Publication list – C. Berton-Carabin

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Articles in peer-reviewed international journals

[1] Berton, C., Genot, C., Ropers, M.-H. Quantification of unadsorbed protein and surfactant emulsifiers in oil-in-water emulsions. **2011**, *Journal of Colloid and Interface Science*, 354, 739–748.

[2] Berton, C., Ropers, M.-H., Viau, M., Genot, C. Contribution of the interfacial layer to the protection of emulsified lipids against oxidation. **2011**, *Journal of Agricultural and Food Chemistry*, 59, 5052–5061.

[3] Berton, C., Ropers, M.-H., Bertrand, D., Viau, M., Genot, C. Oxidative stability of oil-in-water emulsions stabilised with protein or surfactant emulsifiers in various oxidation conditions. **2012**, *Food Chemistry*, 131, 1360–1369.

[4] Berton, C., Ropers, M.-H., Guibert, D., Solé, V., Genot, C. Modifications of interfacial proteins in oil-inwater emulsions prior to and during lipid oxidation. **2012**, *Journal of Agricultural and Food Chemistry*, 60, 8659–8671.

[5] **Berton**, **C.**, Genot, C., Guibert, D., Ropers, M.-H. Effect of lateral heterogeneity in mixed surfactantstabilized interfaces on the oxidation of unsaturated lipids in oil-in-water emulsions. **2012**, *Journal of Colloid and Interface Science*, 377, 244–250.

[6] Berton-Carabin, C., Coupland, J. N., Qian, C., McClements, D. J., Elias, R. J. Reactivity of a lipophilic ingredient solubilized in anionic or cationic surfactant micelles. **2012**, *Colloids and Surfaces A*, 412, 135–142.

[7] Berton-Carabin, C., Genot, C., Gaillard, C., Guibert, D., Ropers, M. H. Design of interfacial films to control lipid oxidation in oil-in-water emulsions. **2013**, *Food Hydrocolloids*, 33, 99–105.

[8] **Berton-Carabin, C.**, Elias, R. J., Coupland, J. N. Reactivity of a model lipophilic ingredient in surfactantstabilized emulsions: Effect of droplet surface charge and ingredient location. **2013**, *Colloids and Surfaces A*, 418, 68–75.

[9] **Berton-Carabin**, **C.**, Coupland, J. N., Elias, R. J. Effect of the lipophilicity of model ingredients on their location and reactivity in emulsions and solid lipid nanoparticles. **2013**, *Colloids and Surfaces A*, 431, 9–17.

[10] Chaprenet, J., **Berton-Carabin, C.**, Elias, R. J., Coupland, J. N. Effect of interfacial properties on the reactivity of a lipophilic ingredient in multilayered emulsions. **2014**, *Food Hydrocolloids*, 42, 56–65.

[11] Berton-Carabin, C., Ropers, M.-H., Genot, C. Lipid oxidation in oil-in-water emulsions: Involvement of the interfacial layer. **2014**, *Comprehensive Reviews in Food Science and Food Safety*, 13, 945–977.

[12] Leong, W. F., **Berton-Carabin, C.**, Elias, R. J., Lecomte, J., Villeneuve, P., Zhao, Y., Coupland, J. N. Effect of lipophilization on the distribution and reactivity of ingredients in emulsions. **2015**, *Journal of Colloid and Interface Science*, 459, 36–43.

[13] Berghout, J. A. M., Marmolejo-Garcia, C., **Berton-Carabin, C.**, Nikiforidis, C., Boom, R. M., van der Goot, A. J. Aqueous fractionation yields chemically stable lupin protein isolates. **2015**, *Food Research International*, 72, 82–90.

[14] Schroën, K., Bliznyuk, O., Muijlwijk, K., Sahin, S., **Berton-Carabin, C.** Microfluidic emulsification devices: from micrometer insights to large-scale food emulsion production. **2015**, *Current Opinion in Food Science*, 3, 33–40.

[15] **Berton-Carabin, C.**, Schroën, K. Pickering emulsions for food applications: Background, trends and challenges. **2015**, *Annual Review of Food Science and Technology*, 6, 263–297.

