Jesus Fernando Ayala-Zavala

List of Publications by Citations

133 papers	4,948 citations	35 h-index	68 g-index
141 ext. papers	5,744 ext. citations	3.9 avg, IF	5.65 L-index

#	Paper	IF	Citations
133	The role of dietary fiber in the bioaccessibility and bioavailability of fruit and vegetable antioxidants. *Journal of Food Science*, **2011**, 76, R6-R15	3.4	402
132	Technologies for Extraction and Production of Bioactive Compounds to be Used as Nutraceuticals and Food Ingredients: An Overview. *Comprehensive Reviews in Food Science and Food Safety*, **2013**, 12, 5-23	16.4	399
131	Agro-industrial potential of exotic fruit byproducts as a source of food additives. *Food Research International*, **2011**, 44, 1866-1874	7	387
130	Effect of storage temperatures on antioxidant capacity and aroma compounds in strawberry fruit. *LWT - Food Science and Technology*, **2004**, 37, 687-695	5.4	231
129	Phenolic compounds: their journey after intake. *Food and Function*, **2014**, 5, 189-97	6.1	206
128	Dietary fiber and phenolic compounds as functional ingredients: interaction and possible effect after ingestion. *Food and Function*, **2014**, 5, 1063-72	6.1	150
127	Improving antioxidant capacity of fresh-cut mangoes treated with UV-C. *Journal of Food Science*, **2007**, 72, S197-202	3.4	135
126	Effect of chitosan coating in preventing deterioration and preserving the quality of fresh-cut papaya Maradol *Journal of the Science of Food and Agriculture*, **2009**, 89, 15-23	4.3	131
125	High relative humidity in-package of fresh-cut fruits and vegetables: advantage or disadvantage considering microbiological problems and antimicrobial delivering systems?. *Journal of Food Science* , **2008**, 73, R41-7	3.4	126
124	Effect of maturity stage on the content of fatty acids and antioxidant activity of Hass avocado. *Food Research International*, **2011**, 44, 1231-1237	7	124
123	Microencapsulation of cinnamon leaf (Cinnamomum zeylanicum) and garlic (Allium sativum) oils in cyclodextrin. *Journal of Inclusion Phenomena and Macrocyclic Chemistry*, **2008**, 60, 359-368		124
122	Antioxidant enrichment and antimicrobial protection of fresh-cut fruits using their own byproducts: looking for integral exploitation. *Journal of Food Science*, **2010**, 75, R175-81	3.4	110
121	Oregano Essential Oil as an Antimicrobial and Antioxidant Additive in Food Products. *Critical Reviews in Food Science and Nutrition*, **2016**, 56, 1717-27	11.5	106
120	Enhancing safety and aroma appealing of fresh-cut fruits and vegetables using the antimicrobial and aromatic power of essential oils. *Journal of Food Science*, **2009**, 74, R84-91	3.4	99
119	Edible coatings as encapsulating matrices for bioactive compounds: a review. *Journal of Food Science and Technology*, **2014**, 51, 1674-85	3.3	98
118	Controlled release of antifungal volatiles of thyme essential oil from cyclodextrin capsules. *Journal of Inclusion Phenomena and Macrocyclic Chemistry*, **2010**, 67, 431-441		85
117	Improvement of the antioxidant status of tropical fruits as a secondary response to some postharvest treatments. *Trends in Food Science and Technology*, **2010**, 21, 475-482	15.3	84

