

Des articles publiés par des membres du Groupe français de chimie des aliments et du goût

Le Groupe Français de Chimie des Aliments et du Goût est un groupe thématique de la Société française de chimie.

Il regroupe toutes celles et tous ceux qui considèrent :

- les aliments, le goût

- l'existence de molécules dans leur travail.

Cela inclut bien sûr : la "chimie analytique", la synthèse chimique, la biochimie, la physico-chimie, la toxicologie (pour partie), la nutrition (pour partie), les procédés (pour partie), etc.

Pour donner plus de cohésion à la communauté, on annonce ci dessous les articles publiés par les membres du Groupe.

Ils sont donnés par ordre de publication décroissante : les plus récemment parus sont en haut de la liste.

{{2022}}

Sharan S, Sanghelini G, ernin A, Descharles N, Zotzel J, Bonerz D, Aschoff J, Maillard MN, Saint-Eve A. 2022. Flavor of fava bean (*Vicia faba* L.) ingredients: Effect of processing and application conditions on odor-perception and headspace volatile chemistry, *J Food Res Int*, 111582, DOI10.1016/j.foodres.2022.111582

Noguera PM, Lantoine J, Le Roux E, Yang S, Jakobi R, Krause S, Saint-Eve A, Nonazzi C, Rega B. 2022. Saponins from Pea Ingredients to Innovative Sponge Cakes and Their Association with Perceived Bitterness, *Food*, 11(18), 2919, DOI10.3390/foods11182919
Krause S Asamoah EA, Huc-Mathis D, Moulin G, Jakobi R, Rega B, Bonazzi C. 2022. *Food Chemistry*, 386, 132653. DOI10.1016/j.foodchem.2022.132653

Perre P, Remond R, Almeida G. 2022. Multiscale analysis of water vapor diffusion in low density fiberboard: Implications as a building material, *Construction and building materials*, 329, DOI10.1016/j.conbuildmat.2022.127047

Delaplace G, Jeantet R, Grenville R, Cuvelier G, Loubiere K. 2022. How dimensional analysis allows to go beyond Metzner-Otto concept for non-Newtonian fluids, *Reviews in chemical engineering*, 38(3), 407-429.

Latil P, Zennoune A, Ndoye FT, Flin F, Geindreau C, Kenkheliva H. 2022. X-ray microtomography of ice crystal formation and growth in a sponge cake during its freezing and storage, *Journal of food engineering*, 325, DOI10.1016/j.jfoodeng.2022.110989

Krause S, Debon S, Palchen K, Jakobi R, Rega B, Bonazzi C, Grauwet T. 2022. In vitro digestion of protein and starch in sponge cakes formulated with pea (*Pisum sativum* L.) ingredients, *Food & Function*, 13 (6), 3206-3219. DOI10.1039/d1fo03601g

Perré, P., Nguyen, D.M, Almeida, G., 2022. Mechanisms of liquid imbibition in wood: a macroscopic Washburn approach derived from X-ray tomography observations. *Scientific reports*, 12 (1) 1750 .

Palanisamy A, Moulin G, Ramaioli M, Plana-Fatori A, Flick D, Menut P. 2022. Determination of the mechanical properties of gelatinized starch granule from bulk suspension characterization, *Rheologica Acta*, DOI10.1007/s00397-022-01325-4

Monnet AF, Saint-Eve A, Michon C, Jeuffroy MH, Delarue J, Blumenthal D. 2022. Tailoring the Properties of Pea-Enriched Soft Cakes Using a Multiobjective Model Based on Sensory-Relevant Instrumental Characterization, *Food and Bioprocess Technology*, 15(2), 459-473.