[16] Muijlwijk, K., Hinderink, E., Ershov, D., **Berton-Carabin, C.**, Schroën, K. Interfacial tension measured at high expansion rates and within milliseconds using microfluidics. **2016**, *Journal of Colloid and Interface Science*, 470, 71–79.

[17] Troise, A. D., **Berton-Carabin, C.**, Fogliano, V. Amadori products formation in emulsified systems. **2016**, *Food Chemistry*, 199, 51–58.

[18] Mikkonen, K. S., Xu, C., **Berton-Carabin, C.**, Schroën, K. Spruce galactoglucomannans in rapeseed oilin-water emulsions: Efficient stabilization performance and structural partitioning. **2016**, *Food Hydrocolloids*, 52, 615–624.

[19] Muijlwijk, K., **Berton-Carabin, C.**, Schroën, K. Cross-flow microfluidic emulsification from a food perspective. **2016**, *Trends in Food Science and Technology*, 49, 51–63.

[20] Muijlwijk, K., Huang, W., Vuist, J. E., **Berton-Carabin, C.**, Schroën, K. Convective mass transport dominates surfactant adsorption in a microfluidic Y-junction. **2016**, *Soft Matter*, 12, 9025-9029.

[21] Berton-Carabin, C., Schröder, A., Rovalino Cordova, A., Schroën, K., Sagis, L. M. C. Highlight Article: Protein and lipid oxidation affect the viscoelasticity of whey protein layers at the oil-water interface. **2016**, *European Journal of Lipid Science and Technology*, 118, 1630-1643.

[22] Keppler, J. K., Martin, D., **Berton-Carabin, C.**, Nipoti, E., Coenye, T., Schwarz, K. Functionality of whey proteins covalently modified by the cabbage compound allyl isothiocyanate. Part 1. Physicochemical and antibacterial properties of native and modified whey proteins at pH 2 to 7. **2017**, *Food Hydrocolloids*, 65, 130-143.

[23] Ladjal Ettoumi, Y., **Berton-Carabin, C.**, Chibane, M., Schroën, K. Legume protein isolates for stable acidic emulsions prepared by premix membrane emulsification. **2017**, *Food Biophysics*, 12, 119-128.

[24] Corstens, M., Osorio Caltenco, L., de Vries, R., Schroën, K., **Berton-Carabin, C.** Interfacial behaviour of biopolymer multilayers: Influence of in vitro digestive conditions. **2017**, *Colloids and Surfaces B*, 153, 199-207.

[25] Muijlwijk, K., Colijn, I., Harsono, H., Krebs, T., **Berton-Carabin, C.**, Schroën, K. Coalescence of proteinstabilised emulsions studied with microfluidics. **2017**, *Food Hydrocolloids*, 70, 96-104.

[26] Schröder, A., Sprakel, J., Schroën, K., **Berton-Carabin, C.** Tailored microstructure of colloidal lipid particles for Pickering emulsions with tunable properties. **2017**, *Soft Matter*, 13, 3190-3198.

[27] Ho, K., Schroën, K., San Martín-González, M. F., **Berton-Carabin, C.** Physicochemical stability of lycopene-loaded emulsions stabilized by plant or dairy proteins. **2017**, *Food Structure*, 12, 34-42.

[28] Corstens, M., **Berton-Carabin, C.**, Kester, A., Fokkink, R., van den Broek, J. M., de Vries, R., Troost, F. J., Masclee, A. A. M., Schroën, K. Destabilization of multilayered interfaces in digestive conditions limits their ability to prevent lipolysis in emulsions. **2017**, *Food Structure*, 12, 54-63.

[29] Corstens, M., **Berton-Carabin, C.**, Elichiry-Ortiz, P., Hol, K., Troost, F., Masclee, A., Schroën, K. Emulsion-alginate beads designed to control in vitro intestinal lipolysis: Towards appetite control. **2017**, *Journal of Functional Foods*, 34, 319-328.

[30] Corstens, M., **Berton-Carabin, C.**, De Vries, R., Troost, F. J., Masclee, A. A. M., Schroën, K. Food-grade micro-encapsulation systems that may induce satiety via delayed lipolysis: A review. **2017**, *Critical Reviews in Food Science and Nutrition*, 57, 2218-2244.