116	Methyl jasmonate in conjunction with ethanol treatment increases antioxidant capacity, volatile compounds and postharvest life of strawberry fruit. *European Food Research and Technology*, **2005**, 221, 731-738	3.4	83
115	Cutting Shape and Storage Temperature Affect Overall Quality of Fresh-cut Papaya cv. 'Maradol' *Journal of Food Science*, **2005**, 70, s482-s489	3.4	81
114	Pectin–cinnamon leaf oil coatings add antioxidant and antibacterial properties to fresh-cut peach. *Flavour and Fragrance Journal*, **2013**, 28, 39-45	2.5	75
113	Effect of phenolic compounds on the growth of selected probiotic and pathogenic bacteria. *Letters in Applied Microbiology*, **2018**, 66, 25-31	2.9	73
112	Effect of temperature and modified atmosphere packaging on overall quality of fresh-cut bell peppers. *LWT - Food Science and Technology*, **2004**, 37, 817-826	5.4	69
111	Optimizing the use of garlic oil as antimicrobial agent on fresh-cut tomato through a controlled release system. *Journal of Food Science*, **2010**, 75, M398-405	3.4	68
110	Gallic Acid Content and an Antioxidant Mechanism Are Responsible for the Antiproliferative Activity of 'Ataulfo' Mango Peel on LS180 Cells. *Molecules*, **2018**, 23,	4.8	66
109	Antioxidant activity and diffusion of catechin and epicatechin from antioxidant active films made of poly(L-lactic acid). *Journal of Agricultural and Food Chemistry*, **2012**, 60, 6515-23	5.7	65
108	Bio-preservation of fresh-cut tomatoes using natural antimicrobials. *European Food Research and Technology*, **2008**, 226, 1047-1055	3.4	65
107	Potential of medicinal plants as antimicrobial and antioxidant agents in food industry: a hypothesis. *Journal of Food Science*, **2014**, 79, R129-37	3.4	64
106	Oregano essential oil-pectin edible films as anti-quorum sensing and food antimicrobial agents. *Frontiers in Microbiology*, **2014**, 5, 699	5.7	63
105	Preserving quality of fresh-cut products using safe technologies. *Journal Fur Verbraucherschutz Und Lebensmittelsicherheit*, **2010**, 5, 65-72	2.3	61
104	Carvacrol as potential quorum sensing inhibitor of Pseudomonas aeruginosa and biofilm production on stainless steel surfaces. *Food Control*, **2017**, 75, 255-261	6.2	56
103	Oregano (Lippia graveolens) essential oil added within pectin edible coatings prevents fungal decay and increases the antioxidant capacity of treated tomatoes. *Journal of the Science of Food and Agriculture*, **2016**, 96, 3772-8	4.3	52
102	Antifungal protection and antioxidant enhancement of table grapes treated with emulsions, vapors, and coatings of cinnamon leaf oil. *Postharvest Biology and Technology*, **2013**, 86, 321-328	6.2	49
101	Total Phenolic, Flavonoid, Tomatine, and Tomatidine Contents and Antioxidant and Antimicrobial Activities of Extracts of Tomato Plant. *International Journal of Analytical Chemistry*, **2015**, 2015, 284071	1.4	47
100	Effect of dietary fiber on the bioaccessibility of phenolic compounds of mango, papaya and pineapple fruits by an in vitro digestion model. *Food Science and Technology*, **2016**, 36, 188-194	2	39
99	β-Cyclodextrin inclusion complexes containing clove (Eugenia caryophyllata) and Mexican oregano (Lippia berlandieri) essential oils: Preparation, physicochemical and antimicrobial characterization. *Food Packaging and Shelf Life*, **2017**, 14, 96-101	8.2	36