Krause S, Asamoah EA, Moulin G, Bonazzi C, Rega B. 2022. Lipid oxidation during the beating of cake batter containing yellow pea (*Pisum sativum* L.) flour, *LWT-Food science and technology*, 154, 112770. DOI10.1016/j.lwt.2021.112770

Urion KC, Garcia R, Boussard A, Degrand L, Guiga W. 2022. Optimization of pure linoleic acid 13-HPX production by enzymatic reaction pathway: Unravelling oxygen transfer role, *Chemical Engineering Journal*, 430, 4, 132978. DOI10.1016/j.cej.2021.132978

Le Delliou B, Vitrac O, Castro M, Bruzard S, Domenek S. 2022. Characterization of a new bio-based and biodegradable blends of poly(3-hydroxybutyrate-co-3-hydroxyvalerate) and poly(butylene-co-succinate-co-adipate), *Journal of applied polymer science*, 52124. DOI10.1002/app.52124

{{
2021}}

Lancha, J.P., Colin, J., Almeida, G., Guerin, C., Casalinho, J., Perré, P. 2021. A validated Distributed Activation Energy Model (DAEM) to predict the chemical degradation of biomass as a function of hydrothermal treatment conditions. *Bioresource Technology*, 341, 125831.

Lancha, J.P., Perré, P., Colin, J., Lv, P., Ruscassier, N., Almeida, G. 2021. Multiscale investigation on the chemical and anatomical changes of lignocellulosic biomass for different severities of hydrothermal treatment. *Scientific reports*, 11 (1), 1-16.

Nguyen, D.M, Almeida, G., Nguyen, T.M.L, Zhang, J., Lu, P., Colin, J., Perré, P. 2021. A critical review of current imaging techniques to investigate water transfers in wood and biosourced materials, *Transport in Porous Media* 137(10), 21-61.

Lee J, Toux S, Le Roux E, Keller S, Rega B, Bonazzi C. 2022. p Unravelling caramelization and Maillard reactions in glucose and glucose plus leucine model cakes: Formation and degradation kinetics of precursors, alpha-dicarbonyl intermediates and furanic compounds during baking, *Food Chemistry*, 376, 131917. DOI10.1016/j.foodchem.2021.131917

Renaud, C., Lamballerie, M., Guyon, C., Astruc, T., Vénien A., Pottier L., 2022, Effects of high-pressure treatment on the muscle structure of salmon (*Salmo salar*). Accepted in Food Chemistry

Prache, S., Adamiec, C., Astruc, T., Baéza-Campone, E., Bouillot P-E., Clinquart, A., Feidt, C., Fourat, E., Gautron, J., Guillier, L., Kesse-Guyot, E., Lebret, B., Lefèvre, F., Martin, B., Mirade, P-S., Pierre, F., Raulet, M., Rémond, D., Sans, P., Souchon, I., Donnars, C., Santé-Lhoutellier, V., Girard, A., Le Perchec, S. 2022. Quality of animal-source foods. Accepted in Animal

Portanguen, S., Tournayre, P., Sicard, J., Astruc, T., & Mirade, P. (2022). 3D food printing: Genesis, trends and prospects. In R. Bhat (Ed.), *Future Foods: Global Trends, Opportunities, and Sustainability Challenges* Elsevier Inc. ed., Chapter 36, pp. 18.
<https://doi.org/10.1016/B978-0-323-91001-9.00008-6>

Functional Microswitches of Mammalian G Protein-Coupled Bitter-Taste Receptors. J. Topin, C. Bouysset, Y. Kim, M. Rhyu, S. Fiorucci, J. Golebiowski. 2021. *Cell. Mol. Life Sci.*, 2021, 78, 7605–7615.

This H. 2021. Les cristaux d'Auguste Laurent et des techniques d'analyse optique de Jean-Baptiste Biot furent directement à l'origine de la découverte de la chiralité par Louis Pasteur, *Notes Académiques de l'Académie d'agriculture de France*, 9, 1-33.

