Claire C Berton-Carabin

List of Publications by Year
in descending order

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80 papers	3,566 citations	126708 33 h-index	143772 57 g-index
81 all docs	81 docs citations	81 times ranked	2935 citing authors

#	ARTICLE	IF	CITATIONS
1	Pickering Emulsions for Food Applications: Background, Trends, and Challenges. Annual Review of Food Science and Technology, 2015, 6, 263-297.	5.1	524
2	Lipid Oxidation in Oilâ€inâ€Water Emulsions: Involvement of the Interfacial Layer. Comprehensive Reviews in Food Science and Food Safety, 2014, 13, 945-977.	5.9	418
3	Interfacial properties of whey protein and whey protein hydrolysates and their influence on O/W emulsion stability. Food Hydrocolloids, 2017, 73, 129-140.	5.6	181
4	Formation, Structure, and Functionality of Interfacial Layers in Food Emulsions. Annual Review of Food Science and Technology, 2018, 9, 551-587.	5.1	160
5	Coalescence stability of Pickering emulsions produced with lipid particles: A microfluidic study. Journal of Food Engineering, 2018, 234, 63-72.	2.7	92
6	Physical bonding between sunflower proteins and phenols: Impact on interfacial properties. Food Hydrocolloids, 2017, 73, 326-334.	5.6	74
7	Emulsion-alginate beads designed to control in vitro intestinal lipolysis: Towards appetite control. Journal of Functional Foods, 2017, 34, 319-328.	1.6	70
8	Nonlinear interfacial rheology and atomic force microscopy of air-water interfaces stabilized by whey protein beads and their constituents. Food Hydrocolloids, 2020, 101, 105466.	5.6	68
9	Microfluidic emulsification devices: from micrometer insights to large-scale food emulsion production. Current Opinion in Food Science, 2015, 3, 33-40.	4.1	64
10	Food-grade micro-encapsulation systems that may induce satiety via delayed lipolysis: A review. Critical Reviews in Food Science and Nutrition, 2017, 57, 2218-2244.	5.4	64
11	Synergistic stabilisation of emulsions by blends of dairy and soluble pea proteins: Contribution of the interfacial composition. Food Hydrocolloids, 2019, 97, 105206.	5.6	63
12	Physicochemical stability of lycopene-loaded emulsions stabilized by plant or dairy proteins. Food Structure, 2017, 12, 34-42.	2.3	62
13	Towards new food emulsions: designing the interface and beyond. Current Opinion in Food Science, 2019, 27, 74-81.	4.1	57
14	Encapsulation of the therapeutic microbe Akkermansia muciniphila in a double emulsion enhances survival in simulated gastric conditions. Food Research International, 2017, 102, 372-379.	2.9	56
15	Coalescence of protein-stabilised emulsions studied with microfluidics. Food Hydrocolloids, 2017, 70, 96-104.	5.6	52
16	Behavior of plant-dairy protein blends at air-water and oil-water interfaces. Colloids and Surfaces B: Biointerfaces, 2020, 192, 111015.	2.5	52
17	Dynamic heterogeneity in complex interfaces of soft interface-dominated materials. Scientific Reports, 2019, 9, 2938.	1.6	50
18	Protein and lipid oxidation affect the viscoelasticity of whey protein layers at the oilâ€“water interface. European Journal of Lipid Science and Technology, 2016, 118, 1630-1643.	1.0	49

