Carine Le Bourvellec

List of Publications by Citations

58 papers	2,772 citations	27 h-index	52 g-index
62 ext. papers	3,256 ext. citations	7.3 avg, IF	5.59 L-index

#	Paper	IF	Citations
58	Interactions between polyphenols and macromolecules: quantification methods and mechanisms. *Critical Reviews in Food Science and Nutrition*, **2012**, 52, 213-48	11.5	450
57	Lab and pilot-scale ultrasound-assisted water extraction of polyphenols from apple pomace. *Journal of Food Engineering*, **2012**, 111, 73-81	6	217
56	Non-covalent interaction between procyanidins and apple cell wall material: Part I. Effect of some environmental parameters. *Biochimica Et Biophysica Acta - General Subjects*, **2004**, 1672, 192-202	4	171
55	Towards the industrial production of antioxidants from food processing by-products with ultrasound-assisted extraction. *Ultrasonics Sonochemistry*, **2010**, 17, 1066-74	8.9	160
54	Non-covalent interaction between procyanidins and apple cell wall material. Part III: Study on model polysaccharides. *Biochimica Et Biophysica Acta - General Subjects*, **2005**, 1725, 10-8	4	148
53	Interactions between polyphenols and polysaccharides: Mechanisms and consequences in food processing and digestion. *Trends in Food Science and Technology*, **2017**, 60, 43-51	15.3	123
52	Interactions between apple (Malus x domestica Borkh.) polyphenols and cell walls modulate the extractability of polysaccharides. *Carbohydrate Polymers*, **2009**, 75, 251-261	10.3	88
51	Procyanidins are the most Abundant Polyphenols in Dessert Apples at Maturity. *LWT - Food Science and Technology*, **2002**, 35, 289-291	5.4	87
50	Inhibition of apple polyphenol oxidase activity by procyanidins and polyphenol oxidation products. *Journal of Agricultural and Food Chemistry*, **2004**, 52, 122-30	5.7	84
49	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	4	75
48	Interactions between pectic compounds and procyanidins are influenced by methylation degree and chain length. *Biomacromolecules*, **2013**, 14, 709-18	6.9	73
47	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, 7896-904	5.7	64
46	Phenolic and polysaccharidic composition of applesauce is close to that of apple flesh. *Journal of Food Composition and Analysis*, **2011**, 24, 537-547	4.1	59
45	Neutral sugar side chains of pectins limit interactions with procyanidins. *Carbohydrate Polymers*, **2014**, 99, 527-36	10.3	56
44	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	8.5	55
43	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, 833-46	5.2	54
42	Validation of a new method using the reactivity of electrogenerated superoxide radical in the antioxidant capacity determination of flavonoids. *Talanta*, **2008**, 75, 1098-103	6.2	53

41	Interactions between cell wall polysaccharides and polyphenols: Effect of molecular internal structure. *Comprehensive Reviews in Food Science and Food Safety*, **2020**, 19, 3574-3617	16.4	47
40	Impact of processing on the noncovalent interactions between procyanidin and apple cell wall. *Journal of Agricultural and Food Chemistry*, **2012**, 60, 9484-94	5.7	46
39	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, 3551-63	5.7	44
38	Modulating polyphenolic composition and organoleptic properties of apple juices by manipulating the pressing conditions. *Food Chemistry*, **2011**, 124, 117-125	8.5	43
37	Characterization of tissue specific differences in cell wall polysaccharides of ripe and overripe pear fruit. *Carbohydrate Polymers*, **2017**, 156, 152-164	10.3	42
36	ATR-FTIR spectroscopy to determine cell wall composition: Application on a large diversity of fruits and vegetables. *Carbohydrate Polymers*, **2019**, 212, 186-196	10.3	40
35	Revisiting the chemistry of apple pomace polyphenols. *Food Chemistry*, **2019**, 294, 9-18	8.5	34
34	Characterization and quantification of fruit phenolic compounds of European and Tunisian pear cultivars. *Food Research International*, **2017**, 95, 125-133	7	31
33	Revisiting the contribution of ATR-FTIR spectroscopy to characterize plant cell wall polysaccharides. *Carbohydrate Polymers*, **2021**, 262, 117935	10.3	31
32	Procyanidin-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,	6.7	30
31	Unraveling the pectinolytic function of Bacteroides xylanisolvens using a RNA-seq approach and mutagenesis. *BMC Genomics*, **2016**, 17, 147	4.5	26
30	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	6.6	23
29	Pink discoloration of canned pears: role of procyanidin chemical depolymerization and procyanidin/cell wall interactions. *Journal of Agricultural and Food Chemistry*, **2013**, 61, 6679-92	5.7	22
28	Interactions of arabinan-rich pectic polysaccharides with polyphenols. *Carbohydrate Polymers*, **2020**, 230, 115644	10.3	22
27	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	5.4	21
26	Nutritional Compounds in Figs from the Southern Mediterranean Region. *International Journal of Food Properties*, **2014**, 17, 491-499	3	21
25	Impact of canning and storage on apricot carotenoids and polyphenols. *Food Chemistry*, **2018**, 240, 615-625	6.5	20
24	Preharvest UV-C radiation impacts strawberry metabolite content and volatile organic compound production. *LWT - Food Science and Technology*, **2017**, 85, 390-393	5.4	20