Prache S., Santé-Lhoutellier V., Donnars C. (coord), Adamiec C., Astruc T., Baeza-Campone E., Bouillot P.E., Clinquart A., Feidt C., Fourat E., Gautron J., Guillier L., Kesse-Guyot E., Lebret B., Lefevre F., Martin B., Mirade P.S., Pierre F., Rémond D., Sans P., Souchon I., Girard A., Le Perchec S., Raulet M., 2021. *Qualité des aliments d'origine animale, production et transformation*. Éditions Quæ (France), 170 p

Chian, F.M., Kaur, L., Astruc, T., Vénien, A., Stübler, A-S., Aganovic, K., Loison, O., Hodgkinson, S., Boland, M. 2021. Shockwave processing of beef brisket in conjunction with sous vide cooking: Effects on protein structural characteristics and muscle microstructure, *Food Chemistry*, 343, 128500

Supaphon P., Kerdpiboon S., Vénien A., Loison O., Sicard J., Rouel J., Astruc T. 2021. Structural changes in local Thai beef during sous-vide cooking. *Meat Science*, 175, 108442.

Vaskoska, R., Venien, A., Ha, M., White, J. D., Unnithan, R. R., Astruc, T., & Warner, R. D. 2021. Thermal denaturation of proteins in the muscle fibre and connective tissue from bovine muscles composed of type I (masseter) or type II (cutaneous trunci) fibres: DSC and FTIR microspectroscopy study. *Food Chemistry*, 343, 128544.

Zennoune A, Latil P, Ndoye FT, Flin F, Perrin J, Geindreau C, Benkhelifa H. 2021. 3D Characterization of Sponge Cake as Affected by Freezing Conditions Using Synchrotron X-ray Microtomography at Negative Temperature, *Foods*, 10(12),

Siddharth S, Zotzel J, Stadtmuller J, Donerz D, Aschoff J, Saint-Eve A, Maillard MN, Olsen K, Rinnan A, Vibeke O. 2021. Two Statistical Tools for Assessing Functionality and Protein Characteristics of Different Fava Bean (*Vicia faba* L.) Ingredients, *Foods* 10(10) DOI10.3390/foods10102489

Terlouw C. E. M., Deiss V., Astruc T. 2021. Stunning of pigs with different gas mixtures: behavioural and physiological reactions. *Meat Science*, 175, 108452

Terlouw C. E. M., Deiss V., Astruc T. 2021. Comparing gas and electrical stunning: effects on meat quality of pigs when pre-stunning physical activity is minimal. *Foods*, 10, 319. <https://doi.org/10.3390/foods10020319>

Chian F-M., Kaur L., Oey I., Astruc T., Hodgkinson S. & Boland M. 2021. Effects of pulsed electric field (PEF) and sous vide (SV) cooking on muscle structure and in vitro protein digestibility of beef brisket. *Foods*, 10, 512. <https://doi.org/10.3390/foods10030512>

Théron, L., Bonifacie, A., Delabre, J., Sayd, T., Aubry, L., Gatellier, P., Ravel, C., Chambon, C., Astruc, T., Rouel, J., Santé-Lhoutelier, V., Refregiers, M., and Wien, F. 2021. Investigation by Synchrotron Radiation Circular Dichroism of the Secondary Structure Evolution of Pepsin under Oxidative Environment. *Foods* 2021, 10, 998. <https://doi.org/10.3390/foods10050998>

N’Gatta, K.C.A.; Kondjoyan, A.; Favier, R.; Rouel, J.; Vénien, A.; Astruc, T.; Gruffat, D.; Mirade, P.-S. 2021. Impact of Tumbling Process on the Toughness and Structure of Raw Beef Meat Pieces. *Foods*, 10, 2802. <https://doi.org/10.3390/foods10112802>

Krause S, Keller S, Hashemi A, Descharles N, Bonazzi C, Rega B. 2021. From flours to cakes: Reactivity potential of pulse ingredients to generate volatile compounds impacting the quality of processed foods, 371, 131379

Faraj H, Sollogoub C, Guinault A, Gervais M, Bras J, Salmi-Mani H, Roger P, Le Gars, Domenek S. 2021. A comparative study of the thermo-mechanical properties of polylactide/ cellulose nanocrystal nanocomposites obtained by two surface compatibilization strategies, 29, 102907

Abbou, A., Kadri, N., Servent, A., Ricci, J., Khodir, M., Dornier, M., Collignan, A., Achir, N. (2021). Setting up a diagram process for the elaboration of a new plant-based beverage from *Pinus halepensis* seeds: Selection of unit operations and their conditions. *Journal of Food Process Engineering*, e13943.

