Barry J Shelp

List of Publications by Year in descending order

71	3,507	126907 33	138484 58
papers	citations	h-index	g-index

71	71	71	3028
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Optimizing manganese and iron delivery for contrasting cultivars of subirrigated greenhouse-grown pot chrysanthemums. Canadian Journal of Plant Science, 2022, 102, 823-834.	0.9	2
2	Î³-Aminobutyrate Improves the Postharvest Marketability of Horticultural Commodities: Advances and Prospects. Frontiers in Plant Science, 2022, 13, .	3.6	7
3	Further optimization of macronutrient delivery for subirrigated greenhouse-grown chrysanthemums: calcium and magnesium. Canadian Journal of Plant Science, 2021, 101, 129-134.	0.9	4
4	Î³-Aminobutyrate (GABA) Regulated Plant Defense: Mechanisms and Opportunities. Plants, 2021, 10, 1939.	3.5	53
5	Commercial validation of a modified method for delivering low nitrogen, phosphorus, and potassium inputs to greenhouse-grown subirrigated pot chrysanthemums. Canadian Journal of Plant Science, 2021, 101, 962-966.	0.9	4
6	Strategic timing and rate of phosphorus fertilization improves phosphorus-use efficiency in two contrasting cultivars of subirrigated greenhouse-grown chrysanthemum. Canadian Journal of Plant Science, 2020, 100, 264-275.	0.9	7
7	Does the GABA Shunt Regulate Cytosolic GABA?. Trends in Plant Science, 2020, 25, 422-424.	8.8	32
8	Strategic timing and rate of sulphur fertilization improves sulphur use efficiency in subirrigated greenhouse-grown chrysanthemums. Canadian Journal of Plant Science, 2019, 99, 654-665.	0.9	9
9	Spermine Is a Potent Plant Defense Activator Against Gray Mold Disease on <i>Solanum lycopersicum</i>, <i>Phaseolus vulgaris</i>, and <i>Arabidopsis thaliana</i>. Phytopathology, 2019, 109, 1367-1377.	2.2	19
10	Spermine Differentially Refines Plant Defense Responses Against Biotic and Abiotic Stresses. Frontiers in Plant Science, 2019, 10, 117.	3.6	97
11	Polyamine homeostasis in apple fruit stored under multiple abiotic stresses. Canadian Journal of Plant Science, 2019, 99, 88-92.	0.9	6
12	Metabolic Alterations in Postharvest Pear Fruit As Influenced by 1-Methylcyclopropene and Controlled Atmosphere Storage. Journal of Agricultural and Food Chemistry, 2018, 66, 12989-12999.	5.2	22
13	Targeted quantitative profiling of metabolites and gene transcripts associated with 4-aminobutyrate (GABA) in apple fruit stored under multiple abiotic stresses. Horticulture Research, 2018, 5, 61.	6.3	38
14	1-Methylcyclopropene affects the shelf-life quality of controlled atmosphere stored â€˜Cold Snapâ„¢â€™ pears. Canadian Journal of Plant Science, 2018, 98, 1365-1375.	0.9	4
15	Salinity-regulated expression of genes involved in GABA metabolism and signaling. Botany, 2017, 95, 621-627.	1.0	21
16	Subcellular compartmentation of 4-aminobutyrate (GABA) metabolism in arabidopsis: An update. Plant Signaling and Behavior, 2017, 12, e1322244.	2.4	23
17	4-Aminobutyrate (GABA): a metabolite and signal with practical significance. Botany, 2017, 95, 1015-1032.	1.0	95
18	Impact of 1-methylcyclopropene and controlled atmosphere on the quality of stored â€˜AC Harrow Crispâ€™ pears. Canadian Journal of Plant Science, 2017, , .	0.9	2

