

## CURRICULUM VITAE

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### Posizione attuale

Dal 01/10/2018 è professore associato (SSD AGR/15) presso l'Università degli Studi di Udine.

### Posizione precedente

Dal 15/12/2010 al 30 settembre 2018 è stata ricercatore (SSD AGR/15) presso l'Università degli Studi di Udine.

### Studi

1998	Laurea in Scienze e Tecnologie Alimentari presso l'Università degli Studi di Udine con voto 110/110 e lode. Titolo della tesi "Effetto di alcune variabili compositive e di processo sulle proprietà antiossidanti dei prodotti della reazione di Maillard in sistemi modello".
2003	Dottore di Ricerca in Scienze e Tecnologie degli Alimenti presso l'Università degli Studi di Udine. Titolo della tesi "Effetto di variabili compositive e strutturali sulla stabilità dei lipidi in sistemi alimentari" .

### ATTIVITÀ DIDATTICA

#### Insegnamenti ricoperti

Dal 2003 S. Calligaris svolge attività didattica in modo continuativo in diverse Università italiane. Di seguito vengono riportati gli insegnamenti ricoperti nell'ambito di corsi di laurea triennali e di laurea magistrale di Università Italiane. In particolare, gli insegnamenti attualmente ricoperti sono:

Tipologia di corso di studi	Insegnamento	Modulo	Sede universitaria
Laurea Magistrale in Scienze e Tecnologie Alimentari	Sistemi di gestione della sicurezza e della qualità. <i>Insegnamento fondamentale (curricula scienze e tecnologie alimentari e controllo e gestione della qualità)</i>	Progettazione e gestione dei sistemi di qualità e stima della shelf-life (6 CFU)	Università degli Studi di Udine
Laurea Magistrale in allevamento e Benessere Animale	Filiere dei prodotti di origine animale	Tecnologie di trasformazione (6 CFU)	Università degli Studi di Udine
Master di primo livello "Coffee Economics and Science Ernesto Illy"	Industrial processes	Industrial processes <u>Corso in lingua inglese (20 h)</u>	Corso interateneo Università di Udine e Università di Trieste
Laurea Triennale Tecniche della prevenzione nell'ambiente e nei luoghi di lavoro	Scienza dell'alimentazione	Tecnologie Alimentari (2 CFU)	Corso interateneo Università di Udine e Università di Trieste

### ATTIVITÀ DI RICERCA

Dal 1998 ad oggi S. Calligaris svolge attività di ricerca in modo continuativo su diversi temi inerenti le tecnologie alimentari. Nello specifico, l'attività di ricerca di S. Calligaris si è focalizzata su aspetti relativi alla stabilità e alla sicurezza degli alimenti, nonché sulle relazioni tra interventi tecnologici e i loro effetti su composizione, struttura e proprietà degli alimenti. Inizialmente, l'attenzione è stata rivolta alla valutazione degli effetti dei trattamenti tecnologici sulle proprietà antiossidanti degli alimenti. Successivamente, nell'ambito del percorso dottorale, è stato affrontato il tema dell'effetto dello stato fisico dei componenti degli alimenti sulla loro stabilità. Queste ricerche hanno consentito

di sviluppare metodi previsionali non convenzionali per la stima della shelf life degli alimenti. Ad oggi gli studi di S. Calligaris si stanno prevalentemente concentrando sullo sviluppo di alimenti con specifiche funzionalità grazie ad un approccio di *food structure design*.

#### **Partecipazione a progetti di ricerca**

S. Calligaris è stata responsabile scientifico dei seguenti progetti di ricerca finanziati da enti pubblici ed imprese. Inoltre, S. Calligaris ha proposto come *Principal Investigator* diversi progetti nazionali e internazionali su bandi competitivi che hanno superato la selezione e si sono posizionati in graduatoria tra i progetti approvati ma non finanziati. S. Calligaris ha anche partecipato come componente di gruppi di ricerca a diversi progetti nazionali ed internazionali finanziati da enti pubblici ed imprese.

