Christopher B Watkins

List of Publications by Year
in descending order

111 papers	5,980 citations	53751 45 h-index	79644 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. Journal of Agricultural and Food Chemistry, 2003, 51, 6887-6892.	2.4	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. Postharvest Biology and Technology, 2000, 19, 17-32.	2.9	395
3	Superficial scald, its etiology and control. Postharvest Biology and Technology, 2012, 65, 44-60.	2.9	222
4	Overview of 1-Methylcyclopropene Trials and Uses for Edible Horticultural Crops. Hortscience: A Publication of the American Society for Hortcultural Science, 2008, 43, 86-94.	0.5	197
5	Temperature and relative humidity effects on quality, total ascorbic acid, phenolics and flavonoid concentrations, and antioxidant activity of strawberry. Postharvest Biology and Technology, 2007, 45, 349-357.	2.9	180
6	Physical and mechanical changes in strawberry fruit after high carbon dioxide treatments. Postharvest Biology and Technology, 2000, 19, 139-146.	2.9	154
7	Harvest maturity, storage temperature and relative humidity affect fruit quality, antioxidant contents and activity, and inhibition of cell proliferation of strawberry fruit. Postharvest Biology and Technology, 2008, 49, 201-209.	2.9	151
8	Superficial Scald of `Granny Smith' Apples is Expressed as a Typical Chilling Injury. Journal of the American Society for Horticultural Science, 1995, 120, 88-94.	0.5	123
9	Responses of Horticultural Commodities to High Carbon Dioxide as Related to Modified Atmosphere Packaging. HortTechnology, 2000, 10, 501-506.	0.5	122
10	Cell Wall Changes in Nectarines (Prunus persica). Plant Physiology, 1992, 100, 1203-1210.	2.3	121
11	Firmness and concentrations of acetaldehyde, ethyl acetate and ethanol in strawberries stored in controlled and modified atmospheres. Postharvest Biology and Technology, 1995, 5, 39-50.	2.9	121
12	Metabolic changes in 1-methylcyclopropene (1-MCP)-treated â€˜Empireâ€™ apple fruit during storage. Metabolomics, 2012, 8, 742-753.	1.4	119
13	Arabidopsis AtNAP regulates fruit senescence. Journal of Experimental Botany, 2012, 63, 6139-6147.	2.4	109
14	A GH3-like gene, CcGH3, isolated from Capsicum chinense L. fruit is regulated by auxin and ethylene*. Plant Molecular Biology, 2005, 58, 447-464.	2.0	105
15	Primary Metabolism in Fresh Fruits During Storage. Frontiers in Plant Science, 2020, 11, 80.	1.7	103
16	Î³-Aminobutyric acid (GABA) metabolism in CO2 treated tomatoes. Postharvest Biology and Technology, 2010, 57, 97-105.	2.9	81
17	Storage temperature, diphenylamine, and pre-storage delay effects on soft scald, soggy breakdown and bitter pit of â€˜Honeycrispâ€™ apples. Postharvest Biology and Technology, 2004, 32, 213-221.	2.9	78
18	Involvement of ethylene in browning development of controlled atmosphere-stored â€˜Empireâ€™ apple fruit. Postharvest Biology and Technology, 2011, 59, 219-226.	2.9	78

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19	Transcriptomic events associated with internal browning of apple during postharvest storage. BMC Plant Biology, 2014, 14, 328.	1.6	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.	2.4	71
21	Fruit maturity, carbohydrate and mineral content relationships with watercore in â€˜Fujiâ€™ apples. Postharvest Biology and Technology, 1997, 11, 31-38.	2.9	69
22	Î³-Aminobutyric acid (GABA) accumulation in four strawberry cultivars in response to elevated CO2 storage. Postharvest Biology and Technology, 2010, 57, 92-96.	2.9	69
23	Expression of ripening-related genes in cold-stored tomato fruit. Postharvest Biology and Technology, 2011, 61, 1-14.	2.9	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 Hortcultural Science, 2005, 40, 2096-2101.	0.5	68
25	Pre- and Post-harvest Harpin Treatments of Apples Induce Resistance to Blue Mold. Plant Disease, 2003, 87, 39-44.	0.7	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.	0.5	67