Lacroix A, Hayert M, Bosc V, Menut P. 2021. Batch versus microfluidic emulsification processes to produce whey protein microgel beads from thermal or acidic gelation, *Journal of Food Engineering*, 312, 110738. DOI10.1016/j.jfoodeng.2021.110738

Domenek S, Berzin F, Ducruet V, Plessis C, Dhakal H, Richaud E, Beaugrand J. 2021. Extrusion and injection moulding induced degradation of date palm fibre - polypropylene composites, *Polymer degradation and stability*, 190, 10964. DOI10.1016/j.polymdegradstab.2021.109641

Floret C, Monne AF, Micard V, Walrand S, Michon C. 2021. Replacement of animal proteins in food: How to take advantage of nutritional and gelling properties of alternative protein sources, *Critical reviews in food science and nutrition*, DOI10.1080/10408398.2021.1956426

Masbernat L, Berland S, Leverrier C, Moulin G, Michon C, Almeida G. 2021. Structuring wheat dough using a thermomechanical process, from liquid food to 3D-printable food material. *JOURNAL OF FOOD ENGINEERING*, 310, 110696, DOI10.1016/j.jfoodeng.2021.110696

Modelling shear viscosity of soft plant cell suspensions, Leverrier, Cassandre; Almeida, Giana; Cuvelier, Gerard; Menut, Paul. *Food Hydrocolloids*, 118, DOI: 10.1016/j.foodhyd.2021.106776

Stabilization of oil-in-water emulsions with a mushroom (*Agaricus bisporus*) by-product, Umana, Monica; Turchiuli, Christelle; Eim, Valeria; Rossello, Carmen; Simal, Susana
Journal Of Food Engineering, 307. DOI: 10.1016/j.jfoodeng.2021.110667

Roisin Burke, Alan Kelly, Christophe Lavelle, Hervé This vo Kientza, Foreword, Handbook of Molecular Gastronomy, CRC Press,

Roisin Burke, Alan Kelly, Christophe Lavelle, Hervé This vo Kientza, Introduction do Molecular Gastronomy and its applications, Handbook of Molecular Gastronomy, CRC Press,

Hervé This vo Kientza, Bioactivity and its measurement, Handbook of Molecular Gastronomy, CRC Press

Hervé This vo Kientza, Capillarity in action, Handbook of Molecular Gastronomy, CRC Press

Hervé This vo Kientza, Chantillys : the cousins of whipped cream, Handbook of Molecular Gastronomy, CRC Press

Laura Febvay, Hervé This vo Kientza, Coffee preparation. From roasted beans to beverage, , Handbook of Molecular Gastronomy, CRC Press

Hervé This vo Kientza, Cooking, Handbook of Molecular Gastronomy, CRC Press

Hervé This vo Kientza, Culinary precisions and robustness of recipes, Handbook of Molecular Gastronomy, CRC Press

Hervé This vo Kientza, Disperse system formalism, Handbook of Molecular Gastronomy, CRC Press

Hervé This vo Kientza, Let us have an egg, Handbook of Molecular Gastronomy, CRC Press.