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19	Maillard reaction products as functional components in oil-in-water emulsions: A review highlighting interfacial and antioxidant properties. Trends in Food Science and Technology, 2022, 121, 129-141.	7.8	48
20	Tailored microstructure of colloidal lipid particles for Pickering emulsions with tunable properties. Soft Matter, 2017, 13, 3190-3198.	1.2	46
21	Effect of the lipophilicity of model ingredients on their location and reactivity in emulsions and solid lipid nanoparticles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 431, 9-17.	2.3	43
22	Protein Oxidation and In Vitro Gastric Digestion of Processed Soy-Based Matrices. Journal of Agricultural and Food Chemistry, 2019, 67, 9591-9600.	2.4	43
23	Spruce galactoglucomannans in rapeseed oil-in-water emulsions: Efficient stabilization performance and structural partitioning. Food Hydrocolloids, 2016, 52, 615-624.	5.6	42
24	Can we prevent lipid oxidation in emulsions by using fat-based Pickering particles?. Food Research International, 2019, 120, 352-363.	2.9	42
25	Cross-flow microfluidic emulsification from a food perspective. Trends in Food Science and Technology, 2016, 49, 51-63.	7.8	41
26	Functionality of whey proteins covalently modified by allyl isothiocyanate. Part 1 physicochemical and antibacterial properties of native and modified whey proteins at pH 2 to 7. Food Hydrocolloids, 2017, 65, 130-143.	5.6	41
27	Physical and oxidative stability of food emulsions prepared with pea protein fractions. LWT - Food Science and Technology, 2021, 146, 111424.	2.5	41
28	Tayloring W/O/W emulsion composition for effective encapsulation: The role of PGPR in water transfer-induced swelling. Food Research International, 2018, 106, 722-728.	2.9	40
29	Microfluidic investigation of the coalescence susceptibility of pea protein-stabilised emulsions: Effect of protein oxidation level. Food Hydrocolloids, 2020, 102, 105610.	5.6	38
30	The structure, viscoelasticity and charge of potato peptides adsorbed at the oil-water interface determine the physicochemical stability of fish oil-in-water emulsions. Food Hydrocolloids, 2021, 115, 106605.	5.6	38
31	Destabilization of multilayered interfaces in digestive conditions limits their ability to prevent lipolysis in emulsions. Food Structure, 2017, 12, 54-63.	2.3	36
32	Air-water interfacial and foaming properties of whey protein - sinapic acid mixtures. Food Hydrocolloids, 2021, 112, 106467.	5.6	36
33	Rethinking plant protein extraction: Albuminâ€"From side stream to an excellent foaming ingredient. Food Structure, 2022, 31, 100254.	2.3	36
34	Interfacial tension measured at high expansion rates and within milliseconds using microfluidics. Journal of Colloid and Interface Science, 2016, 470, 71-79.	5.0	34
35	Foams and air-water interfaces stabilised by mildly purified rapeseed proteins after defatting. Food Hydrocolloids, 2021, 112, 106270.	5.6	34
36	Synergistic and antagonistic effects of plant and dairy protein blends on the physicochemical stability of lycopene-loaded emulsions. Food Hydrocolloids, 2018, 81, 180-190.	5.6	33

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37	Pickering particles as interfacial reservoirs of antioxidants. Journal of Colloid and Interface Science, 2020, 575, 489-498.	5.0	33
38	Conformational Changes of Whey and Pea Proteins upon Emulsification Approached by Front-Surface Fluorescence. Journal of Agricultural and Food Chemistry, 2021, 69, 6601-6612.	2.4	30
39	Droplet Microfluidics for Food and Nutrition Applications. Micromachines, 2021, 12, 863.	1.4	30
40	The Importance of Interfacial Tension in Emulsification: Connecting Scaling Relations Used in Large Scale Preparation with Microfluidic Measurement Methods. ChemEngineering, 2020, 4, 63.	1.0	29
41	Sequential adsorption and interfacial displacement in emulsions stabilized with plant-dairy protein blends. Journal of Colloid and Interface Science, 2021, 583, 704-713.	5.0	29
42	Interfacial behaviour of biopolymer multilayers: Influence of in vitro digestive conditions. Colloids and Surfaces B: Biointerfaces, 2017, 153, 199-207.	2.5	28
43	Glycation of soy proteins leads to a range of fractions with various supramolecular assemblies and surface activities. Food Chemistry, 2021, 343, 128556.	4.2	28
44	Protein Oxidation in Plant Protein-Based Fibrous Products: Effects of Encapsulated Iron and Process Conditions. Journal of Agricultural and Food Chemistry, 2018, 66, 11105-11112.	2.4	27
45	Emulsion encapsulation in calcium-alginate beads delays lipolysis during dynamic in vitro digestion. Journal of Functional Foods, 2018, 46, 394-402.	1.6	27
46	Antioxidant potential of non-modified and glycated soy proteins in the continuous phase of oil-in-water emulsions. Food Hydrocolloids, 2021, 114, 106564.	5.6	26
47	Oxidative stability of soy proteins: From ground soybeans to structured products. Food Chemistry, 2020, 318, 126499.	4.2	25
48	Double emulsions for iron encapsulation: is a high concentration of lipophilic emulsifier ideal for physical and chemical stability?. Journal of the Science of Food and Agriculture, 2019, 99, 4540-4549.	1.7	22
49	Legume Protein Isolates for Stable Acidic Emulsions Prepared by Premix Membrane Emulsification. Food Biophysics, 2017, 12, 119-128.	1.4	20
50	Oxidative stability of emulsions fortified with iron: the role of liposomal phospholipids. Journal of the Science of Food and Agriculture, 2019, 99, 2957-2965.	1.7	20
51	Early film formation in protein-stabilised emulsions: Insights from a microfluidic approach. Food Hydrocolloids, 2021, 118, 106785.	5.6	20
52	Air-water interfacial behaviour of whey protein and rapeseed oleosome mixtures. Journal of Colloid and Interface Science, 2021, 602, 207-221.	5.0	20
53	Amadori products formation in emulsified systems. Food Chemistry, 2016, 199, 51-58.	4.2	19
54	Functionality of whey proteins covalently modified by allyl isothiocyanate. Part 2: Influence of the protein modification on the surface activity in an O/W system. Food Hydrocolloids, 2018, 81, 286-299.	5.6	18