27	Active Oxygen Species Metabolism in `White Angel' Ã— `Rome Beauty' Apple Selections Resistant and Susceptible to Superficial Scald. Journal of the American Society for Horticultural Science, 1998, 123, 299-304.	0.5	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.	1.7	66
29	Expression of Î±-farnesene synthase gene AFS1 in relation to levels of Î±-farnesene and conjugated trienols in peel tissue of scald-susceptible â€˜Law Romeâ€™ and scald-resistant â€˜Idaredâ€™ apple fruit. Postharvest Biology and Technology, 2005, 35, 125-132.	2.9	65
30	Antioxidant contents and activity of 1-methylcyclopropene (1-MCP)-treated â€˜Empireâ€™ apples in air and controlled atmosphere storage. Postharvest Biology and Technology, 2009, 52, 30-37.	2.9	64
31	Rapid 1-methylcyclopropene (1-MCP) treatment and delayed controlled atmosphere storage of apples. Postharvest Biology and Technology, 2012, 69, 24-31.	2.9	64
32	Storage and Handling Effects on a CO2-related Internal Browning Disorder of `Braeburn' Apples. Hortscience: A Publication of the American Society for Hortcultural Science, 1998, 33, 719-722.	0.5	64
33	External carbon dioxide injury and 1-methylcyclopropene (1-MCP) in the â€˜Empireâ€™ apple. Postharvest Biology and Technology, 2008, 48, 92-98.	2.9	62
34	Antioxidant concentrations during chilling injury development in peaches. Postharvest Biology and Technology, 2010, 57, 27-34.	2.9	62
35	Harvest Date and Crop Load Effects on a Carbon Dioxideâ€“related Storage Injury of `Braeburn' Apple. Hortscience: A Publication of the American Society for Hortcultural Science, 1999, 34, 305-309.	0.5	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.	2.9	59

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37	Controlled-Atmosphere Effects on Postharvest Quality and Antioxidant Activity of Cranberry Fruits. Journal of Agricultural and Food Chemistry, 2002, 50, 5932-5938.	2.4	57
38	Chillingâ€related cell damage of apple (Malus Ã— domestica Borkh.) fruit cortical tissue impacts antioxidant, lipid and phenolic metabolism. Physiologia Plantarum, 2015, 153, 204-220.	2.6	56
39	Non-destructive prediction of soluble solids and dry matter contents in eight apple cultivars using near-infrared spectroscopy. Postharvest Biology and Technology, 2019, 151, 111-118.	2.9	55
40	Peel tissue Î±-farnesene and conjugated trienol concentrations during storage of â€˜White Angelâ€™Ã—â€˜Rome Beautyâ€™ hybrid apple selections susceptible and resistant to superficial scald. Postharvest Biology and Technology, 2000, 20, 231-241.	2.9	53
41	Understanding development and ripening of fruit crops in an â€˜omicsâ€™ era. Horticulture Research, 2014, 1, 14034.	2.9	53
42	Quality of â€˜Buerre Boscâ€™ and â€˜Doyenne du Comiceâ€™ pears in relation to harvest date and storage period. Postharvest Biology and Technology, 1997, 10, 29-37.	2.9	52
43	Cell wall metabolism in cold-stored tomato fruit. Postharvest Biology and Technology, 2010, 57, 106-113.	2.9	52
44	Quality and safety of fresh horticultural commodities: Recent advances and future perspectives. Food Packaging and Shelf Life, 2017, 14, 2-11.	3.3	51
45	Meta-analysis of the effects of 1-methylcyclopropene (1-MCP) treatment on climacteric fruit ripening. Horticulture Research, 2020, 7, 208.	2.9	51
46	Harvest Date Effects on Maturity, Quality, and Storage Disorders of `Honeycrisp' Apples. Hortscience: A Publication of the American Society for Hortcultural Science, 2005, 40, 164-169.	0.5	50
47	Delayed response to cold stress is characterized by successive metabolic shifts culminating in apple fruit peel necrosis. BMC Plant Biology, 2017, 17, 77.	1.6	48
48	Firmness and Aroma Composition of Strawberries following Short-term High Carbon Dioxide Treatments. Hortscience: A Publication of the American Society for Hortcultural Science, 1995, 30, 303-305.	0.5	48