Hervé This vo Kientza, Emulsions and foams : Ostwald ripening and dispropornation in practice, Handbook of Molecular Gastronomy, CRC Press

Hervé This vo Kientza, Emulsions and surfactants in the kitchen, Handbook of Molecular Gastronomy, CRC Press

Hervé This vo Kientza, Evaporation, Handbook of Molecular Gastronomy, CRC Press

Hervé This vo Kientza, Expansion, Handbook of Molecular Gastronomy, CRC Press

Hervé This and José Miguel Aguilera, Food matrices and matrix effect, Handbook of Molecular Gastronomy, CRC Press

Hervé This vo Kientza and Christophe Lavelle, Food Pairing : is it really about science ?, Handbook of Molecular Gastronomy, CRC Press

Hervé This vo Kientza, Gels, Handbook of Molecular Gastronomy, CRC Press

Alan Kelly and Hervé This vo Kientza, Microwave heating and modern cuisine, Handbook of Molecular Gastronomy, CRC Press

Hervé This vo Kientza, Osmosis in the kitchen, Handbook of Molecular Gastronomy, CRC Press

Hervé This vo Kientza and Laura Febvray, Roasting, Handbook of Molecular Gastronomy, CRC Press

Hervé This vo Kientza, Marie-Paule Pardo, Rolande Ollitrault, Salt : when should salt be added to meat being grilled ?, Handbook of Molecular Gastronomy, CRC Press

Hervé This vo Kientza, Sauces, Handbook of Molecular Gastronomy, CRC Press

Hervé This vo Kientza, The right words for improving communication in food science, food technology and between food science and food technology and a broader audience, Handbook of Molecular Gastronomy, CRC Press

Hervé This vo Kientza, Flavour experimental workshops, Handbook of Molecular Gastronomy, CRC Press

Marie-Claude Feore, Laure Fort, Marie Blanche Mauhourat, Hervé This vo Kientza, « Science and Cooking Activities » for Secondary School Students, Handbook of Molecular Gastronomy, CRC Press

Reine Barbar, Jean-Marie Malbec, Christophe Lavelle, Hervé This vo Kientza, An educational satellite project around the scientific elucidation of culinary precisions in Lebanon and in the Middle East, Handbook of Molecular Gastronomy, CRC Press

Hervé This vo Kientza, Simple calculations based on cooking, Handbook of Molecular Gastronomy, CRC Press

Hervé This vo Kientza, The monthly INRAE-AgroParisTech Seminars on molecular gastronomy, Handbook of Molecular Gastronomy, CRC Press

Hervé This vo Kientza, Decantation, Handbook of Molecular Gastronomy, CRC Press

Christophe Lavelle, Hervé This vo Kientza, Using liqui nitrogen to prepare ice creams in the restaurant, Handbook of Molecular Gastronomy, CRC Press

Hervé This vo Kientza, An eclipse dish, Handbook of Molecular Gastronomy, CRC Press

Hervé This vo Kientza, How do eggs coagulate, Handbook of Molecular Gastronomy, CRC Press

Hervé This vo Kientza, Filtration, Handbook of Molecular Gastronomy, CRC Press

Hervé This vo Kientza, Roisin Burke, Note by note cooking and note by note cuisine, Handbook of Molecular Gastronomy, CRC Press

Hervé This vo Kientza, Pierre Gagnaire, Molecular mixology : Welcome coffee, a cocktail with ten layers, Handbook of Molecular Gastronomy, CRC Press

Masselot V, Bosc V, Benkhelifa H. 2021. Influence of stabilizers on the microstructure of fresh sorbets: X-ray micro-computed tomography, cryo-SEM, and Focused Beam Reflectance Measurement analyses. *Journal of Food Engineering*, 300, 110522. DOI: 10.1016/j.jfoodeng.2021.110522

Masbernath, L ; Berland, S ; Almeida, G ; Michon, C. 2021. Stabilizing highly hydrated wheat flour doughs by adding water in two steps, *JOURNAL OF CEREAL SCIENCE*, Volume: 98, article Number: 103179 ; DOI: 10.1016/j.jcs.2021.103179

Castillo-Fraire, C. M., Branda, E., Poupard, P., Le Quere, J. M., Salas, E., de Freitas, V., Guyot, S., & Soares, S. (2021). Interactions between polyphenol oxidation products and salivary proteins: Specific affinity of CQA dehydrodimers with cystatins and P-B peptide. *Food Chemistry*, 343. DOI: 10.1016/j.foodchem.2020.128496