[31] Karefyllakis, D., Altunkaya, S., **Berton-Carabin, C.**, van der Goot, A. G., Nikiforidis, C. Physical bonding between sunflower proteins and phenols: Impact on interfacial properties. **2017**, *Food Hydrocolloids*, 73, 326-334.

[32] Schröder, A., **Berton-Carabin, C.**, Venema, P., Cornacchia, L. Interfacial properties and physical stability of O/W emulsions containing hydrolyzed whey proteins. **2017**, *Food Hydrocolloids*, 73, 129-140.

[33] van der Ark, K., Nugroho, A. D. W., **Berton-Carabin, C.**, Wang, C., Belzer, C., de Vos, W. M., Schroën, K. Encapsulation of the therapeutic microbe *Akkermansia muciniphila* in a double emulsion enhances survival in simulated gastric conditions. **2017**, *Food Research International*, 102, 372-379.

[34] Muijlwijk, K., Li, X., **Berton-Carabin, C.**, Schroën, K. Dynamic fluid interface formation in microfluidics: Effect of emulsifier structure and oil viscosity. **2018**, *Innovative Food Science and Emerging Technologies*, 45, 215-219.

[35] Eisinaite, V., Duque Estrada, P., Schroën, K., **Berton-Carabin, C.**, Leskauskaite, D. Tayloring W/O/W emulsion composition for effective encapsulation: The role of PGPR in water transfer-induced swelling. **2018**, *Food Research International*, 106, 722-728.

[36] Ho, K., Schroën, K., San Martín-González, M. F., **Berton-Carabin, C.** Synergistic and antagonistic effects of plant and dairy protein blends on the physicochemical stability of lycopene-loaded emulsions. **2018**, *Food Hydrocolloids*, 81, 180-190.

[37] Keppler, J. K., Steffen-Heins, A., **Berton-Carabin, C.**, Ropers, M. H., Schwarz, K. 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. **2018**, *Food Hydrocolloids*, 81, 286-299.

[38] **Berton-Carabin**, C., Sagis, L., Schroën, K. Formation, structure, and functionality of interfacial layers in food emulsions. **2018**, *Annual Review of Food Science and Technology*, 9, 551-587.

[39] Schröder, A., Sprakel, J., Schroën, K., Spaen, J., **Berton-Carabin, C.** Coalescence stability of Pickering emulsions produced with lipid particles: A microfluidic study. **2018**, *Journal of Food Engineering*, 234, 63-72.

[40] Corstens, M., **Berton-Carabin, C.**, Schroën, K., Viau, M., Meynier, A. Emulsion encapsulation in calciumalginate beads delays lipolysis during dynamic in vitro digestion. **2018**, *Journal of Functional Foods*, 46, 394-402.

[41] Duque Estrada, P., **Berton-Carabin, C.**, Schlangen, M., Haagsma, A., Pierucci, A., van der Goot, A. J. Protein oxidation in plant protein-based fibrous products: Effects of encapsulated iron and process conditions. **2018**, *Journal of Agricultural and Food Chemistry*, 66, 11105–11112.

[42] Corstens, M., Troost, F., Alleleyn, A., Klaassen, T., **Berton-Carabin, C.**, Schroën, K., Masclee, A. Encapsulation of lipids as emulsion-alginate beads reduces food intake: a randomized placebo-controlled cross-over human trial in overweight adults. **2019**, *Nutrition Research*, 63, 86-94.

[43] Sagis, L., Liu, B., Li, Y., Essers, J., Yang, J., Moghimikheirabadi, A., Hinderink, E., **Berton-Carabin, C.**, Schroën, K. Dynamic heterogeneity in complex interfaces of soft interface-dominated materials. **2019**, *Scientific Reports*, 9, 2938.

[44] Cengiz, A., Kahyaoglu, T., Schroën, K., **Berton-Carabin, C.** Oxidative stability of emulsions fortified with iron: the role of liposomal phospholipids. **2019**, *Journal of the Science of Food and Agriculture*, 99, 2957-2965.

[45] Schröder, A., Sprakel, J., Boerkamp, W., Schroën, K., **Berton-Carabin, C.** Can we prevent lipid oxidation in emulsions by using fat-based Pickering particles? **2019**, *Food Research International*, 120, 352-363.

