Carine Le Bourvellec

List of Publications by Year
in descending order

59 papers	3,817 citations	172207 29 h-index	128067 60 g-index
62 all docs	62 docs citations	62 times ranked	4020 citing authors

#	Article	IF	Citations
1	Interactions between Polyphenols and Macromolecules: Quantification Methods and Mechanisms. Critical Reviews in Food Science and Nutrition, 2012, 52, 213-248.	5.4	601
2	Lab and pilot-scale ultrasound-assisted water extraction of polyphenols from apple pomace. Journal of Food Engineering, 2012, 111, 73-81.	2.7	262
3	Non-covalent interaction between procyanidins and apple cell wall material. Biochimica Et Biophysica Acta - General Subjects, 2004, 1672, 192-202.	1.1	202
4	Interactions between polyphenols and polysaccharides: Mechanisms and consequences in food processing and digestion. Trends in Food Science and Technology, 2017, 60, 43-51.	7.8	192
5	Towards the industrial production of antioxidants from food processing by-products with ultrasound-assisted extraction. Ultrasonics Sonochemistry, 2010, 17, 1066-1074.	3.8	187
6	Non-covalent interaction between procyanidins and apple cell wall material. Part III: Study on model polysaccharides. Biochimica Et Biophysica Acta - General Subjects, 2005, 1725, 10-18.	1.1	174
7	Interactions between cell wall polysaccharides and polyphenols: Effect of molecular internal structure. Comprehensive Reviews in Food Science and Food Safety, 2020, 19, 3574-3617.	5.9	114
8	Procyanidins are the most Abundant Polyphenols in Dessert Apples at Maturity. LWT - Food Science and Technology, 2002, 35, 289-291.	2.5	102
9	Interactions between apple (Malus x domestica Borkh.) polyphenols and cell walls modulate the extractability of polysaccharides. Carbohydrate Polymers, 2009, 75, 251-261.	5.1	100
10	Interactions between Pectic Compounds and Procyanidins are Influenced by Methylation Degree and Chain Length. Biomacromolecules, 2013, 14, 709-718.	2.6	97
11	Revisiting the contribution of ATR-FTIR spectroscopy to characterize plant cell wall polysaccharides. Carbohydrate Polymers, 2021, 262, 117935.	5.1	91
12	Inhibition of Apple Polyphenol Oxidase Activity by Procyanidins and Polyphenol Oxidation Products. Journal of Agricultural and Food Chemistry, 2004, 52, 122-130.	2.4	88
13	Non-covalent interaction between procyanidins and apple cell wall material. Part II: Quantification and impact of cell wall drying. Biochimica Et Biophysica Acta - General Subjects, 2005, 1725, 1-9.	1.1	86
14	ATR-FTIR spectroscopy to determine cell wall composition: Application on a large diversity of fruits and vegetables. Carbohydrate Polymers, 2019, 212, 186-196.	5.1	85
15	Seasonal variations of the phenolic constituents in bilberry (Vaccinium myrtillus L.) leaves, stems and fruits, and their antioxidant activity. Food Chemistry, 2016, 213, 58-68.	4.2	82
16	Neutral sugar side chains of pectins limit interactions with procyanidins. Carbohydrate Polymers, 2014, 99, 527-536.	5.1	75
17	Impact of Noncovalent Interactions between Apple Condensed Tannins and Cell Walls on Their Transfer from Fruit to Juice: Studies in Model Suspensions and Application. Journal of Agricultural and Food Chemistry, 2007, 55, 7896-7904.	2.4	68
18	Phenolic and polysaccharidic composition of applesauce is close to that of apple flesh. Journal of Food Composition and Analysis, 2011, 24, 537-547.	1.9	67

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19	Characterization of tissue specific differences in cell wall polysaccharides of ripe and overripe pear fruit. Carbohydrate Polymers, 2017, 156, 152-164.	5.1	66
20	Validation of a new method using the reactivity of electrogenerated superoxide radical in the antioxidant capacity determination of flavonoids. Talanta, 2008, 75, 1098-1103.	2.9	65
21	Characterization of microbial metabolism of Syrah grape products in an in vitro colon model using targeted and non-targeted analytical approaches. European Journal of Nutrition, 2013, 52, 833-846.	1.8	60
22	Impact of Processing on the Noncovalent Interactions between Procyanidin and Apple Cell Wall. Journal of Agricultural and Food Chemistry, 2012, 60, 9484-9494.	2.4	59
23	Characterization and quantification of fruit phenolic compounds of European and Tunisian pear cultivars. Food Research International, 2017, 95, 125-133.	2.9	56
24	Interactions of arabinan-rich pectic polysaccharides with polyphenols. Carbohydrate Polymers, 2020, 230, 115644.	5.1	56
25	Modulating polyphenolic composition and organoleptic properties of apple juices by manipulating the pressing conditions. Food Chemistry, 2011, 124, 117-125.	4.2	53
26	Effect of Sample Preparation on the Measurement of Sugars, Organic Acids, and Polyphenols in Apple Fruit by Mid-infrared Spectroscopy. Journal of Agricultural and Food Chemistry, 2012, 60, 3551-3563.	2.4	53
27	Revisiting the chemistry of apple pomace polyphenols. Food Chemistry, 2019, 294, 9-18.	4.2	52
28	Procyanidinâ€"Cell Wall Interactions within Apple Matrices Decrease the Metabolization of Procyanidins by the Human Gut Microbiota and the Anti-Inflammatory Effect of the Resulting Microbial Metabolome In Vitro. Nutrients, 2019, 11, 664.	1.7	42
29	Soil Photosynthetic Microbial Communities Mediate Aggregate Stability: Influence of Cropping Systems and Herbicide Use in an Agricultural Soil. Frontiers in Microbiology, 2019, 10, 1319.	1.5	34
30	Unraveling the pectinolytic function of Bacteroides xylanisolvens using a RNA-seq approach and mutagenesis. BMC Genomics, 2016, 17, 147.	1.2	33
31	Trends and challenges on fruit and vegetable processing: Insights into sustainable, traceable, precise, healthy, intelligent, personalized and local innovative food products. Trends in Food Science and Technology, 2022, 125, 12-25.	7.8	33
32	Exploring interactions between pectins and procyanidins: Structure-function relationships. Food Hydrocolloids, 2021, 113, 106498.	5.6	31
33	Impact of canning and storage on apricot carotenoids and polyphenols. Food Chemistry, 2018, 240, 615-625.	4.2	30
34	Nutritional Compounds in Figs from the Southern Mediterranean Region. International Journal of Food Properties, 2014, 17, 491-499.	1.3	29
35	Preharvest UV-C radiation impacts strawberry metabolite content and volatile organic compound production. LWT - Food Science and Technology, 2017, 85, 390-393.	2.5	28
36	Comparison of microcalorimetry and haze formation to quantify the association of B-type procyanidins to poly-l-proline and bovine serum albumin. LWT - Food Science and Technology, 2015, 63, 376-382.	2.5	26