49	1-Methylcyclopropene Interactions with Diphenylamine on Diphenylamine Degradation, Î±-Farnesene and Conjugated Trienol Concentrations, and Polyphenol Oxidase and Peroxidase Activities in Apple Fruit. Journal of Agricultural and Food Chemistry, 2005, 53, 7565-7570.	2.4	47
50	Maturity and Regional Influences on Watercore Development and its Postharvest Disappearance in `Fuji' Apples. Journal of the American Society for Horticultural Science, 1999, 124, 166-172.	0.5	41
51	Physiological responses of fresh-cut apple slices under high CO2 and low O2 partial pressures. Postharvest Biology and Technology, 2001, 22, 197-204.	2.9	39
52	Antioxidant metabolism of 1-methylcyclopropene (1-MCP) treated â€˜Empireâ€™ apples during controlled atmosphere storage. Postharvest Biology and Technology, 2012, 65, 79-91.	2.9	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. Journal of the American Society for Horticultural Science, 2001, 126, 235-241.	0.5	39
54	Intermittent warming effects on superficial scald development of â€˜Cortlandâ€™, â€˜Deliciousâ€™ and â€˜Law Romeâ€™ apple fruit. Postharvest Biology and Technology, 1999, 16, 203-212.	2.9	38

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55	Fermentative Metabolism and Organic Acid Concentrations in Fruit of Selected Strawberry Cultivars with Different Tolerances to Carbon Dioxide. Journal of the American Society for Horticultural Science, 1999, 124, 696-701.	0.5	38
56	A Quantitative and Qualitative Analysis of Antioxidant Enzymes in Relation to Susceptibility of Apples to Superficial Scald. Journal of the American Society for Horticultural Science, 2003, 128, 910-916.	0.5	38
57	Repeated treatment of apple fruit with 1-methylcyclopropene (1-MCP) prior to controlled atmosphere storage. Postharvest Biology and Technology, 2013, 79, 73-79.	2.9	34
58	Harvest Management of Marshall `McIntosh' Apples: Effects of AVG, NAA, Ethephon, and Summer Pruning on Preharvest Drop and Fruit Quality. Hortscience: A Publication of the American Society for Hortcultural Science, 2003, 38, 1093-1099.	0.5	33
59	Differential fruit gene expression in two strawberry cultivars in response to elevated CO2 during storage revealed by a heterologous fruit microarray approach. Postharvest Biology and Technology, 2009, 51, 131-140.	2.9	32
60	Nitrogen Fertilization, Midsummer Trunk Girdling, and AVG Treatments Affect Maturity and Quality of `Jonagold' Apples. Hortscience: A Publication of the American Society for Hortcultural Science, 2004, 39, 493-500.	0.5	32
61	Peroxidase Activity and Superficial Scald Development in Apple Fruit. Journal of Agricultural and Food Chemistry, 2003, 51, 7182-7186.	2.4	30
62	Relationships between starch pattern indices and starch concentrations in four apple cultivars. Postharvest Biology and Technology, 2015, 110, 86-95.	2.9	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). Hortscience: A Publication of the American Society for Hortcultural Science, 2004, 39, 816D-816.	0.5	29
64	Variations in zonal fruit starch concentrations of apples â€“ a developmental phenomenon or an indication of ripening?. Horticulture Research, 2015, 2, 15047.	2.9	28
65	Gene expression and metabolism preceding soft scald, a chilling injury of â€˜Honeycrispâ€™ apple fruit. BMC Genomics, 2016, 17, 798.	1.2	28
66	Characterization of Fruit Quality Attributes and Cell Wall Metabolism in 1-Methylcyclopropene (1-MCP)-Treated â€˜Summer Kingâ€™ and â€˜Green Ballâ€™ Apples During Cold Storage. Frontiers in Plant Science, 2019, 10, 1513.	4.7	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. Postharvest Biology and Technology, 2021, 178, 111555.	2.9	27
68	Effects of repeated 1-methylcyclopropene (1-MCP) treatments on ripening and superficial scald of â€˜Cortlandâ€™ and â€˜Deliciousâ€™ apples. Postharvest Biology and Technology, 2013, 78, 48-54.	2.9	25