[46] Duque Estrada, P., School, E., van der Goot, A. J., **Berton-Carabin, C.** Double emulsions for iron encapsulation: is a high concentration of lipophilic emulsifier ideal for physical and chemical stability? **2019**, *Journal of the Science of Food and Agriculture*, 99, 4540-4549.

[47] Hinderink, E., Münch, K., Sagis, L., Schroën, K., **Berton-Carabin, C.** Synergistic stabilisation of emulsions by blends of dairy and soluble pea proteins: Contribution of the interfacial composition. **2019**, *Food Hydrocolloids*, 97, 105206.

[48] **Berton-Carabin**, **C.**, Schroën, K. Towards new food emulsions: Designing the interface and beyond. **2019**, *Current Opinion in Food Science*, 27, 74–81.

[49] Cengiz, A., Schroën, K., **Berton-Carabin, C.** Lipid oxidation in emulsions fortified with iron-loaded alginate beads. **2019**, *Foods*, 8, 361.

[50] Duque Estrada, P., **Berton-Carabin, C.**, Nieuwkoop, M., Dekkers, B., Janssen, A., van der Goot, A. J. Protein oxidation and *in vitro* gastric digestion of processed soy-based matrices. **2019**, *Journal of Agricultural and Food Chemistry*, 67, 9591-9600.

[51] Yang, J., Thielen, I., **Berton-Carabin, C.**, van der Linden, E., Sagis, L. Nonlinear interfacial rheology and atomic force microscopy of air-water interfaces stabilized by whey protein beads and their constituents. **2020**, *Food Hydrocolloids*, 101, 105466.

[52] Hinderink, E., Kaade, W., Sagis, L., Schroën, K., **Berton-Carabin, C.** Microfluidic investigation of the coalescence susceptibility of pea protein-stabilised emulsions: Effect of protein oxidation level. **2020**, *Food Hydrocolloids*, 102, 105610.

[53] Schroën, K., de Ruiter, J., **Berton-Carabin, C.** Microtechnological tools used to achieve sustainable food processes, products, and ingredients. **2020**, *Food Engineering Reviews*, 12, 101–120.

[54] Duque Estrada, P., Kyriakopoulou, K., de Groot, W., van der Goot, A. J., **Berton-Carabin, C.** Oxidative stability of soy proteins: from ground soybeans to structured products. **2020**, *Food Chemistry*, 318, 126499.

[55] Wang, L., Dekker, M., Heising, J., Fogliano, V., **Berton-Carabin, C.** Carvacrol release from a packaging film to a model food emulsion: Impact of oil droplet size. **2020**, *Food Control*, 114, 107247.

[56] Hinderink, E., Sagis, L., Schroën, K., **Berton-Carabin, C.** Behavior of plant-dairy protein blends at airwater and oil-water interfaces. **2020**, *Colloids and Surfaces B*, 192, 111015.

[57] Schröder, A., Sprakel, J., Schroën, K., **Berton-Carabin, C.** Chemical stability of α-tocopherol in colloidal lipid particles with various morphologies. **2020**, *European Journal of Lipid Science and Technology*, 122, 2000012.

[58] Schröder, A., Laguerre, M., Sprakel, J., Schroën, K., **Berton-Carabin, C.** Pickering particles as interfacial reservoirs of antioxidants. **2020**, *Journal of Colloid and Interface Science*, 575, 489–498.

[59] Troise, D., **Berton-Carabin, C.**, Vitaglione, P., Fogliano, V. Formation of taste-active pyridinium betaine derivatives is promoted in thermally treated O/W emulsions and alkaline pH. **2020**, *Journal of Agricultural and Food Chemistry*, 68, 5180–5188.

[60] Troise, D., Fogliano, V., Vitaglione, P., **Berton-Carabin, C.** Interrelated routes between Maillard reaction and lipid oxidation in emulsion systems. *Journal of Agricultural and Food Chemistry*, **2020**, 68, 12107–12115.

[61] Schroën, K., de Ruiter, J., **Berton-Carabin, C.** The importance of interfacial tension in emulsification: Connecting scaling relations used in large scale preparation with microfluidic measurement methods. *ChemEngineering*, **2020**, 4, 63.