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37	Impact of air-drying on polyphenol extractability from apple pomace. Food Chemistry, 2019, 296, 142-149.	4.2	26
38	Pink Discoloration of Canned Pears: Role of Procyanidin Chemical Depolymerization and Procyanidin/Cell Wall Interactions. Journal of Agricultural and Food Chemistry, 2013, 61, 6679-6692.	2.4	25
39	A method using near infrared hyperspectral imaging to highlight the internal quality of apple fruit slices. Postharvest Biology and Technology, 2021, 175, 111497.	2.9	24
40	Size-exclusion chromatography of procyanidins: Comparison between apple and grape procyanidins and application to the characterization of fractions of high degrees of polymerization. Analytica Chimica Acta, 2006, 563, 33-43.	2.6	23
41	Reactivity of flavanols: Their fate in physical food processing and recent advances in their analysis by depolymerization. Comprehensive Reviews in Food Science and Food Safety, 2021, 20, 4841-4880.	5.9	23
42	Cultivar and Year Rather than Agricultural Practices Affect Primary and Secondary Metabolites in Apple Fruit. PLoS ONE, 2015, 10, e0141916.	1.1	22
43	Effect of maturity on the phenolic compositions of pear juice and cell wall effects on procyanidins transfer. LWT - Food Science and Technology, 2017, 85, 380-384.	2.5	21
44	Comparison between microwave hydrodiffusion and pressing for plum juice extraction. LWT - Food Science and Technology, 2012, 49, 229-237.	2.5	20
45	Caprification modifies polyphenols but not cell wall concentrations in ripe figs. Scientia Horticulturae, 2013, 160, 115-122.	1.7	19
46	Effects of the apple matrix on the postprandial bioavailability of flavan-3-ols and nutrigenomic response of apple polyphenols in minipigs challenged with a high fat meal. Food and Function, 2020, 11, 5077-5090.	2.1	19
47	Pear ripeness and tissue type impact procyanidin-cell wall interactions. Food Chemistry, 2019, 275, 754-762.	4.2	18
48	Modification of apple, beet and kiwifruit cell walls by boiling in acid conditions: Common and specific responses. Food Hydrocolloids, 2021, 112, 106266.	5.6	14
49	Immobilization of flavan-3-ols onto sensor chips to study their interactions with proteins and pectins by SPR. Applied Surface Science, 2016, 371, 512-518.	3.1	13
50	Exopolysaccharides in the rhizosphere: A comparative study of extraction methods. Application to their quantification in Mediterranean soils. Soil Biology and Biochemistry, 2020, 149, 107961.	4.2	12
51	Changes in cell wall neutral sugar composition related to pectinolytic enzyme activities and intra-flesh textural property during ripening of ten apricot clones. Food Chemistry, 2021, 339, 128096.	4.2	11
52	Interactions between heterogeneous cell walls and two procyanidins: Insights from the effects of chemical composition and physical structure. Food Hydrocolloids, 2021, 121, 107018.	5.6	8
53	Experimental and theoretical investigation on interactions between xylose-containing hemicelluloses and procyanidins. Carbohydrate Polymers, 2022, 281, 119086.	5.1	8
54	Flavan-3-ols and procyanidins in grape seeds: biodiversity and relationships among wild and cultivated vines. Euphytica, 2017, 213, 1.	0.6	7

#	Article	IF	Citations
55	Interactions Between Polyphenols and Macromolecules: Effect of TanninÂStructure. , 2019, , 515-521.		7
56	Effect of storage conditions on â€˜Deglet Nourâ€™ date palm fruit organoleptic and nutritional quality. LWT - Food Science and Technology, 2021, 137, 110343.	2.5	6
57	Iron-induced peroxidation of trilinolein nano-emulsions under model gastric conditions and its inhibition by dietary phenolic antioxidants. Food and Function, 2020, 11, 9144-9156.	2.1	3
58	Phenolic profiling in ten apricot clones using an efficient method (Thioacidolysis-UFLC) and determination of their antioxidant potential. Food Bioscience, 2022, 49, 101880.	2.0	2
59	Multiscale Localization of Procyanidins in Ripe and Overripe Perry Pears by Light and Transmission Electron Microscopy. Journal of Agricultural and Food Chemistry, 2020, 68, 8900-8906.	2.4	1