

Christopher B Watkins

List of Publications by Year in descending order

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111
papers

5,980
citations

53794

45
h-index

79698

73
g-index

112
all docs

112
docs citations

112
times ranked

3779
citing authors

#	ARTICLE	IF	CITATIONS
1	Antioxidant and Antiproliferative Activities of Strawberries. <i>Journal of Agricultural and Food Chemistry</i> , 2003, 51, 6887-6892.	5.2	436
2	Responses of early, mid and late season apple cultivars to postharvest application of 1-methylcyclopropene (1-MCP) under air and controlled atmosphere storage conditions. <i>Postharvest Biology and Technology</i> , 2000, 19, 17-32.	6.0	395
3	Superficial scald, its etiology and control. <i>Postharvest Biology and Technology</i> , 2012, 65, 44-60.	6.0	222
4	Overview of 1-Methylcyclopropene Trials and Uses for Edible Horticultural Crops. <i>Hortscience: A Publication of the American Society for Horticultural Science</i> , 2008, 43, 86-94.	1.0	197
5	Temperature and relative humidity effects on quality, total ascorbic acid, phenolics and flavonoid concentrations, and antioxidant activity of strawberry. <i>Postharvest Biology and Technology</i> , 2007, 45, 349-357.	6.0	180
6	Physical and mechanical changes in strawberry fruit after high carbon dioxide treatments. <i>Postharvest Biology and Technology</i> , 2000, 19, 139-146.	6.0	154
7	Harvest maturity, storage temperature and relative humidity affect fruit quality, antioxidant contents and activity, and inhibition of cell proliferation of strawberry fruit. <i>Postharvest Biology and Technology</i> , 2008, 49, 201-209.	6.0	151
8	Superficial Scald of 'Granny Smith' Apples is Expressed as a Typical Chilling Injury. <i>Journal of the American Society for Horticultural Science</i> , 1995, 120, 88-94.	1.0	123
9	Responses of Horticultural Commodities to High Carbon Dioxide as Related to Modified Atmosphere Packaging. <i>HortTechnology</i> , 2000, 10, 501-506.	0.9	122
10	Cell Wall Changes in Nectarines (<i>Prunus persica</i>). <i>Plant Physiology</i> , 1992, 100, 1203-1210.	4.8	121
11	Firmness and concentrations of acetaldehyde, ethyl acetate and ethanol in strawberries stored in controlled and modified atmospheres. <i>Postharvest Biology and Technology</i> , 1995, 5, 39-50.	6.0	121
12	Metabolic changes in 1-methylcyclopropene (1-MCP)-treated 'Empire' apple fruit during storage. <i>Metabolomics</i> , 2012, 8, 742-753.	3.0	119
13	Arabidopsis AtNAP regulates fruit senescence. <i>Journal of Experimental Botany</i> , 2012, 63, 6139-6147.	4.8	109
14	A GH3-like gene, CcGH3, isolated from <i>Capsicum chinense</i> L. fruit is regulated by auxin and ethylene*. <i>Plant Molecular Biology</i> , 2005, 58, 447-464.	3.9	105
15	Primary Metabolism in Fresh Fruits During Storage. <i>Frontiers in Plant Science</i> , 2020, 11, 80.	3.6	103
16	δ^3 -Aminobutyric acid (GABA) metabolism in CO ₂ treated tomatoes. <i>Postharvest Biology and Technology</i> , 2010, 57, 97-105.	6.0	81
17	Storage temperature, diphenylamine, and pre-storage delay effects on soft scald, soggy breakdown and bitter pit of 'Honeycrisp' apples. <i>Postharvest Biology and Technology</i> , 2004, 32, 213-221.	6.0	78
18	Involvement of ethylene in browning development of controlled atmosphere-stored 'Empire' apple fruit. <i>Postharvest Biology and Technology</i> , 2011, 59, 219-226.	6.0	78