[62] Yang, J., Faber, I., **Berton-Carabin, C.**, Nikiforidis, C., van der Linden, E., Sagis, L. Foams and air-water interfaces stabilised by mildly purified rapeseed proteins after defatting. *Food Hydrocolloids*, **2021**, 112, 106270.

[63] Hinderink, E., Sagis, L., Schroën, K., **Berton-Carabin, C.** Sequential adsorption and interfacial displacement in emulsions stabilized with plant-dairy protein blends. *Journal of Colloid and Interface Science*, **2021**, 583, 704-713.

[64] Yang, J., Lamochi Roozalipour, S., **Berton-Carabin, C.**, Nikiforidis, C., van der Linden, E., Sagis, L. Airwater interfacial and foaming properties of whey protein - sinapic acid mixtures. *Food Hydrocolloids*, **2021**, 112, 106467.

[65] Feng, J., **Berton-Carabin, C.**, Atac Mogol, B., Schroën, K., Fogliano, V. Glycation of soy proteins leads to a range of fractions with various supramolecular assemblies and functionalities. *Food Chemistry*, **2021**, 343, 128556.

[66] Feng, J., Schroën, K., Fogliano, V., **Berton-Carabin, C.** Antioxidant potential of non-modified and glycated soy proteins in the continuous phase of oil-in-water emulsions. *Food Hydrocolloids*, **2021**, 114, 106564.

[67] Schröder, A. Laguerre, M., Tenon, M., Schroën, K., **Berton-Carabin, C.** Natural particles can armor emulsions against lipid oxidation and coalescence. **2021**, *Food Chemistry*, 347, 129003.

[68] Garcia-Moreno, P., Yang, J., Gregersen, S., Jones, N. C., **Berton-Carabin, C.**, Sagis, L., Hoffmann, S. V., Marcatili, P., Overgaard, M., Hansen, E., Jacobsen, C. The structure, viscoelasticity and charge of potato

peptides adsorbed at the oil-water interface determine the physicochemical stability of fish oil-in-water emulsions. **2021**, *Food Hydrocolloids*, 115, 106605.

[69] Hinderink, E., de Ruiter, J., de Leeuw, J., Schroën, K., Sagis, L., **Berton-Carabin, C.** Early film formation in protein-stabilised emulsions: Insights from a microfluidic approach. **2021**, *Food Hydrocolloids*, 118, 106785.

[70] Hinderink, E., Schröder, A., Sagis, L., Schroën, K., **Berton-Carabin, C.** Physical and oxidative stability of food emulsions prepared with pea protein fractions. **2021**, *LWT Food Science and Technology*, 146, 111424.

[71] Hinderink, E., **Berton-Carabin, C.**, Schroën, K., Riaublanc, A., Houinsou-Houssou, B., Boire, A., Genot, C. Conformational changes of whey and pea proteins upon emulsification approached by front-surface fluorescence. **2021**, *Journal of Agricultural and Food Chemistry*, 69, 6601-6612.

[72] Yang, J., Waardenburg, L., **Berton-Carabin, C.**, Nikiforidis, C., van der Linden, E., Sagis, L. Air-water interfacial behaviour of whey protein and rapeseed oleosome mixtures. **2021**, *Journal of Colloid and Interface Science*, 602, 207-221.

[73] Cengiz, A., Schroën, K., **Berton-Carabin, C.** Towards oxidatively stable emulsions containing iron-loaded liposomes: The key role of phospholipid-to-iron ratio. **2021**, *Foods*, 10, 1293.

[74] Hoppenreijs, L., **Berton-Carabin, C.**, Dubbeldoer, A., Hennebelle, M. Effect of oxygen partial pressure, temperature and fatty acid composition on lipid oxidation mechanisms in stripped and non-stripped oil blends. **2021**, *Food Research International*, 147, 110555.

[75] Schroën, K., **Berton-Carabin, C.**, Renard, D., Marquis, M., Boire, A., Cochereau, R., Amine, C., Marze, S. Droplet microfluidics for food and nutrition applications. **2021**, *Micromachines*, 12, 863.

