i>Trans</i>-Golgi Network Transporter NRAMP2 Is Critical for Photosynthesis and Cellular Redox Homeostasis. Plant Cell, 2017, 29, 3068-3084.	3.1	87
4	Accumulation and Secretion of Coumarinolignans and other Coumarins in Arabidopsis thaliana Roots in Response to Iron Deficiency at High pH. Frontiers in Plant Science, 2016, 7, 1711.	1.7	105
5	Spatio-Temporal Imaging of Promoter Activity in Intact Plant Tissues. Methods in Molecular Biology, 2016, 1482, 103-110.	0.4	3
6	Facilitated Fe Nutrition by Phenolic Compounds Excreted by the Arabidopsis ABCG37/PDR9 Transporter Requires the IRT1/FRO2 High-Affinity Root Fe 2+ Transport System. Molecular Plant, 2016, 9, 485-488.	3.9	105
7	Integration of P, S, Fe, and Zn nutrition signals in Arabidopsis thaliana: potential involvement of PHOSPHATE STARVATION RESPONSE 1 (PHR1). Frontiers in Plant Science, 2015, 06, 290.	1.7	189
8	Iron- and Ferritin-Dependent Reactive Oxygen Species Distribution: Impact on Arabidopsis Root System Architecture. Molecular Plant, 2015, 8, 439-453.	3.9	106
9	Iron nutrition, biomass production, and plant product quality. Trends in Plant Science, 2015, 20, 33-40.	4.3	435
10	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.	1.7	30
11	Involvement of the <scp>ABCG</scp>37 transporter in secretion of scopoletin and derivatives by <i>Arabidopsis</i> roots in response to iron deficiency. New Phytologist, 2014, 201, 155-167.	3.5	322
12	Iron around the clock. Plant Science, 2014, 224, 112-119.	1.7	18
13	Signals from chloroplasts and mitochondria for iron homeostasis regulation. Trends in Plant Science, 2013, 18, 305-311.	4.3	102
14	Dissecting plant iron homeostasis under short and long-term iron fluctuations. Biotechnology Advances, 2013, 31, 1292-1307.	6.0	52
15	Changes Induced by Fe Deficiency and Fe Resupply in the Root Protein Profile of a Peach-Almond Hybrid Rootstock. Journal of Proteome Research, 2013, 12, 1162-1172.	1.8	22
16	The iron-sulfur cluster assembly machineries in plants: current knowledge and open questions. Frontiers in Plant Science, 2013, 4, 259.	1.7	160
17	Iron-dependent modifications of the flower transcriptome, proteome, metabolome, and hormonal content in an Arabidopsis ferritin mutant. Journal of Experimental Botany, 2013, 64, 2665-2688.	2.4	52
18	Arabidopsis Ferritin 1 (AtFer1) Gene Regulation by the Phosphate Starvation Response 1 (AtPHR1) Transcription Factor Reveals a Direct Molecular Link between Iron and Phosphate Homeostasis. Journal of Biological Chemistry, 2013, 288, 22670-22680.	1.6	146

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19	Iron and ROS control of the DownSTream mRNA decay pathway is essential for plant fitness. EMBO Journal, 2012, 31, 175-186.	3.5	37
20	GSH threshold requirement for NOâ€mediated expression of the Arabidopsis <i>AtFer1</i> ferritin gene in response to iron. FEBS Letters, 2012, 586, 880-883.	1.3	16
21	The FRD3 Citrate Effluxer Promotes Iron Nutrition between Symplastically Disconnected Tissues throughout <i>Arabidopsis</i> Development. Plant Cell, 2011, 23, 2725-2737.	3.1	147
22	High-Affinity Manganese Uptake by the Metal Transporter NRAMP1 Is Essential for <i>Arabidopsis</i> Growth in Low Manganese Conditions Â. Plant Cell, 2010, 22, 904-917.	3.1	449
23	Ferritins and iron storage in plants. Biochimica Et Biophysica Acta - General Subjects, 2010, 1800, 806-814.	1.1	271
24	New insights into ferritin synthesis and function highlight a link between iron homeostasis and oxidative stress in plants. Annals of Botany, 2010, 105, 811-822.	1.4	267
25	Arsenic tolerance in plants: "Pas de deux" between phytochelatin synthesis and ABCC vacuolar transporters. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 20853-20854.	3.3	52