#### **Partecipazione a convegni internazionali e nazionali**

S. Calligaris ha partecipato a numerosi convegni nazionali ed internazionali con contributi orali tenuti in prima persona e presentazione di poster.

### **ELENCO DELLE PUBBLICAZIONI SU RIVISTE INTERNAZIONALI**

	Titolo
1	Nicoli M.C., Calligaris S.*, Manzocco L. Effect of enzymatic and chemical oxidation on the antioxidant capacity of catechin model systems and apple derivatives. <i>Journal of Agricultural and Food Chemistry</i> , 48, 10, 4576-4580, 2000.
2	Da Porto C., Calligaris S., Celotti E., Nicoli M.C. Antiradical properties of commercial cognacs assessed by DPPH• test. <i>Journal of Agricultural and Food Chemistry</i> , 48, 9, 4241-4245, 2000.
3	Hofmann T., Czerny M., Calligaris S., Schieberle P. Model studies on the influence of coffee melanoidins on flavour volatiles of coffee beverages. <i>Journal of Agricultural and Food Chemistry</i> , 49, 2382-2386, 2001.
4	Manzocco L., Calligaris S., Mastrocola D., Nicoli M.C., Leric C.R. Reviews of non-enzymatic browning and antioxidant capacity in processed foods. <i>Trends in Food Science and Technology</i> , 11, 340-346, 2001.
5	Manzocco L., Calligaris S., Nicoli M.C. Assessment of pro-oxidant activity of foods by kinetics analysis of crocin bleaching. <i>Journal of Agricultural and Food Science</i> , 50, 10, 2767-2771, 2002.
6	Calligaris, S*, Falcone, P., Anese, M. Colour changes of tomato purees during storage at freezing temperatures. <i>Journal of Food Science</i> , 67, 6, 2432-2435, 2002.
7	Anese, M., Calligaris, S., Nicoli, M.C., Massini, R. Influence of total solids concentration and temperature on the changes in redox potential of tomato pastes. <i>International Journal of Food Science and Technology</i> , 38, 55-61, 2003.
8	Calligaris, S.*, Manzocco L., Anese, M., Nicoli, M.C. Effect of heath treatment on the antioxidant and pro-oxidant activity of milk. <i>International Dairy Journal</i> , 14, 5, 421-427, 2004.
9	Calligaris, S.*, Manzocco, L., Conte, L.S., Nicoli, M.C. Application of a modified Arrhenius equation for the evaluation of oxidation rate of sunflower oil at sub-zero temperatures. <i>Journal of Food Science</i> , 69, 8, 361-366, 2004.
10	Calligaris, S.*, Nicoli M.C. Effect of selected ions from lyotropic series on lipid oxidation rate. <i>Food Chemistry</i> , 94, 1, 130-134, 2006.
11	Calligaris, S.*, Sovrano, S., Manzocco, L., Nicoli, MC. Influence of Crystallisation on the oxidative stability of extra virgin olive oil. <i>Journal of Agricultural and Food Chemistry</i> , 54, 2, 529-535, 2006.