98	Maintaining antioxidant potential of fresh fruits and vegetables after harvest. *Critical Reviews in Food Science and Nutrition*, **2015**, 55, 806-22	11.5	35
97	Genotypic variation in tomatoes affecting processing and antioxidant attributes. *Critical Reviews in Food Science and Nutrition*, **2015**, 55, 1819-35	11.5	33
96	Quercetin reduces adhesion and inhibits biofilm development by Listeria monocytogenes by reducing the amount of extracellular proteins. *Food Control*, **2018**, 90, 266-273	6.2	32
95	Effect of free and microencapsulated thyme essential oil on quality attributes of minimally processed lettuce. *Postharvest Biology and Technology*, **2018**, 145, 125-133	6.2	31
94	Antibacterial and antioxidant properties of grape stem extract applied as disinfectant in fresh leafy vegetables. *Journal of Food Science and Technology*, **2017**, 54, 3192-3200	3.3	30
93	Effect of edible coatings on bioactive compounds and antioxidant capacity of tomatoes at different maturity stages. *Journal of Food Science and Technology*, **2014**, 51, 2706-12	3.3	30
92	Low fluence pulsed light enhanced phytochemical content and antioxidant potential of Tommy Atkins mango peel and pulp. *Innovative Food Science and Emerging Technologies*, **2016**, 33, 216-224	6.8	27
91	Combination of Cymbopogon citratus and Allium cepa essential oils increased antibacterial activity in leafy vegetables. *Journal of the Science of Food and Agriculture*, **2017**, 97, 2166-2173	4.3	26
90	Effect of Edible Coatings, Storage Time and Maturity Stage on Overall Quality of Tomato Fruits. *American Journal of Agricultural and Biological Science*, **2011**, 6, 162-171	1.7	25
89	Antimicrobial activity and thermal stability of rosemary essential oil: cyclodextrin capsules applied in tomato juice. *LWT - Food Science and Technology*, **2019**, 111, 837-845	5.4	24
88	Carvacrol inhibits biofilm formation and production of extracellular polymeric substances of Pectobacterium carotovorum subsp. carotovorum. *Food Control*, **2018**, 89, 210-218	6.2	24
87	Antimicrobial Properties of Teas and Their Extracts in vitro. *Critical Reviews in Food Science and Nutrition*, **2016**, 56, 1428-39	11.5	22
86	Individual and Combined Coatings of Chitosan and Carnauba Wax with Oregano Essential Oil to Avoid Water Loss and Microbial Decay of Fresh Cucumber. *Coatings*, **2020**, 10, 614	2.9	21
85	Galactomannan-carnauba wax coating improves the antioxidant status and reduces chilling injury of Paluma guava. *Postharvest Biology and Technology*, **2019**, 149, 9-17	6.2	19
84	Virulence of Pseudomonas aeruginosa exposed to carvacrol: alterations of the Quorum sensing at enzymatic and gene levels. *Journal of Cell Communication and Signaling*, **2019**, 13, 531-537	5.2	18
83	Antimicrobial, antioxidant, and sensorial impacts of oregano and rosemary essential oils over broccoli florets. *Journal of Food Processing and Preservation*, **2019**, 43, e13889	2.1	17
82	Mechanism for the inhibition of apple juice enzymatic browning by Palo Fierro (desert ironweed) honey extract and other natural compounds. *LWT - Food Science and Technology*, **2011**, 44, 269-276	5.4	17
81	Comparison of Single and Combined Use of Catechin, Protocatechuic, and Vanillic Acids as Antioxidant and Antibacterial Agents against Uropathogenic at Planktonic and Biofilm Levels. *Molecules*, **2018**, 23,	4.8	16