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19	Transcriptomic events associated with internal browning of apple during postharvest storage. BMC Plant Biology, 2014, 14, 328.	3.6	76
20	Inhibition of the ethylene response by 1-MCP in tomato suggests that polyamines are not involved in delaying ripening, but may moderate the rate of ripening or over-ripening. Journal of Experimental Botany, 2006, 57, 3313-3325.	4.8	71
21	Fruit maturity, carbohydrate and mineral content relationships with watercore in 'Fuji' apples. Postharvest Biology and Technology, 1997, 11, 31-38.	6.0	69
22	γ -Aminobutyric acid (GABA) accumulation in four strawberry cultivars in response to elevated CO ₂ storage. Postharvest Biology and Technology, 2010, 57, 92-96.	6.0	69
23	Expression of ripening-related genes in cold-stored tomato fruit. Postharvest Biology and Technology, 2011, 61, 1-14.	6.0	68
24	Effects of Delays between Harvest and 1-Methylcyclopropene Treatment, and Temperature during Treatment, on Ripening of Air-stored and Controlled-atmosphere-stored Apples. Hortscience: A Publication of the American Society for Horticultural Science, 2005, 40, 2096-2101.	1.0	68
25	Pre- and Post-harvest Harpin Treatments of Apples Induce Resistance to Blue Mold. Plant Disease, 2003, 87, 39-44.	1.4	67
26	Reducing External Chilling Injury in Stored 'Hass' Avocados with Dry Heat Treatments. Journal of the American Society for Horticultural Science, 1995, 120, 1050-1056.	1.0	67
27	Active Oxygen Species Metabolism in 'White Angel' and 'Rome Beauty' Apple Selections Resistant and Susceptible to Superficial Scald. Journal of the American Society for Horticultural Science, 1998, 123, 299-304.	1.0	67
28	Cultivar variation in response of strawberry fruit to high carbon dioxide treatments. Journal of the Science of Food and Agriculture, 1999, 79, 886-890.	3.5	66
29	Expression of β -farnesene synthase gene AFS1 in relation to levels of β -farnesene and conjugated trienols in peel tissue of scald-susceptible 'Law Rome' and scald-resistant 'Idared' apple fruit. Postharvest Biology and Technology, 2005, 35, 125-132.	6.0	65
30	Antioxidant contents and activity of 1-methylcyclopropene (1-MCP)-treated 'Empire' apples in air and controlled atmosphere storage. Postharvest Biology and Technology, 2009, 52, 30-37.	6.0	64
31	Rapid 1-methylcyclopropene (1-MCP) treatment and delayed controlled atmosphere storage of apples. Postharvest Biology and Technology, 2012, 69, 24-31.	6.0	64
32	Storage and Handling Effects on a CO ₂ -related Internal Browning Disorder of 'Braeburn' Apples. Hortscience: A Publication of the American Society for Horticultural Science, 1998, 33, 719-722.	1.0	64
33	External carbon dioxide injury and 1-methylcyclopropene (1-MCP) in the 'Empire' apple. Postharvest Biology and Technology, 2008, 48, 92-98.	6.0	62
34	Antioxidant concentrations during chilling injury development in peaches. Postharvest Biology and Technology, 2010, 57, 27-34.	6.0	62
35	Harvest Date and Crop Load Effects on a Carbon Dioxide-related Storage Injury of 'Braeburn' Apple. Hortscience: A Publication of the American Society for Horticultural Science, 1999, 34, 305-309.	1.0	61
36	Reduction of chilling injury in the sweet persimmon 'Fuyu' during storage by dry air heat treatments. Postharvest Biology and Technology, 1997, 11, 155-164.	6.0	59