12	Manzocco, L., Calligaris S., Nicoli, MC. Modelling bleaching of tomato derivatives at subzero temperatures. <i>Journal of Agricultural and Food Chemistry</i> , 54, 4, 1302-1308, 2006.
13	Pittia P., Anese M., Manzocco L., Calligaris S., Mastrocola D., Nicoli M.C. Liquid-vapour partition of ethanol in bakery products. <i>Flavour and Fragrance Journal</i> , 21, 3-7, 2006.
14	Calligaris, S.*, Manzocco, L., Nicoli, MC. Modelling the temperature dependence of oxidation rate in water-in-oil emulsions stored at sub-zero temperatures. <i>Food Chemistry</i> , 101, 1019-1024, 2007.
15	Calligaris, S.*, Manzocco, L., Kravina, G. Nicoli M.C. Shelf-life modeling of bakery products by using oxidation indexes. <i>Journal of Agriculture and Food Chemistry</i> , 55, 5, 2004-2009, 2007.
16	Calligaris, S.*, Da Pieve S., Kravina, G., Manzocco, L., Nicoli M.C. Shelf-life prediction of bread sticks by using oxidation indices: a validation study. <i>Journal of Food Science</i> , 73, 2, E51-E56, 2008.
17	Manzocco, L., Kravina, G., Calligaris, S., Nicoli M.C. Shelf life modelling of photosensitive food: the case of coloured beverages. <i>Journal of Agriculture and Food Chemistry</i> , 56 (13) 5158-5164, 2008.
18	Calligaris S.*, Arrighetti G., Barba L., Nicoli M.C. Phase transition of sunflower oil as affected by the oxidation level. <i>Journal of American Oil Chemists Society</i> , 85(7), 591-598, 2008.
19	Calligaris S.*, Munari M., Arrighetti G., Barba L. An insight into physicochemical properties of coffee oil. <i>European Journal of Lipid Science and Technology</i> , 111, 12, 1270-1277, 2009.
20	Nicoli M.C., Calligaris S., Manzocco L. Shelf life testing of coffee and related products: uncertainties, pitfalls and perspectives. <i>Food Engineering Reviews</i> , 1, 2, 159-168, 2009.
21	Calligaris S.*, Da Pieve S., Arrighetti G., Barba L. Effect of the structure of monoglyceride-oil-water gels on aroma partition. <i>Food Research International</i> , 43,671-677, 2010.
22	Da Pieve, S., Calligaris S., Co E., Nicoli M.C., Marangoni A. Shear nanostructuring of monoglyceride organogel. <i>Food Biophysics</i> , 5, 211-217, 2010.
23	Anese M., Quarta B., Peloux L., Calligaris S. Effect of formulation on the capacity of L-asparaginase to minimize acrylamide formation in short dough biscuits. <i>Food Research International</i> , 44, 2837-2842, 2011.
24	Da Pieve S., Calligaris S.*, Panozzo A., Arrighetti G., Nicoli M.C. Effect of monoglyceride organogel structure on cod liver oil stability. <i>Food Research International</i> , 44, 2978-2983, 2011.
25	Calligaris S.*, Foschia M., Bartolomeoli I., Maifreni M., Manzocco L. Study on the applicability of high-pressure homogenization for the production of banana juices. <i>LWT- Food Science and Technology</i> , 45, 1, 117-121, 2012.
26	Manzocco L., Panozzo A., Calligaris S. Accelerated shelf life testing (ASLT) of oils by light and temperature exploitation. <i>Journal of American Oil Chemist's Society</i> , 89, 4, 577-583, 2012.
27	Manzocco L., Anese M., Calligaris S.*, Quarta B., Nicoli M.C. Use of monoglyceride hydrogel for the production of low fat short dough pastry. <i>Food Chemistry</i> , 132, 175-180, 2012.
28	Manzocco, L., Calligaris S.*, Da Pieve S., Marzona S., Nicoli M.C. Effect of monoglyceride-oil-water gels on white bread properties. <i>Food Research International</i> , 49, 778-782, 2012.
29	Calligaris S.*, Gulotta A., Ignat A., Bermudez-Aguirre D., Barbosa-Canovas G., Nicoli M.C. Milk pre-treatment by high pressure homogenization in the manufacturing of "queso fresco" fortified with omega-3 fatty acids. <i>LWT- Food Science and Technology</i> , 50, 629-633, 2013.
30	Barba L., Arrighetti G., Calligaris S*. Crystallization and melting properties of extra virgin olive oil studied by synchrotron XRD and DSC. <i>European Journal of Lipid Science and Technology</i> , 115, 322-329, 2013.
31	Calligaris S., Manzocco L., Valoppi F., Nicoli M.C. Effect of palm oil replacement with monoglyceride organogel and hydrogel on sweet bread properties. <i>Food Research International</i> , 51, 596-602, 2013
32	Calligaris S.*, Manzocco L., Da Pieve S., Arrighetti G., Nicoli M.C. Effect of Lipid Physical State of Palm Derivatives on $\beta$ -Carotene Bleaching. <i>Journal of Food Science</i> , 78, 4, E549-E554, 2013.
33	Anese M, Manzocco L., Calligaris S., Nicoli M.C. Industrially Applicable Strategies for Mitigating Acrylamide, Furan and 5-Hydroxymethylfurfural in Food. <i>Journal of Agricultural and Food Chemistry</i> , 61, 43, 10209-10214, 2013.
34	Calligaris S.*, Mirolo G., Da Pieve S., Arrighetti G., Nicoli M.C. Effect of Oil Type on Formation, Structure and Thermal Properties of $\gamma$ -oryzanol and $\beta$ -sitosterol-Based Organogels. <i>Food Biophysics</i> , 9, 1, 69-75, 2014.
35	Manzocco L., Calligaris S. *, Camerin M., Pizzale L., Nicoli M.C. Prediction of firmness and physical stability of low-fat chocolate spreads. <i>Journal of Food Engineering</i> , 126, 120-125, 2014.
36	Mao L., Calligaris S., Barba L., Miao S. Monoglyceride self-assembled structure in O/W emulsion: formation, characterization and its effect on emulsion properties. <i>Food Research International</i> , 58, 81-88, 2014.