69	Selection of low-variance expressed Malus x domestica (apple) genes for use as quantitative PCR reference genes (housekeepers). Tree Genetics and Genomes, 2014, 10, 751-759.	0.6	25
70	Internal ethylene concentrations in apple fruit at harvest affect persistence of inhibition of ethylene production after 1-methylcyclopropene treatment. Postharvest Biology and Technology, 2014, 96, 1-6.	2.9	25
71	Preharvest calcium chloride sprays affect ripening of Eksotika IIâ€™papaya fruits during cold storage. Scientia Horticulturae, 2014, 171, 6-13.	1.7	25
72	Antioxidant metabolism in stem and calyx end tissues in relation to flesh browning development during storage of 1-methylcyclopropene treated â€˜Empireâ€™ apples. Postharvest Biology and Technology, 2019, 149, 66-73.	2.9	23

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73	Preharvest aminoethoxyvinylglycine (AVG) and 1-methylcyclopropene (1-MCP) effects on ethylene and starch concentrations of â€˜Empireâ€™ and â€˜McIntoshâ€™ apples. Scientia Horticulturae, 2019, 244, 134-140.	1.7	23
74	Location and Temperature Effects on Soft Scald in `Honeycrisp' Apples. Hortscience: A Publication of the American Society for Hortcultural Science, 2003, 38, 1153-1155.	0.5	23
75	Fruit Quality, Fermentation Products, and Activities of Associated Enzymes During Elevated CO2 Treatment of Strawberry Fruit at High and Low Temperatures. Journal of the American Society for Horticultural Science, 2005, 130, 124-130.	0.5	23
76	Fermentation and malate metabolism in response to elevated CO₂ concentrations in two strawberry cultivars. Physiologia Plantarum, 2008, 134, 121-133.	2.6	22
77	Flesh browning development of â€˜Empireâ€™ apple during a shelf life period after 1-methylcyclopropene (1-MCP) treatment and controlled atmosphere storage. Scientia Horticulturae, 2020, 261, 108938.	1.7	22
78	Isolation and characterization of a lipid transfer protein expressed in ripening fruit of Capsicum chinense. Planta, 2006, 223, 672-683.	1.6	20
79	Antioxidant enzyme activities in strawberry fruit exposed to high carbon dioxide atmospheres during cold storage. Food Chemistry, 2007, 104, 1425-1429.	4.2	20
80	Fruit maturity, controlled atmosphere delays and storage temperature affect fruit quality and incidence of storage disorders of â€˜Fujiâ€™ apples. Scientia Horticulturae, 2013, 157, 60-64.	1.7	20
81	Prediction of Bitter Pit in â€˜Honeycrispâ€™ Apples and Best Management Implications. Hortscience: A Publication of the American Society for Hortcultural Science, 2017, 52, 1368-1374.	0.5	20
82	Controlled-atmosphere Storage of â€˜Honeycrispâ€™ Apples. Hortscience: A Publication of the American Society for Hortcultural Science, 2012, 47, 886-892.	0.5	19
83	Effects of Preharvest and Postharvest Applications of 1-Methylcyclopropene on Fruit Quality and Physiological Disorders of â€˜Fujiâ€™ Apples during Storage at Warm and Cold Temperatures. Hortscience: A Publication of the American Society for Hortcultural Science, 2019, 54, 1375-1383.	0.5	19
84	Bitter pit and soft scald development during storage of unconditioned and conditioned â€˜Honeycrispâ€™ apples in relation to mineral contents and harvest indices. Postharvest Biology and Technology, 2020, 160, 111044.	2.9	18
85	Physiological disorder development of â€˜Honeycrispâ€™ apples after pre- and post-harvest 1-methycyclopropene (1-MCP) treatments. Postharvest Biology and Technology, 2021, 182, 111703.	2.9	18
86	An economic analysis of harvest timing to manage the physiological storage disorder firm flesh browning in â€˜Empireâ€™ apples. Postharvest Biology and Technology, 2015, 107, 1-8.	2.9	17
87	The effect of 1-MCP on the development of physiological storage disorders in horticultural crops. Stewart Postharvest Review, 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. Postharvest Biology and Technology, 2000, 19, 33-45.	2.9	15