#	Article	IF	Citations
19	Ancient Plant Glyoxylate/Succinic Semialdehyde Reductases: GLYR1s Are Cytosolic, Whereas GLYR2s Are Localized to Both Mitochondria and Plastids. Frontiers in Plant Science, 2017, 8, 601.	3.6	15
20	Plant Glyoxylate/Succinic Semialdehyde Reductases: Comparative Biochemical Properties, Function during Chilling Stress, and Subcellular Localization. Frontiers in Plant Science, 2017, 8, 1399.	3.6	21
21	Arabidopsis aldehyde dehydrogenase 10 family members confer salt tolerance through putrescine-derived 4-aminobutyrate (GABA) production. Scientific Reports, 2016, 6, 35115.	3.3	53
22	Plant GABA: Not Just a Metabolite. Trends in Plant Science, 2016, 21, 811-813.	8.8	181
23	Oxidative metabolism is associated with physiological disorders in fruits stored under multiple environmental stresses. Plant Science, 2016, 245, 143-152.	3.6	50
24	Towards an understanding of how phloem amino acid composition shapes elevated CO₂â€induced changes in aphid population dynamics. Ecological Entomology, 2015, 40, 247-257.	2.2	27
25	NAD⁺â€aminoaldehyde dehydrogenase candidates for 4â€aminobutyrate (GABA) and Î²â€alanine production during terminal oxidation of polyamines in apple fruit. FEBS Letters, 2015, 589, 2695-2700.	2.8	19
26	Controlled atmosphere-related injury in â€˜Honeycrispâ€™ apples is associated with Î³-aminobutyrate accumulation. Canadian Journal of Plant Science, 2015, 95, 879-886.	0.9	15
27	Apple Fruit Copper Amine Oxidase Isoforms: Peroxisomal MdAO1 Prefers Diamines as Substrates, Whereas Extracellular MdAO2 Exclusively Utilizes Monoamines. Plant and Cell Physiology, 2015, 56, 137-147.	3.1	36
28	Impact of 1-methylcyclopropene and controlled atmosphere storage on polyamine and 4-aminobutyrate levels in Ã¢â,¬Å“EmpireÃ¢â,¬Â•apple fruit. Frontiers in Plant Science, 2014, 5, 144.	3.6	26
29	Effects of elevated CO2 and 1-methylcyclopropene on storage-related disorders of Ontario-grown Empire apples. Canadian Journal of Plant Science, 2014, 94, 857-865.	0.9	15
30	Impact of : ratio and nitrogen supply on nitrogen remobilization in potted chrysanthemum grown in a subirrigation system. Canadian Journal of Plant Science, 2014, 94, 867-880.	0.9	1
31	Phloem phytochemistry and aphid responses to elevated <scp>CO₂</scp>, nitrogen fertilization and endophyte infection. Agricultural and Forest Entomology, 2014, 16, 273-283.	1.3	25
32	Effect of boron nutrition on American ginseng in field and in nutrient cultures. Journal of Ginseng Research, 2014, 38, 73-77.	5.7	7
33	Impact of various combinations of nitrate and chloride on nitrogen remobilization in potted chrysanthemum grown in a subirrigation system. Canadian Journal of Plant Science, 2014, 94, 643-657.	0.9	10
34	Identification of catalytically important amino acid residues for enzymatic reduction of glyoxylate in plants. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2013, 1834, 2663-2671.	2.3	11
35	Review: Improving nitrogen use efficiency of potted chrysanthemum: Strategies and benefits. Canadian Journal of Plant Science, 2013, 93, 1009-1016.	0.9	19
36	Development and Utilization of High Carotenoid Maize Germplasm: Proof of Concept. Crop Science, 2013, 53, 554-563.	1.8	11

#	ARTICLE	IF	CITATIONS
37	Detoxification of succinate semialdehyde in <i>Arabidopsis</i> glyoxylate reductase and NAD kinase mutants subjected to submergence stress. Botany, 2012, 90, 51-61.	1.0	23
38	Strategies and tools for studying the metabolism and function of Î³-aminobutyrate in plants. II.ÂIntegrated analysis. Botany, 2012, 90, 781-793.	1.0	56
39	Does long-distance GABA signaling via the phloem really occur?. Botany, 2012, 90, 897-900.	1.0	13
40	Hypothesis/review: Contribution of putrescine to 4-aminobutyrate (GABA) production in response to abiotic stress. Plant Science, 2012, 193-194, 130-135.	3.6	247
41	Compartmentation of GABA metabolism raises intriguing questions. Trends in Plant Science, 2012, 17, 57-59.	8.8	119
42	Strategies and tools for studying the metabolism and function of Î³-aminobutyrate in plants. I.ÂPathway structure. Botany, 2012, 90, 651-668.	1.0	84
43	Glyoxylate Reductase Isoform 1 is Localized in the Cytosol and Not Peroxisomes in Plant Cells. Journal of Integrative Plant Biology, 2012, 54, 152-168.	8.5	33
44	Allele Mining of Exotic Maize Germplasm to Enhance Macular Carotenoids. Crop Science, 2011, 51, 991-1004.	1.8	36
45	Nitrogen use efficiency: re-consideration of the bioengineering approach. Botany, 2010, 88, 103-109.	1.0	34
46	Î³-Aminobutyrate transaminase limits the catabolism of Î³-aminobutyrate in cold-stressed Arabidopsis plants: insights from an overexpression mutant. Botany, 2010, 88, 522-527.	1.0	19
47	Biochemical characterization, mitochondrial localization, expression, and potential functions for an Arabidopsis Î³-aminobutyrate transaminase that utilizes both pyruvate and glyoxylate. Journal of Experimental Botany, 2009, 60, 1743-1757.	4.8	104
48	Subcellular localization and expression of multiple tomato Î³-aminobutyrate transaminases that utilize both pyruvate and glyoxylate. Journal of Experimental Botany, 2009, 60, 3255-3267.	4.8	63
49	Role of plant glyoxylate reductases during stress: a hypothesis. Biochemical Journal, 2009, 423, 15-22.	3.7	82
50	Identification and characterization of a plastid-localized Arabidopsis glyoxylate reductase isoform: comparison with a cytosolic isoform and implications for cellular redox homeostasis and aldehyde detoxification. Journal of Experimental Botany, 2008, 59, 2545-2554.	4.8	60
51	Â-Hydroxybutyrate accumulation in Arabidopsis and tobacco plants is a general response to abiotic stress: putative regulation by redox balance and glyoxylate reductase isoforms. Journal of Experimental Botany, 2008, 59, 2555-2564.	4.8	104
52	Characteristics of an Arabidopsis glyoxylate reductase: general biochemical properties and substrate specificity for the recombinant protein, and developmental expression and implications for glyoxylate and succinic semialdehyde metabolism in planta. Canadian Journal of Botany, 2007, 85, 883-895.	1.1	43
53	Kinetic mechanism of a recombinant Arabidopsis glyoxylate reductase: studies of initial velocity, dead-end inhibition and product inhibition. Canadian Journal of Botany, 2007, 85, 896-902.	1.1	15
54	Identification of the full-length Hs1pro-1 coding sequence and preliminary evaluation of soybean cyst nematode resistance in soybean transformed with Hs1pro-1 cDNA. Canadian Journal of Botany, 2007, 85, 437-441.	1.1	22