23	Soil Photosynthetic Microbial Communities Mediate Aggregate Stability: Influence of Cropping Systems and Herbicide Use in an Agricultural Soil. *Frontiers in Microbiology*, **2019**, 10, 1319	5.7	18
22	Caprification modifies polyphenols but not cell wall concentrations in ripe figs. *Scientia Horticulturae*, **2013**, 160, 115-122	4.1	17
21	Impact of air-drying on polyphenol extractability from apple pomace. *Food Chemistry*, **2019**, 296, 142-148	8.5	16
20	Cultivar and Year Rather than Agricultural Practices Affect Primary and Secondary Metabolites in Apple Fruit. *PLoS ONE*, **2015**, 10, e0141916	3.7	16
19	Comparison between microwave hydrodiffusion and pressing for plum juice extraction. *LWT - Food Science and Technology*, **2012**, 49, 229-237	5.4	16
18	Pear ripeness and tissue type impact procyanidin-cell wall interactions. *Food Chemistry*, **2019**, 275, 754-762	8.5	15
17	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	5.4	13
16	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	6.1	11
15	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	6.7	11
14	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	16.4	10
13	Exploring interactions between pectins and procyanidins: Structure-function relationships. *Food Hydrocolloids*, **2021**, 113, 106498	10.6	8
12	Modification of apple, beet and kiwifruit cell walls by boiling in acid conditions: Common and specific responses. *Food Hydrocolloids*, **2021**, 112, 106266	10.6	8
11	A method using near infrared hyperspectral imaging to highlight the internal quality of apple fruit slices. *Postharvest Biology and Technology*, **2021**, 175, 111497	6.2	7
10	Flavan-3-ols and procyanidins in grape seeds: biodiversity and relationships among wild and cultivated vines. *Euphytica*, **2017**, 213, 1	2.1	6
9	Exopolysaccharides in the rhizosphere: A comparative study of extraction methods. Application to their quantification in Mediterranean soils. *Soil Biology and Biochemistry*, **2020**, 149, 107961	7.5	5
8	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	8.5	3
7	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	15.3	3
6	Interactions Between Polyphenols and Macromolecules: Effect of Tannin Structure **2019**, 515-521		2

5	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	6.1	1
4	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	5.7	1
3	Interactions between heterogeneous cell walls and two procyanidins: Insights from the effects of chemical composition and physical structure. *Food Hydrocolloids*, **2021**, 121, 107018	10.6	1
2	Experimental and theoretical investigation on interactions between xylose-containing hemicelluloses and procyanidins.. *Carbohydrate Polymers*, **2022**, 281, 119086	10.3	0
1	Effect of storage conditions on Deglet Nour date palm fruit organoleptic and nutritional quality. *LWT - Food Science and Technology*, **2021**, 137, 110343	5.4	0