37	Panozzo, A., Manzocco, L., Calligaris, S., Bartolomeoli, I., Maifreni, M., Lippe, G., Nicoli, M.C. Effect of high pressure homogenisation on microbial inactivation, protein structure and functionality of egg white. <i>Food Research International</i> , 62, 718-725, 2014.
38	Calligaris, S., Valoppi, F., Barba, L., Anese M., Nicoli M.C. Mutual effect of fat and $\beta$ -carotene on fat crystal network structure and carotenoid bleaching. <i>Food Research International</i> , 66, 257-263, 2014.
39	Valoppi F., Calligaris S. *, Barba L., Nicoli M.C. Compositional phase diagram, rheological and structural properties of systems containing UHT skim milk, sunflower oil, saturated monoglycerides and co-surfactants. <i>Food Biophysics</i> , 10, 94-102, 2015.
40	Comuzzo, P., Calligaris S., Palacios A., Ginaldi F., Iacumin, L., Zironi R. Potential of high pressure homogenization to induce autolysis of wine yeasts. <i>Food Chemistry</i> , 185, 340-348, 2015.
41	Calligaris S., Comuzzo P., Bot, F., Lippe G., Zironi R., Anese M., Nicoli M.C. Nanoemulsions as delivery systems of hydrophobic silybin from silymarin extract: effect of oil type on silybin solubility, in vitro bioaccessibility and stability. <i>LWT- Food Science and Technology</i> , 63, 77-84, 2015.
42	Valoppi F., Calligaris S.*, Barba L., Nicoli M.C. Structural and viscoelastic characterization of ternary mixtures of sunflower oil, saturated monoglycerides and aqueous phases containing different bases. <i>Food Research International</i> , 74, 224-230, 2015.
43	Calligaris S.*, Ignat A., Biasutti M., Innocente N., Nicoli M.C. Cheese fortification using saturated monoglyceride self-assembly structures as carrier of omega-3 fatty acids. <i>International Journal of Food Science and Technology</i> , 50(9), 2129-2134, 2015.
44	Manzocco L., Ignat A., Anese M., Bot F., Calligaris S., Valoppi F., Nicoli M.C. Efficient management of water resource in fresh-cut industry: current status and perspectives. <i>Trends in Food Science and Technology</i> , 46, 286-294, 2015.
45	Calligaris S.*, Manzocco L., Anese M., Nicoli M.C. Shelf life assessment of food undergoing oxidation - a review. <i>Critical review in Food Science and Nutrition</i> , 56, 1903-1912, 2016.
46	Anese M., Valoppi F., Calligaris S*, Suman M., Lagazio C., Manzocco L., Nicoli M.C. Omega-3 enriched biscuits with low levels of heat-induced toxicants: effect of formulation and baking conditions. <i>Food Process and Biotechnology</i> , 9(2), 232-242, 2016.
47	Manzocco, L., Plazzotta S., Maifreni M., Calligaris S., Anese M., Nicoli M.C. Impact of UV-C light on storage quality of fresh-cut pineapple in two different packages. <i>LWT- Food Science and Technology</i> , 65, 1138-1143, 2016.
48	Calligaris S., Plazzotta S., Bot F., Grasselli S., Malchiodi A., Anese M. Nanoemulsion preparation by combining high pressure homogenization and high power ultrasound at low energy densities. <i>Food Research International</i> , 2016, 93, 25-30.