80	Phenolic extracts from grape stems inhibit Listeria monocytogenes motility and adhesion to food contact surfaces. *Journal of Adhesion Science and Technology*, **2018**, 32, 889-907	2	15
79	Biological activities of Agave by-products and their possible applications in food and pharmaceuticals. *Journal of the Science of Food and Agriculture*, **2018**, 98, 2461-2474	4.3	15
78	Synergistic mode of action of catechin, vanillic and protocatechuic acids to inhibit the adhesion of uropathogenic Escherichia coli on silicone surfaces. *Journal of Applied Microbiology*, **2020**, 128, 387-400	4.7	15
77	Gallotannins are uncompetitive inhibitors of pancreatic lipase activity. *Biophysical Chemistry*, **2020**, 264, 106409	3.5	14
76	Antibrowning and antimicrobial effects of onion essential oil to preserve the quality of cut potatoes. *Acta Alimentaria*, **2014**, 43, 640-649	1	14
75	Antioxidant and antifungal potential of methanol extracts of Phellinus spp. from Sonora, Mexico. *Revista Iberoamericana De Micologia*, **2012**, 29, 132-8	1.6	13
74	NUEVO ACERCAMIENTO A LA INTERACCIN DEL REACTIVO DE FOLIN-CIOCALTEU CON AZCARES DURANTE LA CUANTIFICACIN DE POLIFENOLES TOTALES. *TIP Revista Especializada En Ciencias Qumico-Biolgicas*, **2017**, 20, 23-28		12
73	Quercetin repressed the stress response factor (sigB) and virulence genes (prfA, actA, inlA, and inlC), lower the adhesion, and biofilm development of L. monocytogenes. *Food Microbiology*, **2020**, 87, 103377	6	12
72	Nanotechnology Tools to Achieve Food Safety **2014**, 341-353		11
71	PROTECCIN ANTIFNGICA Y ENRIQUECIMIENTO ANTIOXIDANTE DE FRESA CON ACEITE ESENCIAL DE HOJA DE CANELA. *Revista Fitotecnia Mexicana*, **2013**, 36, 217	1.2	11
70	Antioxidant Enrichment and Antimicrobial Protection of Fresh-Cut Mango Applying Bioactive Extracts from Their Seeds By-Products. *Food and Nutrition Sciences (Print)*, **2013**, 04, 197-203	0.4	11
69	Antioxidant and antimicrobial activity of extract on overall quality and shelf life of pork patties stored under refrigeration. *Journal of Food Science and Technology*, **2018**, 55, 4413-4423	3.3	11
68	Formulation and characterization of an optimized functional beverage from hibiscus (L.) and green tea (L.). *Food Science and Technology International*, **2019**, 25, 547-561	2.6	10
67	Washing, Peeling and Cutting of Fresh-Cut Fruits and Vegetables. *Food Engineering Series*, **2015**, 57-78	0.5	9
66	Inhibition of Glucosyltransferase Activity and Glucan Production as an Antibiofilm Mechanism of Lemongrass Essential Oil against O157:H7. *Antibiotics*, **2020**, 9,	4.9	9
65	Lime (Citrus aurantifolia) Oils **2016**, 531-537		9
64	Antioxidant Capacity and Bioaccessibility of Synergic Mango (cv. Ataulfo) Peel Phenolic Compounds in Edible Coatings Applied to Fresh-Cut Papaya. *Food and Nutrition Sciences (Print)*, **2015**, 06, 365-373	0.4	8
63	Health Benefits of Mango By-products **2020**, 159-191		8

62	Effects of ripening on the in vitro antioxidant capacity and bioaccessibility of mango cv. 'Ataulfo' phenolics. *Journal of Food Science and Technology*, **2019**, 56, 2073-2082	3.3	7
61	Quorum sensing interruption as a tool to control virulence of plant pathogenic bacteria. *Physiological and Molecular Plant Pathology*, **2019**, 106, 281-291	2.6	7
60	Sanitation of fresh green asparagus and green onions inoculated with Salmonella. *Czech Journal of Food Sciences*, **2009**, 27, 454-462	1.3	7
59	Nanofibers of gelatin and polivinyl-alcohol-chitosan for wound dressing application: fabrication and characterization. *Polimeros*, **2020**, 30,	1.6	7
58	Combinational Approaches for Antimicrobial Packaging: Pectin and Cinnamon Leaf Oil **2016**, 609-617		7
57	Onion (Allium cepa) Essential Oils **2016**, 617-623		7
56	Technologies in Fresh-Cut Fruit and Vegetables. *Food Engineering Series*, **2015**, 79-103	0.5	6
55	Combination of ultraviolet light-C and clove essential oil to inactivate Salmonella Typhimurium biofilms on stainless steel. *Journal of Food Safety*, **2020**, 40, e12788	2	6
54	Peroxyacetic Acid **2012**, 215-223		6
53	Plant Essential Oils as Antifungal Treatments on the Postharvest of Fruit and Vegetables **2013**, 429-446		6
52	Fresh-cut orange treated with its own seed by-products presented higher antioxidant capacity and lower microbial growth. *International Journal of Postharvest Technology and Innovation*, **2013**, 3, 13	0.3	6
51	Optimization of total anthocyanin content and antioxidant activity of a Hibiscus sabdariffa infusion using response surface methodology. *Biotecnia*, **2019**, 21, 114-122	1.5	6
50	Chlorine121-133		6
49	Fiber and phenolic compounds contribution to the hepatoprotective effects of mango diets in rats fed high cholesterol/sodium cholate. *Phytotherapy Research*, **2019**, 33, 2996-3007	6.7	5
48	New Technologies to Preserve Quality of Fresh-Cut Produce. *Food Engineering Series*, **2008**, 105-115	0.5	5
47	Supplementing corn chips with mango cv. Ataulfo peel improves their sensory acceptability and phenolic profile, and decreases in vitro dialyzed glucose. *Journal of Food Processing and Preservation*, **2020**, 44, e14954	2.1	5
46	Oregano (Origanum spp.) Oils **2016**, 625-631		5
45	AVG and GA3 prevent preharvest fruit drop and enhance postharvest quality of 'BRS 189' cashew. *Scientia Horticulturae*, **2019**, 257, 108771	4.1	4