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37	Controlled-Atmosphere Effects on Postharvest Quality and Antioxidant Activity of Cranberry Fruits. <i>Journal of Agricultural and Food Chemistry</i> , 2002, 50, 5932-5938.	5.2	57
38	Chilling-related cell damage of apple (<i>Malus domestica</i> Borkh.) fruit cortical tissue impacts antioxidant, lipid and phenolic metabolism. <i>Physiologia Plantarum</i> , 2015, 153, 204-220.	5.2	56
39	Non-destructive prediction of soluble solids and dry matter contents in eight apple cultivars using near-infrared spectroscopy. <i>Postharvest Biology and Technology</i> , 2019, 151, 111-118.	6.0	55
40	Peel tissue Δ^5 -farnesene and conjugated trienol concentrations during storage of 'White Angel'-'Rome Beauty' hybrid apple selections susceptible and resistant to superficial scald. <i>Postharvest Biology and Technology</i> , 2000, 20, 231-241.	6.0	53
41	Understanding development and ripening of fruit crops in an 'omics' era. <i>Horticulture Research</i> , 2014, 1, 14034.	6.3	53
42	Quality of 'Buerre Bosc' and 'Doyenne du Comice' pears in relation to harvest date and storage period. <i>Postharvest Biology and Technology</i> , 1997, 10, 29-37.	6.0	52
43	Cell wall metabolism in cold-stored tomato fruit. <i>Postharvest Biology and Technology</i> , 2010, 57, 106-113.	6.0	52
44	Quality and safety of fresh horticultural commodities: Recent advances and future perspectives. <i>Food Packaging and Shelf Life</i> , 2017, 14, 2-11.	7.5	51
45	Meta-analysis of the effects of 1-methylcyclopropene (1-MCP) treatment on climacteric fruit ripening. <i>Horticulture Research</i> , 2020, 7, 208.	6.3	51
46	Harvest Date Effects on Maturity, Quality, and Storage Disorders of 'Honeycrisp' Apples. <i>Hortscience: A Publication of the American Society for Horticultural Science</i> , 2005, 40, 164-169.	1.0	50
47	Delayed response to cold stress is characterized by successive metabolic shifts culminating in apple fruit peel necrosis. <i>BMC Plant Biology</i> , 2017, 17, 77.	3.6	48
48	Firmness and Aroma Composition of Strawberries following Short-term High Carbon Dioxide Treatments. <i>Hortscience: A Publication of the American Society for Horticultural Science</i> , 1995, 30, 303-305.	1.0	48
49	1-Methylcyclopropene Interactions with Diphenylamine on Diphenylamine Degradation, Δ^5 -Farnesene and Conjugated Trienol Concentrations, and Polyphenol Oxidase and Peroxidase Activities in Apple Fruit. <i>Journal of Agricultural and Food Chemistry</i> , 2005, 53, 7565-7570.	5.2	47
50	Maturity and Regional Influences on Watercore Development and its Postharvest Disappearance in 'Fuji' Apples. <i>Journal of the American Society for Horticultural Science</i> , 1999, 124, 166-172.	1.0	41
51	Physiological responses of fresh-cut apple slices under high CO ₂ and low O ₂ partial pressures. <i>Postharvest Biology and Technology</i> , 2001, 22, 197-204.	6.0	39
52	Antioxidant metabolism of 1-methylcyclopropene (1-MCP) treated 'Empire' apples during controlled atmosphere storage. <i>Postharvest Biology and Technology</i> , 2012, 65, 79-91.	6.0	39
53	Superficial Scald, Carbon Dioxide Injury, and Changes of Fermentation Products and Organic Acids in 'Cortland' and 'Law Rome' Apples after High Carbon Dioxide Stress Treatment. <i>Journal of the American Society for Horticultural Science</i> , 2001, 126, 235-241.	1.0	39
54	Intermittent warming effects on superficial scald development of 'Cortland', 'Delicious' and 'Law Rome' apple fruit. <i>Postharvest Biology and Technology</i> , 1999, 16, 203-212.	6.0	38