[76] Hinderink, E., Boire, A., Renard, D., Riaublanc, A., Sagis, L., Schroën, K., Bouhallab, S., Famelart, M. H., Gagnaire, V., Guyomarc'h, F., **Berton-Carabin, C.** Combining plant and dairy proteins in food colloid design. **2021**, *Current Opinion in Colloid & Interface Science*, 56, 101507.

[77] Yang, J., **Berton-Carabin, C.**, Nikiforidis, C., van der Linden, E., Sagis, L. Competition of rapeseed proteins and oleosomes for the air-water interface and its effect on the foaming properties of protein-oleosome mixtures. **2022**, *Food Hydrocolloids*, 122, 107078.

[78] Yang, J., Kornet, R., Diedericks, C., Yang, Q., **Berton-Carabin, C.**, Nikiforidis, C., Venema, P., van der Linden, E., Sagis, L. Rethinking plant protein extraction: albumin — an excellent foaming ingredient. **2022**, *Food Structure*, 31, 100254.

[79] Feng, J., **Berton-Carabin, C.**, Fogliano, V., Schroën, K. Maillard reaction products as functional components in oil-in-water emulsions: A review highlighting interfacial and antioxidant properties. **2022**, *Trends in Food Science and Technology*, 121, 129-141.

[80] ten Klooster, S., Villeneuve, P., Bourlieu-Lacanal, C., Durand, E. Schroën, K., **Berton-Carabin, C.** Alkyl chain length modulates antioxidant activity of gallic acid esters in spray-dried emulsions. **2022**, *Food Chemistry*, 387, 132880.

[81] Hinderink, E., Meinders, M., Miller, R., Sagis, L., Schroën, K., **Berton-Carabin, C.** Interfacial proteinprotein displacement at fluid interfaces. **2022**, *Advances in Colloid and Interface Science*, 305, 102691.

[82] Schroën, K., **Berton-Carabin, C.** A unifying approach to lipid oxidation in emulsions: modelling and experimental validation. **2022**, *Food Research International*, 160, 111621.

[83] ten Klooster, S., van den Berg, J., **Berton-Carabin, C.**, de Ruiter, J., Schroën, K. Upscaling microfluidic emulsification: the importance of sub-structure design in EDGE devices. **2022**, *Chemical Engineering Science*, 261, 117993.

[84] Okuro, P., Viau, M., Kermarrec, A., Cunha, R., Meynier, A., **Berton-Carabin, C.** Lipid recovery from concentrated emulsions by freezing-thawing as an alternative to solvent-based extraction: a case study on mayonnaise. **2022**, *European Journal of Lipid Science and Technology*, 124, 2200101.

[85] **Berton-Carabin**, **C.**, Villeneuve, P. Targeting interfacial localisation of antioxidants in emulsions: Strategies and benefits. **2023**, *Annual Review of Food Science and Technology*, 14, 63-83.

[86] ten Klooster, S., Schroën, K., **Berton-Carabin, C.** Lipid oxidation products in model food emulsions: do they stay in or leave droplets, that's the question. **2023**, *Food Chemistry*, 405, 134992.

[87] ten Klooster, S., **Berton-Carabin, C.**, Schroën, K. Design insights for upscaling spontaneous microfluidic emulsification devices based on behavior of the Upscaled Partitioned EDGE device. **2023**, *Food Research International*, 164, 112365.

[88] Schroën, K., Deng, B., **Berton-Carabin, C.**, Marze, S., Corstens, M., Hinderink, E. Microfluidic observation techniques to monitor dynamic processes occurring in food emulsions and foams. **2023**, *Current Opinion in Food Science*, 50, 100989.

[89] Feng, J., **Berton-Carabin, C.**, Guyot, S., Gacel, A., Fogliano, V., Schroën, K. Coffee melanoidins as emulsion stabilizers. **2023**, *Food Hydrocolloids*, 139, 108522.

[90] Feng, J., Schroën, K., Guyot, S., Gacel, A., Fogliano, V., **Berton-Carabin, C.** Physical and oxidative stabilization of oil-in-water emulsions by roasted coffee fractions: Interface- and continuous phase-related effects. **2023**, *Journal of Agricultural and Food Chemistry*, 71, 4717–4728.