44	Postharvest physicochemical changes in mutant (dg, og c, and rin) and non-mutant tomatoes. *Acta Physiologiae Plantarum*, **2015**, 37, 1	2.6	4
43	Using Sensory Evaluation to Determine the Highest Acceptable Concentration of Mango Seed Extract as Antibacterial and Antioxidant Agent in Fresh-Cut Mango. *Foods*, **2018**, 7,	4.9	4
42	Using natural antimicrobials to enhance the safety and quality of fresh and processed fruits and vegetables **2015**, 287-313		4
41	Preharvest nitrogen application affects quality and antioxidant status of two tomato cultivars. *Bragantia*, **2020**, 79, 134-144	1.2	4
40	Bioaccessibility, Bioavailability and Antioxidant Stability of Phenolic Compounds Present in Mango (cv. Ataulfo) Following an in Vitro Digestion and Microbial Fermentation. *FASEB Journal*, **2015**, 29, 606.4	0.9	4
39	Physico-Chemical and Antiadhesive Properties of Poly(Lactic Acid)/Grapevine Cane Extract Films against Food Pathogenic Microorganisms. *Polymers*, **2020**, 12,	4.5	4
38	Contribution of Bioactive Compounds to the Antioxidant Capacity of the Edible Mushroom Neolentinus lepideus. *Chemistry and Biodiversity*, **2021**, 18, e2100085	2.5	4
37	Licorice (Glycyrrhiza glabra Linn.) Oils **2016**, 523-530		4
36	Antioxidant Properties and Industrial Uses of Edible Polyporales. *Journal of Fungi (Basel, Switzerland)*, **2021**, 7,	5.6	4
35	Electrospun and co-electrospun biopolymer nanofibers for skin wounds on diabetic patients: an overview.. *RSC Advances*, **2021**, 11, 15340-15350	3.7	4
34	Impact of Fruit Dietary Fibers and Polyphenols on Modulation of the Human Gut Microbiota **2017**, 405-422		3
33	Fruit Processing Byproducts as a Source of Natural Antifungal Compounds **2013**, 447-461		3
32	Avocado paste from industrial byproducts as an unconventional source of bioactive compounds: characterization, in vitro digestion and in silico interactions of its main phenolics with cholesterol. *Journal of Food Measurement and Characterization*, **2021**, 15, 5460	2.8	3
31	Phenolic compounds from Hass avocado peel are retained in the indigestible fraction after an in vitro gastrointestinal digestion. *Journal of Food Measurement and Characterization*, **2021**, 15, 1982-1990	2.8	3
30	Biological Actions of Phenolic Compounds **2017**, 125-138		2
29	Phytochemical Changes in the Postharvest and Minimal Processing of Fresh Fruits and Vegetables309-339		2
28	Phenolic Profiles and Biological Activities of Extracts from Edible Wild Fruits and. *Foods*, **2021**, 10,	4.9	2
27	Polar fractionation affects the antioxidant properties of methanolic extracts from species of genus Phellinus quel. (higher Basidiomycetes). *International Journal of Medicinal Mushrooms*, **2012**, 14, 563-73	1.3	2