#	Article	IF	Citations
55	Fluctuations of Î³-aminobutyrate, Î³-hydroxybutyrate, and related amino acids in Arabidopsis leaves as a function of the lightâ€“dark cycle, leaf age, and N stressEditorial decisions for this paper were made by Robert Ireland, Associate Editor, Canadian Journal of Botany.. Canadian Journal of Botany, 2006, 84, 1339-1346.	1.1	34
56	Gamma-aminobutyrate: defense against invertebrate pests?. Trends in Plant Science, 2006, 11, 424-427.	8.8	148
57	GABA controls the level of quorum-sensing signal in Agrobacterium tumefaciens. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 7460-7464.	7.1	235
58	Extracellular Î³-Aminobutyrate Mediates Communication between Plants and Other Organisms. Plant Physiology, 2006, 142, 1350-1352.	4.8	108
59	Title is missing!. Molecular Breeding, 2003, 11, 277-285.	2.1	71
60	Overexpression of glutamate decarboxylase in transgenic tobacco plants deters feeding by phytophagous insect larvae. Journal of Chemical Ecology, 2003, 29, 2177-2182.	1.8	59
61	A Novel Î³-Hydroxybutyrate Dehydrogenase. Journal of Biological Chemistry, 2003, 278, 41552-41556.	3.4	105
62	Biochemical characterization of partially purified gaba:pyruvate transaminase from Nicotiana tabacum. Phytochemistry, 1999, 52, 575-581.	2.9	39
63	Regulation of Î“ -aminobutyric acid synthesis in situ by glutamate availability. Physiologia Plantarum, 1999, 106, 363-369.	5.2	50
64	Identification and characterization of GABA, proline and quaternary ammonium compound transporters fromArabidopsis thaliana. FEBS Letters, 1999, 450, 280-284.	2.8	104
65	Accumulation of Î³-aminobutyric acid in nodulated soybean in response to drought stress. Physiologia Plantarum, 1998, 102, 79-86.	5.2	88
66	Cold-shock-stimulated Î³-aminobutyric acid synthesis is mediated by an increase in cytosolic Ca²⁺, not by an increase in cytosolic H⁺. Canadian Journal of Botany, 1997, 75, 375-382.	1.1	58
67	In situ [14C] Glutamate Metabolism by Developing Soybean Cotyledons II. The Importance of Glutamate Decarboxylation. Journal of Plant Physiology, 1996, 147, 714-720.	3.5	23
68	Gaba shunt in developing soybean seeds is associated with hypoxia. Physiologia Plantarum, 1995, 94, 219-228.	5.2	77
69	Boron mobility in plants. Physiologia Plantarum, 1995, 94, 356-361.	5.2	77
70	In situ [14C]Glutamate Metabolism by Developing Soybean Cotyledons I. Metabolic Routes. Journal of Plant Physiology, 1994, 143, 1-7.	3.5	36
71	The Production and Efflux of 4-Aminobutyrate in Isolated Mesophyll Cells. Plant Physiology, 1992, 99, 659-664.	4.8	51