49	Valoppi F., Calligaris S., Marangoni A.G. Phase transition and polymorphic behavior of binary systems containing fatty alcohols and peanut oil. <i>Crystal Growth &amp; Design</i> , 16, 8, 4209-4215, 2016
50	Valoppi F., Calligaris S., Marangoni A.G. Structure and physical properties of oleogels containing peanut oil and saturated fatty alcohols. <i>European Journal of Lipid Science and Technology</i> , 119, 5, 1600252 (1-11), 2017
51	Calligaris S., Valoppi F., Barba L., Pizzale L., Anese M., Conte L., Nicoli M.C.. Development of transparent curcumin loaded microemulsions by phase inversion temperature (PIT) method: effect of lipid type and physical state on curcumin stability. <i>Food Biophysics</i> , 12, 1, 45-51, 2017.
52	Valoppi F., Calligaris S.*, Barba L., Segatin N., Poklar N., Nicoli M.C. Influence of oil type on formation, structure, thermal and physical properties of monoglyceride-based organogel. <i>European Journal of Lipid Science and Technology</i> , 2017, 119, 2, 1500549.
53	Saccotelli M.A., Conte A., Burrafato K. R., Calligaris S., Manzocco L., Del Nobile M.A. Optimization of durum wheat bread enriched with bran. <i>Food Science &amp; Nutrition</i> , 1-7, DOI: 10.1002/fsn3.448, 2017
54	Comuzzo, P., Calligaris S., Iacumin, L., Ginaldi F., Voce S., Zironi R. Application of multi-pass high pressure homogenization under variable temperature regimes to induce autolysis of wine yeasts. <i>Food Chemistry</i> , 224, 105-113, 2017.
55	Manzocco L., Valoppi F., Lagazio C., Calligaris S., Anese M., Nicoli M.C. Shelf life validation by monitoring food on the market: the case study of sliced white bread. <i>Italian Journal of Food Science</i> , 29, 100-111, 2017.
56	Valoppi F., Frisina R., Calligaris S*. Fabrication of transparent lemon oil loaded microemulsions by phase inversion temperature (PIT) method: effect of oil phase composition and stability after dilution. <i>Food Biophysics</i> , 12, 2, 244-249, 2017.
57	Manzocco L., Valoppi F., Calligaris S. *, Andreatta F., Spilimbergo S., Nicoli M.C. Exploitation of $\kappa$ -carrageenan aerogels as template for edible oleogel preparation. <i>Food Hydrocolloids</i> , 71, 68-75, 2017
58	Bot F., Calligaris S.*, Cortella G., Nocera F., Peressini D., Anese M. Effect of high pressure homogenization and high power ultrasound on some physical properties of tomato juices with different concentration levels. <i>Journal of Food Engineering</i> , 213, 10-17, 2017
59	Marino M., Innocente N., Calligaris S., Maifreni M., Marangone A., Nicoli M.C. Viability of probiotic <i>Lactobacillus rhamnosus</i> in structured emulsion containing saturated monoglycerides. <i>Journal of Functional Foods</i> , 35, 51-59, 2017.
60	Fayaz, G., Goli, S.A.H., Kadivar, M., Valoppi, F., Barba, L., Balducci, C, Conte, L, Calligaris, S, Nicoli, M.C. Pomegranate seed oil organogels structured by propolis wax, beeswax, and their mixture, <i>European Journal of Lipid Science and Technology</i> , 10.1002/ejlt.201700032, 2017