[91] Keuleyan, E., Gélébart, P., Beaumal, V., Kermarrec, A., Birault-Ribourg, L., Le Gall, S., Meynier, A., Riaublanc, A., **Berton-Carabin, C.** Pea and lupin protein ingredients: new insights into endogenous lipids and the key effect of high-pressure homogenization on their aqueous suspensions. **2023**, *Food Hydrocolloids*, 141, 108671.

[92] Cancalon, M., Hemery, Y., Barouh, N., Baréa, B., **Berton-Carabin, C.**, Birault-Ribourg, L., Durand, E., Villeneuve, P., Bourlieu-Lacanal, C. Comparison of the effect of various sources of saturated fatty acids on infant follow-on formulas oxidative stability and nutritional profile. **2023**, *Food Chemistry*, 429, 136854.

[93] ten Klooster, S., Takeuchi, M., Schroën, K., Tuinier, R., Joosten, R., Friedrich, H., **Berton-Carabin, C.** Tiny, yet impactful: Detection and oxidative stability of small oil droplets in emulsions. *Journal of Colloid and Interface Science*, **2023**, 652, 1994-2004.

[94] Locali-Pereira, A., Boire, A., **Berton-Carabin, C.**, Roberto Taboga, S., Nicoletti, V. Pigeon pea, an emerging source of plant-based proteins. **2023**, *ACS Food Science & Technology*, 3, 11, 1777–1799.

[95] Okuro, P., Viau, M., Marze, S., Laurent, S., Cunha, R., **Berton-Carabin, C.**, Meynier, A. *In vitro* digestion of high-lipid emulsions: towards a critical interpretation of lipolysis. **2023**, *Food & Function*, 14, 10868-10881.

[96] Münch, K., Schroën, K., **Berton-Carabin, C.** Relevance of various components present in plant protein ingredients for lipid oxidation in emulsions. *Journal of the American Oil Chemists' Society*, in press (https://doi.org/10.1002/aocs.12790).

[97] Cengiz, A., Hennebelle, M., **Berton-Carabin, C.**, Schroën, K. Effects often overlooked in lipid oxidation in oil-in-water emulsions: Agitation conditions and headspace-to-emulsion ratio. **2024**, *Journal of the American Oil Chemists' Society*, 101, 441-450.

[98] Hennebelle, M., Villeneuve, P., Jacobsen, C., van Duynhoven, J., Durand, E., Meynier, A., Yesiltas, B., Lecomte, J., **Berton-Carabin, C.** Lipid oxidation in emulsions: New insights from the past two decades. **2024**, *Progress in Lipid Research*, 94, 101275.

[99] Ribourg-Birault, L., Meynier, A., Sallan, E., Kermarrec, A., Vergé, S., Falourd, X., **Berton-Carabin, C.**, Fameau, A.L. Oleofoams: the impact of formulating air-in-oil systems from a lipid oxidation perspective. **2024**, *Current Research in Food Science*, 8, 100690.

[100] Locali Pereira, A., Caruso, I., Rabesona, H., Laurent, S., Meynier, A., Kermarrec, A., Birault, L., Geairon, A., Le Gall, S., Thoulouze, L., Solé Jamault, V., **Berton-Carabin, C.**, Boire, A., Nicoletti, V. Pre-treatment effects on the composition and functionalities of pigeon pea seed ingredients. **2024**, *Food Hydrocolloids*, 152, 109923.

[101] Münch, K., ten Klooster, S. van Kouwen, I., **Berton-Carabin, C.**, Schroën, K. Incomplete lipid extraction as a possible cause for underestimation of lipid oxidation in emulsions. *European Journal of Lipid Science and Technology*, in press (https://doi.org/10.1002/ejlt.202300229).

[102] Benatti Gallo, T., Beaumal, V., Houinsou-Houssou, B., Viau, M., Birault-Ribourg, L., Sotin, H., Bonicel, J., Boire, A., Vieira-Queiroz, V., Mameri, H., Guyot, S., Riaublanc, A., Nicoletti, V., **Berton-Carabin, C.** Sorghum protein ingredients: Production, in-depth characterization and use of homogenization to improve their aqueous dispersibility. **2024**, *Future Foods*, 9, 100323.