Fava bean (*Vicia faba* L.) for food applications: From seed to ingredient processing and its effect on functional properties, antinutritional factors, flavor, and color
Sharan, S (Sharan, Siddharth) ; Zanghelini, G (Zanghelini, Gabriela) ; Zotzel, J (Zotzel, Jens) ; Bonerz, D (Bonerz, Daniel) ; Aschoff, J (Aschoff, Julian) ; Saint-Eve, A (Saint-Eve, Anne)[1] ; Maillard, MN (Maillard, Marie-Noelle), *COMPREHENSIVE REVIEWS IN FOOD SCIENCE AND FOOD SAFETY*, 20, 1401-428. DOI: 10.1111/1541-4337.12687

Analyzing the microstructure of a fresh sorbet with X-ray micro-computed tomography: Sampling, acquisition, and image processing
Masselot, V (Masselot, Veronique) ; Bosc, V (Bosc, Veronique) ; Benkhelifa, H (Benkhelifa, Hayat). *JOURNAL OF FOOD ENGINEERING*, 292, 110347. DOI: 10.1016/j.jfoodeng.2020.110347

Fostering infant food texture acceptance: A pilot intervention promoting food texture introduction between 8 and 15 months. Tournier, C (Tournier, C.) ; Bernad, C (Bernad, C.) ; Madrelle, J (Madrelle, J.) ; Delarue, J (Delarue, J.) ; Cuvelier, G (Cuvelier, G.) ; Schwartz, C (Schwartz, C.) ; Nicklaus, S (Nicklaus, S.), *APPETITE*, 158, 104989. DOI: 10.1016/j.appet.2020.104989

Addition of a mushroom by-product in oil-in-water emulsions for the microencapsulation of sunflower oil by spray drying, Umana, M (Umana, Monica) ; Turchiuli, C (Turchiuli, Christelle) ; Rossello, C (Rossello, Carmen) ; Simal, S (Simal, Susana), *FOOD CHEMISTRY*, 343, 128429. DOI: 10.1016/j.foodchem.2020.128429

Canon, F.; Belloir, C.; Bourillot, E.; Brignot, H.; Briand, L.; Feron, G.; Lesniewska, E.; Nivet, C.; Septier, C.; Schwartz, M.; Tournier, C.; Vargiolu, R.; Wang, M.; Zahouani, H.; Neiers, F., Perspectives on Astringency Sensation: An Alternative Hypothesis on the Molecular Origin of Astringency. *J. Agric. Food Chem.* 2021. XXXX, XXX, XXX-XXX.
<https://pubs.acs.org/doi/full/10.1021/acs.jafc.0c07474>

This H. 2021. La rigueur terminologique pour les concepts de la chimie : une base pour des choix de société rationnels, *Notes Académiques de l'Académie d'agriculture de France / Academic Notes from the French Academy of Agriculture*, 2021, 1, 1-15.

Hammad, I., Dornier, M., Servent, A., Poucheret, P., & Dhuique-Mayer, C. (2021). Modulation of carotenoid/flavonoid profiles and sugar content of a potential functional citrus-based food through crossflow microfiltration. *LWT - Food Science and Technology*, 141, 110923.
<https://doi.org/10.1016/j.lwt.2021.110923>

Lucas Suc, Peggy Rigou, and Laetitia Mouls. 2021. Detection and Identification of Oxidation Markers of the Reaction of Grape Tannins with Volatile Thiols Commonly Found in Wine, *J. Agric. Food Chem.* 2021, XXXX, XXX, XXX-XXX, <https://doi.org/10.1021/acs.jafc.0c07163>

This H, Febvay L, Bria M. 2021. L'intégration des signaux (incluant des résonances) dans les spectres unidimensionnels obtenus par spectroscopie de résonance magnétique quantitative in situ, *Cahiers Techniques de l'INRAE*, 104(4), https://www6.inrae.fr/cahier_des_techniques/Les-Cahiers-parus/Les-N-reguliers/2021/Cahier-N-104/Art4-ct104-2021.