26	Increased sensitivity to iron deficiency in Arabidopsis thaliana overaccumulating nicotianamine. Journal of Experimental Botany, 2009, 60, 1249-1259.	2.4	66
27	Regulation of Iron Homeostasis in Arabidopsis thaliana by the Clock Regulator Time for Coffee. Journal of Biological Chemistry, 2009, 284, 36271-36281.	1.6	71
28	Post-Translational Regulation of AtFER2 Ferritin in Response to Intracellular Iron Trafficking during Fruit Development in Arabidopsis. Molecular Plant, 2009, 2, 1095-1106.	3.9	64
29	Arabidopsis IRT2 cooperates with the high-affinity iron uptake system to maintain iron homeostasis in root epidermal cells. Planta, 2009, 229, 1171-1179.	1.6	161
30	Iron dynamics in the rhizosphere as a case study for analyzing interactions between soils, plants and microbes. Plant and Soil, 2009, 321, 513-535.	1.8	164
31	Ferritins control interaction between iron homeostasis and oxidative stress in Arabidopsis. Plant Journal, 2009, 57, 400-412.	2.8	416
32	The NRAMP6 metal transporter contributes to cadmium toxicity. Biochemical Journal, 2009, 422, 217-228.	1.7	235
33	Cytokinins negatively regulate the root iron uptake machinery in Arabidopsis through a growthâ€dependent pathway. Plant Journal, 2008, 55, 289-300.	2.8	188
34	The iron-responsive element (IRE)/iron-regulatory protein 1 (IRP1)â€“cytosolic aconitase iron-regulatory switch does not operate in plants. Biochemical Journal, 2007, 405, 523-531.	1.7	68
35	Iron Acquisition from Fe-Pyoverdine by Arabidopsis thaliana. Molecular Plant-Microbe Interactions, 2007, 20, 441-447.	1.4	225
36	Knock-out of ferritin AtFer1 causes earlier onset of age-dependent leaf senescence in Arabidopsis. Plant Physiology and Biochemistry, 2007, 45, 898-907.	2.8	44

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37	Iron utilization and metabolism in plants. Current Opinion in Plant Biology, 2007, 10, 276-282.	3.5	374
38	TcYSL3, a member of the YSL gene family from the hyper-accumulator Thlaspi caerulescens, encodes a nicotianamine-Ni/Fe transporter. Plant Journal, 2006, 49, 1-15.	2.8	190
39	The Soil Type Affects Both the Differential Accumulation of Iron between Wild-type and Ferritin Over-expressor Tobacco Plants and the Sensitivity of their Rhizosphere Bacterioflora to Iron Stress. Plant and Soil, 2006, 283, 73-81.	1.8	19
40	Root-to-shoot long-distance circulation of nicotianamine and nicotianamine-nickel chelates in the metal hyperaccumulator Thlaspi caerulescens. Journal of Experimental Botany, 2006, 57, 4111-4122.	2.4	129
41	An Iron-induced Nitric Oxide Burst Precedes Ubiquitin-dependent Protein Degradation for Arabidopsis AtFer1 Ferritin Gene Expression. Journal of Biological Chemistry, 2006, 281, 23579-23588.	1.6	167
42	Ferritins and Iron Accumulation in Plant Tissues. , 2006, , 341-357.		23
43	Siderophore-mediated upregulation of Arabidopsis ferritin expression in response to Erwinia chrysanthemi infection. Plant Journal, 2005, 43, 262-272.	2.8	136
44	A loss-of-function mutation in AtYSL1 reveals its role in iron and nicotianamine seed loading. Plant Journal, 2005, 44, 769-782.	2.8	238
45	Cadmium availability at different soil pH to transgenic tobacco overexpressing ferritin. Plant and Soil, 2005, 270, 189-197.	1.8	33
46	Cellular and whole organism aspects of iron transport and storage in plants. Topics in Current Genetics, 2005, , 193-213.	0.7	3
47	A Putative Function for the Arabidopsis Feâ€"Phytosiderophore Transporter Homolog AtYSL2 in Fe and Zn Homeostasis. Plant and Cell Physiology, 2005, 46, 762-774.	1.5	163
48	Mitochondrial localization ofArabidopsis thalianaIsu Fe-S scaffold proteins. FEBS Letters, 2005, 579, 1930-1934.	1.3	40
49	Le fer du sol aux produits vÃ©gÃ©taux. Bulletin De L'Academie Nationale De Medecine, 2005, 189, 1609-1621.	0.0	8
50	Iron-Regulated Expression of a Cytosolic Ascorbate Peroxidase Encoded by the APX1 Gene in Arabidopsis Seedlings. Plant Physiology, 2004, 134, 605-613.	2.3	53