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55	Fermentative Metabolism and Organic Acid Concentrations in Fruit of Selected Strawberry Cultivars with Different Tolerances to Carbon Dioxide. <i>Journal of the American Society for Horticultural Science</i> , 1999, 124, 696-701.	1.0	38
56	A Quantitative and Qualitative Analysis of Antioxidant Enzymes in Relation to Susceptibility of Apples to Superficial Scald. <i>Journal of the American Society for Horticultural Science</i> , 2003, 128, 910-916.	1.0	38
57	Repeated treatment of apple fruit with 1-methylcyclopropene (1-MCP) prior to controlled atmosphere storage. <i>Postharvest Biology and Technology</i> , 2013, 79, 73-79.	6.0	34
58	Harvest Management of Marshall McIntosh Apples: Effects of AVG, NAA, Ethephon, and Summer Pruning on Preharvest Drop and Fruit Quality. <i>Hortscience: A Publication of the American Society for Horticultural Science</i> , 2003, 38, 1093-1099.	1.0	33
59	Differential fruit gene expression in two strawberry cultivars in response to elevated CO ₂ during storage revealed by a heterologous fruit microarray approach. <i>Postharvest Biology and Technology</i> , 2009, 51, 131-140.	6.0	32
60	Nitrogen Fertilization, Midsummer Trunk Girdling, and AVG Treatments Affect Maturity and Quality of 'Jonagold' Apples. <i>Hortscience: A Publication of the American Society for Horticultural Science</i> , 2004, 39, 493-500.	1.0	32
61	Peroxidase Activity and Superficial Scald Development in Apple Fruit. <i>Journal of Agricultural and Food Chemistry</i> , 2003, 51, 7182-7186.	5.2	30
62	Relationships between starch pattern indices and starch concentrations in four apple cultivars. <i>Postharvest Biology and Technology</i> , 2015, 110, 86-95.	6.0	30
63	A Summary of Physiological Processes or Disorders in Fruits, Vegetables and Ornamental Products that are Delayed or Decreased, Increased, or Unaffected by Application of 1-Methylcyclopropene (1-MCP). <i>Hortscience: A Publication of the American Society for Horticultural Science</i> , 2004, 39, 816D-816.	1.0	29
64	Variations in zonal fruit starch concentrations of apples – a developmental phenomenon or an indication of ripening?. <i>Horticulture Research</i> , 2015, 2, 15047.	6.3	28
65	Gene expression and metabolism preceding soft scald, a chilling injury of 'Honeycrisp' apple fruit. <i>BMC Genomics</i> , 2016, 17, 798.	2.8	28
66	Characterization of Fruit Quality Attributes and Cell Wall Metabolism in 1-Methylcyclopropene (1-MCP)-Treated 'Summer King' and 'Green Ball' Apples During Cold Storage. <i>Frontiers in Plant Science</i> , 2019, 10, 1513.	6.6	27
67	NAC transcription factors SNAC4 and SNAC9 synergistically regulate tomato fruit ripening by affecting expression of genes involved in ethylene and abscisic acid metabolism and signal transduction. <i>Postharvest Biology and Technology</i> , 2021, 178, 111555.	6.0	27
68	Effects of repeated 1-methylcyclopropene (1-MCP) treatments on ripening and superficial scald of 'Cortland' and 'Delicious' apples. <i>Postharvest Biology and Technology</i> , 2013, 78, 48-54.	6.0	25
69	Selection of low-variance expressed <i>Malus x domestica</i> (apple) genes for use as quantitative PCR reference genes (housekeepers). <i>Tree Genetics and Genomes</i> , 2014, 10, 751-759.	1.6	25
70	Internal ethylene concentrations in apple fruit at harvest affect persistence of inhibition of ethylene production after 1-methylcyclopropene treatment. <i>Postharvest Biology and Technology</i> , 2014, 96, 1-6.	6.0	25
71	Preharvest calcium chloride sprays affect ripening of Eksotika papaya fruits during cold storage. <i>Scientia Horticulturae</i> , 2014, 171, 6-13.	3.6	25
72	Antioxidant metabolism in stem and calyx end tissues in relation to flesh browning development during storage of 1-methylcyclopropene treated 'Empire' apples. <i>Postharvest Biology and Technology</i> , 2019, 149, 66-73.	6.0	23