[103] Münch, K., Takeuchi, M., Tuinier, R., Stoyanov, S., Friedrich, H., Schroën, K., **Berton-Carabin, C.** Mixed interfaces comprising pea proteins and phosphatidylcholine: A route to modulate lipid oxidation in emulsions? **2024**, *Food Hydrocolloids*, 153, 109962.

[104] Münch, K., Stoyanov, S., Schroën, K., **Berton-Carabin, C.** Non-protein components are important drivers for lipid oxidation in plant protein-stabilised emulsions. *ACS Food Science & Technology,* in press (https://doi.org/10.1021/acsfoodscitech.3c00691).

[105] ten Klooster, S., Boerkamp, V., Hennebelle, M., van Duynhoven, J., Schroën, K., **Berton-Carabin, C.** Unravelling the effect of droplet size on lipid oxidation in O/W emulsions by using microfluidics. *Scientific Reports*, just accepted.

Book chapters

[1] Genot C., **Berton C.**, Ropers M.H. (**2013**). The role of the interfacial layer and emulsifying proteins in the oxidation in oil-in-water emulsions. In A. Logan, U. Nienaber and X. Pan (Eds.), *Lipid Oxidation: Challenges in Food Systems*, pp. 177-210, AOCS Press, Urbana, IL.

[2] Falkeborg, M., **Berton-Carabin, C.**, Cheong, L.Z. (**2016**). Ionic liquids in the synthesis of antioxidant targeted compounds. In L.Z. Cheong, Z. Guo and X. Xu (Eds.), *Ionic Liquids for Lipid Processing and Analysis: Opportunities and Challenges*, pp. 317-346, AOCS Press, Urbana, IL.

[3] Schroën, K., **Berton-Carabin, C.** (**2016**). Emulsification: Established and future technologies. In H. G. Merkus & G. M. H. Meesters (Eds.), *Production, Handling and Characterization of Particulate Materials*, vol. 25, pp. 257-289, Springer International Publishing Switzerland.

[4] Schröder, A., Corstens, M., Ho, K., Schroën, K., **Berton-Carabin, C. (2018)**. Pickering emulsions. In S. Roohinejad, R. Greiner, I. Oey, & J. Wen (Eds.), *Emulsion-Based Systems for Delivery of Food Active Compounds: Formation, Application, Health and Safety, First Edition*, pp. 29-67, John Wiley & Sons, Ltd.

[5] **Berton-Carabin, C.**, Schröder, A., Schroën, K., Laguerre, M. (**2021**). Lipid oxidation in Pickering emulsions. In C. Jacobsen, A. D. M. Sorensen, B. Yesiltas & P. J. Garcia-Moreno (Eds.), *Omega-3 Delivery Systems – Production, Physical Characterization and Oxidative Stability*, pp. 275-293, Academic Press, Elsevier.

[6] ten Klooster, S., Boerkamp, V., Lazaridi, E., Yang, S., Takeuchi, M., **Berton-Carabin, C.**, Schroën, K., Janssen, H. G., Friedrich, H., Holhlbein, J., van Duynhoven, J., Hennebelle, M. (**2022**). Lipid oxidation in food emulsions: Analytical challenges and recent developments. In C. Bravo-Diaz (Ed.), *Lipid Oxidation and its Control by Antioxidants*, pp. 3-29, Springer Nature, Switzerland.

Editorial

[1] **Berton-Carabin, C.**, Scholten, E. Editorial: 16th Food Colloids conference: Structuring beyond the colloidal scale. **2017**, *Food Structure*, 12, 33.

Other publications

[1] Muijlwijk, K., **Berton-Carabin, C.**, Schroën, K. Feature article: How microfluidic methods can lead to better emulsion products. **2015**, *Lipid Technology*, 27, 234–236.

[2] Muijlwijk, K., Harsono, H., Li, X., Schroën, K., **Berton-Carabin, C.** Using microfluidic tools to understand emulsification. **2016**, *Inform*, 27, 18-21.

Patents

[1] A.J. Schröder, M. Laguerre, J.H.B. Sprakel, S. Birtic, C.G.P.H. Schroën, **C. Berton-Carabin**. Emulsion comprising antioxidant particles. PCT/EP2019/067780.