51	Nfu2: a scaffold protein required for [4Fe-4S] and ferredoxin iron-sulphur cluster assembly in Arabidopsis chloroplasts. Plant Journal, 2004, 40, 101-111.	2.8	107
52	Differential involvement of the IDRS cis -element in the developmental and environmental regulation of the AtFer1 ferritin gene from Arabidopsis. Planta, 2003, 217, 709-716.	1.6	56
53	Differential expression and evolutionary analysis of the three ferritin genes in the legume plantLupinus luteus. Physiologia Plantarum, 2003, 118, 380-389.	2.6	25
54	IRONTRANSPORT ANDSIGNALING INPLANTS. Annual Review of Plant Biology, 2003, 54, 183-206.	8.6	487

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55	Dual Regulation of the Arabidopsis High-Affinity Root Iron Uptake System by Local and Long-Distance Signals. Plant Physiology, 2003, 132, 796-804.	2.3	262
56	Iron-sulphur cluster assembly in plants: distinct NFU proteins in mitochondria and plastids from Arabidopsis thaliana. Biochemical Journal, 2003, 371, 823-830.	1.7	113
57	The AtNFS2 gene from Arabidopsis thaliana encodes a NifS-like plastidial cysteine desulphurase. Biochemical Journal, 2002, 366, 557-564.	1.7	127
58	IRT1, an Arabidopsis Transporter Essential for Iron Uptake from the Soil and for Plant Growth. Plant Cell, 2002, 14, 1223-1233.	3.1	1,464
59	Structure and differential expression of the four members of the Arabidopsis thaliana ferritin gene family. Biochemical Journal, 2001, 359, 575-582.	1.7	173
60	Arabidopsis IRT2 gene encodes a root-periphery iron transporter. Plant Journal, 2001, 26, 181-189.	2.8	272
61	Ferritin synthesis in response to iron in the Fe-inefficient maize mutant ys3. Plant Physiology and Biochemistry, 2001, 39, 461-465.	2.8	14
62	Maize yellow stripe1 encodes a membrane protein directly involved in Fe(III) uptake. Nature, 2001, 409, 346-349.	13.7	905
63	Characterization of an Iron-dependent Regulatory Sequence Involved in the Transcriptional Control of AtFer1and ZmFer1 Plant Ferritin Genes by Iron. Journal of Biological Chemistry, 2001, 276, 5584-5590.	1.6	121
64	Structure and differential expression of the four members of the Arabidopsis thaliana ferritin gene family. Biochemical Journal, 2001, 359, 575.	1.7	127
65	Involvement of NRAMP1 from Arabidopsis thaliana in iron transport. Biochemical Journal, 2000, 347, 749.	1.7	125
66	Involvement of NRAMP1 from Arabidopsis thaliana in iron transport. Biochemical Journal, 2000, 347, 749-755.	1.7	474
67	Soil-dependent variability of leaf iron accumulation in transgenic tobacco overexpressing ferritin. Plant Physiology and Biochemistry, 2000, 38, 499-506.	2.8	38
68	Differential expression of maize sugar responsive genes in response to iron deficiency. Plant Physiology and Biochemistry, 1999, 37, 759-766.	2.8	10
69	Iron homeostasis alteration in transgenic tobacco overexpressing ferritin. Plant Journal, 1999, 17, 93-97.	2.8	120
70	Plant ferritin and human iron deficiency. Nature Biotechnology, 1999, 17, 621-621.	9.4	10
71	Plant responses to metal toxicity. Comptes Rendus De L'AcadÃ©mie Des Sciences SÃ©rie 3, Sciences De La Vie, 1999, 322, 43-54.	0.8	141
72	Nicotianamine Chelates Both FeIII and FeII. Implications for Metal Transport in Plants1. Plant Physiology, 1999, 119, 1107-1114.	2.3	443

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73	Cloning and characterization of a maize cytochrome-b5 reductase withFe3+-chelate reduction capability. Biochemical Journal, 1999, 338, 499-505.	1.7	21
74	In vitro characterization of iron-phytosiderophore interaction with maize root plasma membranes: evidences for slow association kinetics. Biochimica Et Biophysica Acta - Biomembranes, 1998, 1371, 143-155.	1.4	9
75	Expression cloning in Fe2+ transport defective yeast of a novel maize MYC transcription factor. Gene, 1998, 225, 47-57.	1.0	18