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73	Preharvest aminoethoxyvinylglycine (AVG) and 1-methylcyclopropene (1-MCP) effects on ethylene and starch concentrations of 'Empire'™ and 'McIntosh'™ apples. <i>Scientia Horticulturae</i> , 2019, 244, 134-140.	3.6	23
74	Location and Temperature Effects on Soft Scald in 'Honeycrisp' Apples. <i>Hortscience: A Publication of the American Society for Horticultural Science</i> , 2003, 38, 1153-1155.	1.0	23
75	Fruit Quality, Fermentation Products, and Activities of Associated Enzymes During Elevated CO ₂ Treatment of Strawberry Fruit at High and Low Temperatures. <i>Journal of the American Society for Horticultural Science</i> , 2005, 130, 124-130.	1.0	23
76	Fermentation and malate metabolism in response to elevated CO ₂ concentrations in two strawberry cultivars. <i>Physiologia Plantarum</i> , 2008, 134, 121-133.	5.2	22
77	Flesh browning development of 'Empire'™ apple during a shelf life period after 1-methylcyclopropene (1-MCP) treatment and controlled atmosphere storage. <i>Scientia Horticulturae</i> , 2020, 261, 108938.	3.6	22
78	Isolation and characterization of a lipid transfer protein expressed in ripening fruit of <i>Capsicum chinense</i> . <i>Planta</i> , 2006, 223, 672-683.	3.2	20
79	Antioxidant enzyme activities in strawberry fruit exposed to high carbon dioxide atmospheres during cold storage. <i>Food Chemistry</i> , 2007, 104, 1425-1429.	8.2	20
80	Fruit maturity, controlled atmosphere delays and storage temperature affect fruit quality and incidence of storage disorders of 'Fuji'™ apples. <i>Scientia Horticulturae</i> , 2013, 157, 60-64.	3.6	20
81	Prediction of Bitter Pit in 'Honeycrisp'™ Apples and Best Management Implications. <i>Hortscience: A Publication of the American Society for Horticultural Science</i> , 2017, 52, 1368-1374.	1.0	20
82	Controlled-atmosphere Storage of 'Honeycrisp'™ Apples. <i>Hortscience: A Publication of the American Society for Horticultural Science</i> , 2012, 47, 886-892.	1.0	19
83	Effects of Preharvest and Postharvest Applications of 1-Methylcyclopropene on Fruit Quality and Physiological Disorders of 'Fuji'™ Apples during Storage at Warm and Cold Temperatures. <i>Hortscience: A Publication of the American Society for Horticultural Science</i> , 2019, 54, 1375-1383.	1.0	19
84	Bitter pit and soft scald development during storage of unconditioned and conditioned 'Honeycrisp'™ apples in relation to mineral contents and harvest indices. <i>Postharvest Biology and Technology</i> , 2020, 160, 111044.	6.0	18
85	Physiological disorder development of 'Honeycrisp'™ apples after pre- and post-harvest 1-methylcyclopropene (1-MCP) treatments. <i>Postharvest Biology and Technology</i> , 2021, 182, 111703.	6.0	18
86	An economic analysis of harvest timing to manage the physiological storage disorder firm flesh browning in 'Empire'™ apples. <i>Postharvest Biology and Technology</i> , 2015, 107, 1-8.	6.0	17
87	The effect of 1-MCP on the development of physiological storage disorders in horticultural crops. <i>Stewart Postharvest Review</i> , 0, 3, 1-6.	0.7	17
88	Cultivar and growing region influence efficacy of warming treatments for amelioration of superficial scald development on apples after storage. <i>Postharvest Biology and Technology</i> , 2000, 19, 33-45.	6.0	15
89	Advances in the Use of 1-MCP. <i>Contemporary Food Engineering</i> , 2015, , 117-146.	0.2	15
90	Comparisons of mineral and non-mineral prediction methods for bitter pit in 'Honeycrisp'™ apples. <i>Scientia Horticulturae</i> , 2019, 254, 116-123.	3.6	15