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55	Convective mass transport dominates surfactant adsorption in a microfluidic Y-junction. Soft Matter, 2016, 12, 9025-9029.	1.2	17
56	Natural particles can armor emulsions against lipid oxidation and coalescence. Food Chemistry, 2021, 347, 129003.	4.2	17
57	Reactivity of a model lipophilic ingredient in surfactant-stabilized emulsions: Effect of droplet surface charge and ingredient location. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 418, 68-75.	2.3	16
58	Reactivity of a lipophilic ingredient solubilized in anionic or cationic surfactant micelles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2012, 412, 135-142.	2.3	14
59	A unifying approach to lipid oxidation in emulsions: Modelling and experimental validation. Food Research International, 2022, 160, 111621.	2.9	14
60	Effect of interfacial properties on the reactivity of a lipophilic ingredient in multilayered emulsions. Food Hydrocolloids, 2014, 42, 56-65.	5.6	13
61	Alkyl chain length modulates antioxidant activity of gallic acid esters in spray-dried emulsions. Food Chemistry, 2022, 387, 132880.	4.2	13
62	Encapsulation of lipids as emulsion-alginate beads reduces food intake: a randomized placebo-controlled cross-over human trial in overweight adults. Nutrition Research, 2019, 63, 86-94.	1.3	12
63	Lipid Oxidation in Emulsions Fortified with Iron-Loaded Alginate Beads. Foods, 2019, 8, 361.	1.9	11
64	Interrelated Routes between the Maillard Reaction and Lipid Oxidation in Emulsion Systems. Journal of Agricultural and Food Chemistry, 2020, 68, 12107-12115.	2.4	11
65	Competition of rapeseed proteins and oleosomes for the air-water interface and its effect on the foaming properties of protein-oleosome mixtures. Food Hydrocolloids, 2022, 122, 107078.	5.6	11
66	Effect of lipophilization on the distribution and reactivity of ingredients in emulsions. Journal of Colloid and Interface Science, 2015, 459, 36-43.	5.0	10
67	Carvacrol release from PLA to a model food emulsion: Impact of oil droplet size. Food Control, 2020, 114, 107247.	2.8	10
68	Evaluation of oxygen partial pressure, temperature and stripping of antioxidants for accelerated shelf-life testing of oil blends using 1H NMR. Food Research International, 2021, 147, 110555.	2.9	10
69	Microtechnological Tools to Achieve Sustainable Food Processes, Products, and Ingredients. Food Engineering Reviews, 2020, 12, 101-120.	3.1	9
70	Chemical Stability of Î±â€•Tocopherol in Colloidal Lipid Particles with Various Morphologies. European Journal of Lipid Science and Technology, 2020, 122, 2000012.	1.0	9
71	Combining plant and dairy proteins in food colloid design. Current Opinion in Colloid and Interface Science, 2021, 56, 101507.	3.4	9
72	Interfacial protein-protein displacement at fluid interfaces. Advances in Colloid and Interface Science, 2022, 305, 102691.	7.0	7

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73	Towards Oxidatively Stable Emulsions Containing Iron-Loaded Liposomes: The Key Role of Phospholipid-to-Iron Ratio. Foods, 2021, 10, 1293.	1.9	6
74	How microfluidic methods can lead to better emulsion products. Lipid Technology, 2015, 27, 234-236.	0.3	5
75	Dynamic fluid interface formation in microfluidics: Effect of emulsifier structure and oil viscosity. Innovative Food Science and Emerging Technologies, 2018, 45, 215-219.	2.7	5
76	Formation of Taste-Active Pyridinium Betaine Derivatives Is Promoted in Thermally Treated Oil-in-Water Emulsions and Alkaline pH. Journal of Agricultural and Food Chemistry, 2020, 68, 5180-5188.	2.4	4
77	Emulsification: Established and Future Technologies. Particle Technology Series, 2016, , 257-289.	0.5	3
78	Lipid oxidation in Pickering emulsions. , 2021, , 275-293.		2
79	Lipid Oxidation in Food Emulsions: Analytical Challenges and Recent Developments. , 2022, , 3-29.		2
80	Ionic Liquids in the Synthesis ofÂAntioxidant Targeted Compounds. , 2016, , 317-346.		0