76	Regulation of Ferritin Synthesis and Degradation in Plants. , 1998, , 431-449.		0
77	Inhibition of the Iron-induced ZmFer1 Maize Ferritin Gene Expression by Antioxidants and Serine/Threonine Phosphatase Inhibitors. Journal of Biological Chemistry, 1997, 272, 33319-33326.	1.6	49
78	Iron triggers a rapid induction of ascorbate peroxidase gene expression inBrassica napus. FEBS Letters, 1997, 410, 195-200.	1.3	51
79	Post-transcriptional regulation of plant ferritin accumulation in response to iron as observed in the maize mutantys1. FEBS Letters, 1996, 397, 149-154.	1.3	21
80	Characterization of a tRNALys(CUU) gene located in the opposite orientation upstream of a ZmFer2 ferritin gene in the maize nuclear genome. Gene, 1996, 182, 195-201.	1.0	2
81	Characterization of a ferritin mRNA from Arabidopsis thaliana accumulated in response to iron through an oxidative pathway independent of abscisic acid. Biochemical Journal, 1996, 318, 67-73.	1.7	96
82	Structure and Differential Expression of two Maize Ferritin Genes in Response to Iron and Abscisic Acid. FEBS Journal, 1995, 231, 609-619.	0.2	23
83	Induction of ferritin synthesis in maize leaves by an iron-mediated oxidative stress. Plant Journal, 1995, 8, 443-449.	2.8	90
84	Cellular and molecular aspects of iron metabolism in plants. Biology of the Cell, 1995, 84, 69-81.	0.7	187
85	Structure and Differential Expression of two Maize Ferritin Genes in Response to Iron and Abscisic Acid. FEBS Journal, 1995, 231, 609-619.	0.2	71
86	Structure and composition of ferritin cores from pea seed (Pisum sativum). BBA - Proteins and Proteomics, 1993, 1161, 91-96.	2.1	89
87	Iron induces ferritin synthesis in maize plantlets. Plant Molecular Biology, 1992, 19, 563-575.	2.0	159
88	Structure, function, and evolution of ferritins. Journal of Inorganic Biochemistry, 1992, 47, 161-174.	1.5	306
89	Iron Induction of Ferritin Synthesis in Soybean Cell Suspensions. Plant Physiology, 1989, 90, 586-590.	2.3	65
90	In vitro transcription initiation of the rDNA operon of spinach chloroplast by a highly purified soluble homologous RNA polymerase. Current Genetics, 1987, 11, 259-263.	0.8	32

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91	Structure and transcription of the 5S rRNA gene from spinach chloroplasts. Current Genetics, 1987, 12, 263-269.	0.8	25
92	Sequence organization of the chloroplast ribosomal spacer ofSpinacia oleracea including the 3? end of the 16S rRNA and the 5? end of the 23S rRNA. Plant Molecular Biology, 1987, 10, 53-63.	2.0	12
93	Abortive and productive elongation catalysed by purified spinach chloroplast RNA polymerase. FEBS Journal, 1987, 165, 515-519.	0.2	7
94	The Transcriptionally Active Chromosome (TAC) of the Spinach Chloroplast: Comparison of its Properties after Isolation at High or Low Ionic Strength. , 1987, , 656-657.		0
95	Similarity between the bacterial histone-like protein HU and a protein from spinach chloroplasts. FEBS Letters, 1984, 172, 75-79.	1.3	59
96	Chloroplast RNA polymerase from spinach: purification and DNA-binding proteins. Plant Molecular Biology, 1983, 2, 67-74.	2.0	48
97	Structure and transcription of the spinach chloroplast rDNA leader region. Nucleic Acids Research, 1982, 10, 6865-6878.	6.5	68
98	Influence of the ionic environment on the in vitro transcription of the spinach plastid DNA by a selectively bound RNA-polymerase DNA complex. Nucleic Acids and Protein Synthesis, 1981, 655, 374-382.	1.7	14
99	Properties and Characterization of a Spinach Chloroplast RNA Polymerase Isolated from a Transcriptionally Active DNA-Protein Complex. FEBS Journal, 1980, 111, 503-509.	0.2	47
100	Transcription Activity of a DNA-Protein Complex Isolated from Spinach Plastids. FEBS Journal, 1979, 98, 285-292.	0.2	67