Ahmad Saad, Julien Bousquet, Nora Fernandez-Castro, Antoine Loquet, and Julie Géan. 2021. New Insights into Wine Taste: Impact of Dietary Lipids on Sensory Perceptions of Grape Tannins, *J. Agric. Food Chem.* 2021, XXXX, XXX, XXX-XXX. Publication Date: March 3, 2021. <https://doi.org/10.1021/acs.jafc.0c06589>

Weiji Liu, Xiao Chen, Romain Jeantet, Christophe André, Séverine Bellayer et al. Effect of casein/whey ratio on the thermal denaturation of whey proteins and subsequent fouling in a plate heat exchanger. *Journal of Food Engineering*, Elsevier, 2021, 289, pp.110175. (10.1016/j.jfoodeng.2020.110175)

Emorine, M., Septier, C., Martin, C., Cordelle, S., Sémon, E., Thomas-Danguin, T., & Salles, C. (2021). Salt and Aroma Compound Distributions Influence Flavour Release and Temporal Perception While Eating Hot-Served Flans. *Molecules*, 26(5), 1300. <https://doi.org/10.3390/molecules26051300>

Sinding, C., Hummel, T., Béno, N., Prescott, J., Bensafi, M., Coureaud, G., & Thomas-Danguin, T. (2021). Configural memory of a blending aromatic mixture reflected in activation of the left orbital part of the inferior frontal gyrus. *Behavioural Brain Research*, 402, 113088. <https://doi.org/10.1016/j.bbr.2020.113088>

Sinding, Charlotte, Thibault, H., Hummel, T., & Thomas-Danguin, T. (2021). Odor-Induced Saltiness Enhancement : Insights Into The Brain Chronometry Of Flavor Perception. *Neuroscience*, 452, 126-137. <https://doi.org/10.1016/j.neuroscience.2020.10.029>

Zhou, T., Feng, Y., Thomas-Danguin, T., & Zhao, M. (2021). Enhancement of saltiness perception by odorants selected from Chinese soy sauce : A gas chromatography/olfactometry-associated taste study. *Food Chemistry*, 335, 127664. <https://doi.org/10.1016/j.foodchem.2020.127664>

Guichard, E., Thomas-Danguin, T., Buchin, S., Perret, B., Guillemin, H., Pénicaud, C., & Salles, C. (2021). Relationships between cheese composition, rheological and sensory properties highlighted using the BaGaTel database. *International Dairy Journal*, 105039. <https://doi.org/10.1016/j.idairyj.2021.105039>

Ma, Y., Tang, K., Xu, Y., & Thomas-Danguin, T. (2021). Perceptual interactions among food odors : Major influences on odor intensity evidenced with a set of 222 binary mixtures of key odorants. *Food Chemistry*, 129483. <https://doi.org/10.1016/j.foodchem.2021.129483>

{{2020}}

Supaphon P. Astruc, T., Kerdpi boon S. 2020. Physical changes of local Thai beef during sous-vide processing. *Agriculture and Natural Resources*, 54, 25–32.

Bourlieu C., Astruc T., Barbe S., Berrin J-G, Bonnin E., Boutrou R., Hugouvieux V., Le Feunteun S., Paës G. 2020. Enzymes to unravel bioproducts architecture. *Biotechnology Advances*, 41, 107546, 1-16.

Theron L., Sayd T., Chambon C., Vautier A., Ferreira C., Aubry L., Venien A., Viala D., Astruc T., Ferraro V. & Sante-Lhoutellier V., (2020) “Toward the Prediction of the PSE-Like Muscle Defect in Cooked Hams”, *Meat and Muscle Biology* 4(2). doi: <https://doi.org/10.22175/mmb.11156>

Yulia B. Monakhova, Alexander Becht, Curd Schollmayer, Ulrike Holzgrabe, Douglas Rutledge. Determination of the origin of acetaminophen tablets by spectral measurement methods and chemometrics. Twelfth Winter Symposium on Chemometrics, Saratov (Russie), 24-28 February, 2020.