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91	Pre- and post-harvest $\hat{1}^3$ -aminobutyric acid application in relation to fruit quality and physiological disorder development in $\hat{1}^{\text{Honeycrisp}}^{\text{TM}}$ apples. <i>Scientia Horticulturae</i> , 2021, 289, 110431.	3.6	15
92	Peroxidase and polyphenoloxidase activities in relation to flesh browning of stem-end and calyx-end tissues of $\hat{1}^{\text{Empire}}^{\text{TM}}$ apples during controlled atmosphere storage. <i>Postharvest Biology and Technology</i> , 2015, 108, 1-7.	6.0	14
93	1-Methylcyclopropene treatment alters fruit quality attributes and targeted metabolites in $\hat{1}^{\text{Wonhwang}}^{\text{TM}}$ pears during shelf life. <i>Scientia Horticulturae</i> , 2021, 284, 110125.	3.6	13
94	Low oxygen affects the quality of Asiatic hybrid lily bulbs during simulated dry-sale storage and subsequent forcing. <i>Postharvest Biology and Technology</i> , 2004, 32, 223-233.	6.0	11
95	Preharvest 1-methylcyclopropene treatment enhances $\hat{1}^{\text{stress-associated watercore}}^{\text{TM}}$ dissipation in $\hat{1}^{\text{Jonagold}}^{\text{TM}}$ apples. <i>Postharvest Biology and Technology</i> , 2021, 181, 111689.	6.0	11
96	The leaf senescence-promoting transcription factor AtNAP activates its direct target gene $\hat{1}^{\text{CYTOKININ OXIDASE}}^{\text{3}}$ to facilitate senescence processes by degrading cytokinins. <i>Molecular Horticulture</i> , 2021, 1, .	5.8	11
97	Acetaldehyde and Ethanol Metabolism during Conditioning and Air Storage of $\hat{1}^{\text{Honeycrisp}}^{\text{TM}}$ Apples. <i>Hortscience: A Publication of the American Society for Horticultural Science</i> , 2018, 53, 1347-1351.	1.0	10
98	<i>Penicillium expansum</i> Invades Apples Through Stems during Controlled Atmosphere Storage. <i>Plant Health Progress</i> , 2006, 7, 1.	1.4	9
99	Influence of wounding and aging on 1-MCP sorption and metabolism in fresh-cut tissue and cell-free homogenates from apple fruit. <i>Postharvest Biology and Technology</i> , 2012, 67, 52-58.	6.0	8
100	Light, moisture, and atmosphere interact to affect the quality of dry-sale lily bulbs. <i>Postharvest Biology and Technology</i> , 2004, 34, 93-103.	6.0	7
101	Initial Short-term Storage at 33 $\hat{1}^{\text{F}}$ Reduces Physiological Disorder Development in $\hat{1}^{\text{Honeycrisp}}^{\text{TM}}$ Apples. <i>HortTechnology</i> , 2018, 28, 481-484.	0.9	7
102	Cultivar differences in gaseous 1-methylcyclopropene accumulation in whole and fresh-cut apple fruit. <i>Postharvest Biology and Technology</i> , 2014, 93, 130-134.	6.0	6
103	How Postharvest Technologies Affect Quality. , 2005, , 447-491.		6
104	Revealing the Specific Regulations of Brassinolide on Tomato Fruit Chilling Injury by Integrated Multi-Omics. <i>Frontiers in Nutrition</i> , 2021, 8, 769715.	3.7	6
105	1-Methylcyclopropene differentially regulates metabolic responses in the stem-end and calyx-end flesh tissues of $\hat{1}^{\text{Empire}}^{\text{TM}}$ apple during long-term controlled atmosphere storage. <i>Postharvest Biology and Technology</i> , 2022, 192, 112018.	6.0	6
106	1-Methylcyclopropene treatment and bruising of different apple cultivars during storage. <i>Journal of Horticultural Science and Biotechnology</i> , 2009, 84, 143-148.	1.9	5
107	Effects of hypoxic and anoxic controlled atmospheres on carbohydrates, organic acids, and fermentation products in Asiatic hybrid lily bulbs. <i>Postharvest Biology and Technology</i> , 2010, 56, 85-94.	6.0	2
108	Using mixed-effects models to estimate the effect of harvest date and its interactions with post-harvest storage regime on apple fruit firmness. <i>Journal of Horticultural Science and Biotechnology</i> , 2013, 88, 29-36.	1.9	2

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109	Tolerance of dry-sale lily bulbs to elevated carbon dioxide in both ambient and low oxygen atmospheres. <i>Postharvest Biology and Technology</i> , 2006, 41, 198-207.	6.0	1
110	STORAGE TEMPERATURE AND RELATIVE HUMIDITY EFFECTS ON QUALITY AND ANTIOXIDANT COMPOSITION OF STRAWBERRY FRUIT. <i>Hortscience: A Publication of the American Society for Horticultural Science</i> , 2006, 41, 493B-493.	1.0	1
111	Cultivar effects on CA/MA requirements of fruits and vegetables. , 2020, , 23-43.		0