61	Fayaz, G., Goli, S.A.H., Kadivar, M., Valoppi, F., Barba, L., Calligaris, S.*, Nicoli, M.C. Potential application of pomegranate seed oil oleogels based on monoglycerides, beeswax and propolis wax as partial substitutes of palm oil in functional chocolate spreads. <i>LWT- Food Science and Technology</i> , 86, 523-529, 2017.
62	Marin V., Gazzin S., Gambaro S.E., Dal Ben M., Calligaris S., Anese M., Raseni A., Avellini C., Giraudi P.J., Tiribelli C., Rosso N. Effects of Oral Administration of Silymarin in a Juvenile Murine Model of Non-alcoholic Steatohepatitis. <i>Nutrients</i> , 9, 1006, 2017.
63	Bot F., Calligaris S., Cortella G., Nocera F., Plazzotta S., Anese M. Study on high pressure homogenization and high power ultrasound effectiveness in inhibiting polyphenoloxidase activity in apple juice. <i>Journal of Food Engineering</i> , 221, 70-76, 2018.
64	Plazzotta S., Calligaris S.*, Manzocco L. Application of different drying techniques to fresh-cut salad waste to obtain food ingredients rich in antioxidants and with high solvent loading capacity. <i>LWT- Food Science and Technology</i> 89, 276-283, 2018.
65	Calligaris S., Valoppi F., Barba L., Anese M., Nicoli M.C. $\beta$ -Carotene degradation kinetics as affected by fat crystal network and solid/ liquid ratio. <i>Food Research International</i> , 105, 599-604, 2018.
66	Nicoli M.C., Calligaris S*. Secondary shelf life: an underestimated issue. <i>Food Engineering review</i> , 2018, <a href="https://doi.org/10.1007/s12393-018-9173-2">https://doi.org/10.1007/s12393-018-9173-2</a>
67	Calligaris S*, Plazzotta S., Valoppi F., Anese M. Combined high-power ultrasound and high-pressure homogenization nanoemulsification: the effect of energy density, oil content and emulsifier type and content. <i>Food Research International</i> , 2018, 107, 700-707.
68	Calligaris S., Marino M., Maifreni M., Innocente N. Potential application of monoglyceride structured emulsions as delivery systems of probiotic bacteria in reduced saturated fat ice cream. <i>LWT- Food Science and Technology</i> , 2018, 96, 329-334.
69	Plazzotta S., Calligaris S.*, Manzocco L. Innovative bioaerogel-like materials from fresh-cut salad waste via supercritical-CO <sub>2</sub> -drying. <i>Innovative Food Science and emerging Technologies</i> , 2018, 47, 485-492.
70	Innocente N., Marino M., Calligaris S. Recovery of brines from cheesemaking using High-Pressure Homogenization treatments. <i>Journal of Food Engineering</i> , 2019, 247, 188-194.
71	Alongi M., Calligaris S., Anese M. Fat concentration and high-pressure homogenization affect chlorogenic acid bioaccessibility and $\alpha$ -glucosidase inhibitory capacity of milk-based coffee beverages. <i>Journal of Functional Foods</i> , 2019, 58, 130-137
72	Plazzotta S., Calligaris S., Manzocco L. Structure of oleogels from $\kappa$ -carrageenan templates as affected by supercritical-CO <sub>2</sub> -drying, freeze-drying and lettuce-filler addition. <i>Food Hydrocolloids</i> , 2019, 96, 1-10.
73	Fayaz G., Plazzotta S., Calligaris S., Manzocco L., Nicoli M.C. Impact of high pressure homogenization on physical properties, extraction yield and biopolymer structure of soybean okara. <i>LWT- Food Science and Technology</i> , 2019, 113, 108324.
74	Fayaz G., Calligaris S.*, Nicoli M.C. Comparative study on the ability of different oleogelators to structure sunflower oil. <i>Food Biophysics</i> , 2019, <a href="https://doi.org/10.1007/s11483-019-09597-9">https://doi.org/10.1007/s11483-019-09597-9</a> .
75	Calligaris S., Valoppi F., Comuzzo P., Manzocco L., Nicoli M.C. Microemulsions as delivery systems of lemon oil and $\beta$ -carotene into beverages: stability test under different light conditions. <i>Journal of the Science of Food and Agriculture</i> , 2019, DOI:10.1002/jsfa.9973
76	Comuzzo P., Calligaris S., Potential applications of high pressure homogenization in winemaking: a review. <i>Beverages</i> 2019, 5, 56; doi:10.3390/beverages5030056.