89	Advances in the Use of 1-MCP. Contemporary Food Engineering, 2015, , 117-146.	0.2	15
90	Comparisons of mineral and non-mineral prediction methods for bitter pit in â€˜Honeycrispâ€™ apples. Scientia Horticulturae, 2019, 254, 116-123.	1.7	15

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91	Pre- and post-harvest Î³-aminobutyric acid application in relation to fruit quality and physiological disorder development in â€˜Honeycrispâ€™ apples. Scientia Horticulturae, 2021, 289, 110431.	1.7	15
92	Peroxidase and polyphenoloxidase activities in relation to flesh browning of stem-end and calyx-end tissues of â€˜Empireâ€™ apples during controlled atmosphere storage. Postharvest Biology and Technology, 2015, 108, 1-7.	2.9	14
93	1-Methylcyclopropene treatment alters fruit quality attributes and targeted metabolites in â€˜Wonhwangâ€™ pears during shelf life. Scientia Horticulturae, 2021, 284, 110125.	1.7	13
94	Low oxygen affects the quality of Asiatic hybrid lily bulbs during simulated dry-sale storage and subsequent forcing. Postharvest Biology and Technology, 2004, 32, 223-233.	2.9	11
95	Preharvest 1-methylcyclopropene treatment enhances â€˜stress-associated watercoreâ€™ dissipation in â€˜Jonagoldâ€™ apples. Postharvest Biology and Technology, 2021, 181, 111689.	2.9	11
96	The leaf senescence-promoting transcription factor AtNAP activates its direct target geneÂCYTOKININ OXIDASEÂ3 to facilitate senescence processes by degrading cytokinins. Molecular Horticulture, 2021, 1, .	2.3	11
97	Acetaldehyde and Ethanol Metabolism during Conditioning and Air Storage of â€˜Honeycrispâ€™ Apples. Hortscience: A Publication of the American Society for Hortcultural Science, 2018, 53, 1347-1351.	0.5	10
98	Penicillium expansum Invades Apples Through Stems during Controlled Atmosphere Storage. Plant Health Progress, 2006, 7, 1.	0.8	9
99	Influence of wounding and aging on 1-MCP sorption and metabolism in fresh-cut tissue and cell-free homogenates from apple fruit. Postharvest Biology and Technology, 2012, 67, 52-58.	2.9	8
100	Light, moisture, and atmosphere interact to affect the quality of dry-sale lily bulbs. Postharvest Biology and Technology, 2004, 34, 93-103.	2.9	7
101	Initial Short-term Storage at 33 Â°F Reduces Physiological Disorder Development in â€˜Honeycrispâ€™ Apples. HortTechnology, 2018, 28, 481-484.	0.5	7
102	Cultivar differences in gaseous 1-methylcyclopropene accumulation in whole and fresh-cut apple fruit. Postharvest Biology and Technology, 2014, 93, 130-134.	2.9	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. Frontiers in Nutrition, 2021, 8, 769715.	1.6	6
105	1-Methylcyclopropene differentially regulates metabolic responses in the stem-end and calyx-end flesh tissues of â€˜Empireâ€™ apple during long-term controlled atmosphere storage. Postharvest Biology and Technology, 2022, 192, 112018.	2.9	6
106	1-Methylcyclopropene treatment and bruising of different apple cultivars during storage. Journal of Horticultural Science and Biotechnology, 2009, 84, 143-148.	0.9	5
107	Effects of hypoxic and anoxic controlled atmospheres on carbohydrates, organic acids, and fermentation products in Asiatic hybrid lily bulbs. Postharvest Biology and Technology, 2010, 56, 85-94.	2.9	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. Journal of Horticultural Science and Biotechnology, 2013, 88, 29-36.	0.9	2

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109	Tolerance of dry-sale lily bulbs to elevated carbon dioxide in both ambient and low oxygen atmospheres. Postharvest Biology and Technology, 2006, 41, 198-207.	2.9	1
110	STORAGE TEMPERATURE AND RELATIVE HUMIDITY EFFECTS ON QUALITY AND ANTIOXIDANT COMPOSITION OF STRAWBERRY FRUIT. Hortscience: A Publication of the American Society for Hortcultural Science, 2006, 41, 493B-493.	0.5	1
111	Cultivar effects on CA/MA requirements of fruits and vegetables. , 2020, , 23-43.		0