26	Preharvest treatment with 1-aminoethoxyvinylglycine and gibberellin on the quality and physiology of cashew peduncles. *Pesquisa Agropecuaria Brasileira*, **2018**, 53, 684-692	1.8	2
25	Sustainability Challenges Involved in Use of Nanotechnology in the Agrofood Sector **2017**, 343-368		1
24	Nanotechnology Trends in the Food Industry: Recent Developments, Risks, and Regulation **2018**, 113-141		1
23	Chapter 5 Applications of Plant Secondary Metabolites in Food Systems **2016**, 195-232		1
22	Plant-Derived Substances with Antibacterial, Antioxidant, and Flavoring Potential to Formulate Oral Health Care Products. *Biomedicines*, **2021**, 9,	4.8	1
21	Evolution of Phenolic Content, Antioxidant Capacity and Phenolic Profile during Cold Pre-fermentative Maceration and Subsequent Fermentation of Cabernet Sauvignon Red Wine. *South African Journal of Enology and Viticulture*, **2020**, 41,	3.1	1
20	Migraci□ de neutr□filos en larvas de pez cebra expuestos a extractos de sofrito de tomate. *Archivos Latinoamericanos De Nutricion*, **2021**, 70, 216-224	0.1	1
19	Antibiofilm properties of copper (II) and iron (III) complexes with an EDTA-based phenylene macrocycle and its acyclic analogue against food and clinical related pathogens. *Polyhedron*, **2021**, 198, 115076	2.7	1
18	Use of Pectin to Formulate Antimicrobial Packaging **2016**, 675-680		1
17	Garlic (Allium sativum Linn.) Oils **2016**, 441-446		1
16	Maltodextrin encapsulation improves thermal and pH stability of green tea extract catechins. *Journal of Food Processing and Preservation*, **2021**, 45, e15729	2.1	1
15	Relevance of tracking the diversity of Escherichia coli pathotypes to reinforce food safety. *International Journal of Food Microbiology*, **2022**, 374, 109736	5.8	1
14	Fouquieria splendens: A source of phenolic compounds with antioxidant and antiproliferative potential. *European Journal of Integrative Medicine*, **2021**, 49, 102084	1.7	0
13	Phytochemical Compounds Targeting the Quorum Sensing System as a Tool to Reduce the Virulence Factors of Food Pathogenic Bacteria **2020**, 257-276		0
12	Phytochemical Composition and Health Aspects of Peach Products309-324		0
11	Valorization of industrial by-products and waste from tropical fruits for the recovery of bioactive compounds, recent advances, and future perspectives **2021**, 29-46		0
10	Effects of pomegranate juice and pomegranate peel powders on quality properties and antioxidant activity of pork sausage. *Journal of Food Processing and Preservation*, **2021**, 45, e15755	2.1	0
9	Phenolic compounds of Phellinus spp. with antibacterial and antiviral activities.. *Brazilian Journal of Microbiology*, **2022**, 1	2.2	0

List of Publications

8	Phytochemical Changes during Minimal Processing of Fresh Fruits and Vegetables **2017**, 629-648	
7	Using natural antimicrobials to enhance the safety and quality of fresh and processed fruits and vegetables **2015**, 315-325	
6	Oxygen, Carbon Dioxide, and Nitrogen **2016**, 1-16	
5	Active Packaging **2016**, 157-173	
4	Minimal Processing **2019**, 353-374	
3	Characterization of quality indices on storage of puree of mutant (dgandogc) and normal tomatoes. *Acta Alimentaria*, **2014**, 43, 426-436	1
2	Produce Contamination Issues in Mexico and Central America **2014**, 343-364	
1	Co-electrospun nanofibers of gelatin and chitosan□polyvinyl alcohol□ugenol for wound dressing applications. *Polymer Bulletin*,1	2.4