\*S. Calligaris corresponding author

## Brevetti

2016	Brevetto depositato in Italia n. 1020160000692429 del 4.7.2016. Inventori: Calligaris S., Manzocco L., Plazzotta S. Proprietà: Università di Udine. Titolo: METODO PER LA REALIZZAZIONE DI COMPOSTI SOSTITUTIVI E/O IMITATIVI DEI GRASSI
2018	International application PCT n. WO2018/007399 pubblicata il 11.1.2018. Inventori: Calligaris S., Manzocco L., Plazzotta S. Proprietà: Università di Udine. Titolo: Method to make fat substitute and or fat imitator compounds

## Capitoli in libri a diffusione internazionale

L1	Nicoli M.C., Manzocco L., Calligaris S., Chapter 11. Packaging and the shelf life of coffee. In <i>Food packaging and shelf-life</i> (a cura di G. Robertson), CRC Press Taylor and Francis Group, Boca Raton, 2010, pp. 199-214.
L2	Manzocco L., Calligaris S., Nicoli M.C., Charter 9. Method of shelf-life determination and prediction. In <i>Oxidation in foods and beverages and antioxidant applications</i> (a cura di E. Decker, J. McClements, R. Elias), Woodhead publishing Limited, Cambridge, 2010, pp.196-219.
L3	Manzocco L., Calligaris S., Nicoli M.C. Coffee. Charter 21. In <i>Food and Beverages shelf life and stability</i> (a cura di Kilcast D. and Subramanian P.), Woodhead publishing Limited, Cambridge, 2011, pp.615-640.

L4	Calligaris S., Manzocco L. Chapter 4. Critical indicators in shelf life assessment. In Shelf life assessment of foods (a cura di M.C. Nicoli), CRC Press Taylor and Francis Group, Boca Raton, 2012, pp. 61-73.
L5	Calligaris S., Manzocco L., Lagazio C. Chapter 5. Modelling shelf life by using chemical, physical and sensory indicators. In Shelf life assessment of foods (a cura di M.C. Nicoli), CRC Press Taylor and Francis Group, Boca Raton, 2012, pp.75-126.
L6	Calligaris S., Barba L., Arrighetti G., Nicoli M.C. Application of DSC-XRD coupled techniques for the evaluation of phase transition in oils and fats and related polymorphic forms. Chapter 6. In "Differential Scanning Calorimetry. Application in fat and oil technology" (a cura di E. Chiavaro), CRC Press Taylor and Francis Group, Boca Raton, 2015, pp.141-161.
L7	Manzocco, L., Calligaris S., Anese M., Nicoli M.C. Determination and prediction of shelf life of oil/fats and oil/fat-based foods. Chapter 2. In "Oxidative stability and shelf life of foods containing oils and fats" (Hu M., and Jacobsen C. Editors) AOCS Press, London, 2016, pp.133-154.
L8	Manzocco L., Calligaris S., Anese M., Nicoli M.C. The stability and shelf life of coffee products. Charter 13. In The stability and shelf life of foods, second edition, a cura di Subramanian P., Woodhead publishing Limited, Cambridge, 2016, pp.375-395.
L9	Valoppi F., Calligaris S., Marangoni A.G. Stearyl alcohol oleogels. Chapter 8. Edible Oleogels, Second Edition, a cura di A.G. Marangoni, N. Garti, Elsevier, 2018, pp 21-232.
L10	Calligaris S., Manzocco L., Anese M., Nicoli M.C. Accelerated shelf life testing, Chapter 12, in Food quality and Shelf life, C. Galanakis Ed., Elsevier, 2019, 359-392.