Douglas N. Rutledge. Novel extensions and applications of Common Components Analysis in chemometrics, Twelfth Winter Symposium on Chemometrics, Saratov (Russie), 24-28 February, 2020.

F. Puig-Castellví, C. Midoux, L. Cardona, O. Chapleur, C. B. Y. Cordella, D. Jouan-Rimbaud Bouveresse, L. Mazeas, D. N. Rutledge. Chemometric analysis of a metagenomic dataset to decipher the functional role of the microbiota from anaerobic digeste. *Chimométrie 2020*, Liège (B), 27-29 janvier 2020

Laguna, O., Guyot, S., Yu, X. X., Broudiscou, L. P., Chapoutot, P., Sole-Jamault, V., Anton, M., Quinsac, A., Sicaire, A. G., Fine, F., Citeau, M., Durand, E., Barakat, A., Villeneuve, P., Lecomte, J., & Dauguet, S. (2020). The PHENOLEO project or how to separate and add-value to phenolic compounds present in rapeseed and sunflower meals. *Ocl-Oilseeds and Fats Crops and Lipids*, 27. DOI: 10.1051/ocl/2020056

New insulating and refractory mineral foam: Structure and mechanical properties
Marechal, M ; Estrada, ED ; Moulin, G ; Almeida, G ; Pin, LV ; Cuvelier, G ; Bonazzi, C,
MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES
MICROSTRUCTURE AND PROCESSING, 780, 139153
DOI: 10.1016/j.msea.2020.139153

TransPoly: A theoretical model to quantify the dynamics of water transfer through nanostructured polymer films, Almeida, G (Almeida, Giana)[1] ; Domenek, S (Domenek, Sandra)[1] ; Perre, P (Perre, Patrick)[2,3], *POLYMER*, 191, 122256. DOI: 10.1016/j.polymer.2020.122256

Potential of model cakes to study reaction kinetics through the dynamic online extraction of volatile markers and TD-GC-MS analysis, Lee, J ; Bousquieres, J ; Descharles, N ; Roux, S ; Michon, C ; Rega, B ; Bonazzi, C, *FOOD RESEARCH INTERNATIONAL*, 132, 109087. DOI: 10.1016/j.foodres.2020.109087

Amorphous rigidification and cooperativity drop in semi-crystalline plasticized polylactide, Varol, N ; Delpouve, N ; Araujo, S (Araujo, S.)[1] ; Domenek, S (Domenek, S.)[2] ; Guinault, A (Guinault, A.)

[3] ; Golovchak, R (Golovchak, R.)[4] ; Ingram, A (Ingram, A.)[5] ; Delbreilh, L (Delbreilh, L.)[1] ; Dargent, E (Dargent, E.), POLYMER, 194, 122373. DOI: 10.1016/j.polymer.2020.122373

Parameters influencing the migration of trace metals in uncoated fruit cans, El Moussawi, SN (Noureddine El Moussawi, Sara)[1,2] ; Camel, V (Camel, Valerie)[1] ; Cladiere, M (Cladiere, Mathieu)[1] ; Lebbos, N (Lebbos, Nada)[3] ; Chebib, H (Chebib, Hanna)[2] ; Ouaini, R (Ouaini, Rosette)[2], JOURNAL OF FOOD PROCESSING AND PRESERVATION, 44, 9, e14653. DOI: 10.1111/jfpp.14653

Application of Pleurotus ostreatus beta-glucans for oil-in-water emulsions encapsulation in powder. Gallotti, F ; Lavelli, V ; Turchiuli, C. FOOD HYDROCOLLOIDS, 105, 105841
DOI: 10.1016/j.foodhyd.2020.105841

Biomonitoring of environmental exposure to inorganic arsenic
Garnier, R ; Gouille, JP ; Nouyrigat, E ; Benoit, P ; Granon, C ; Manel, J ; Manouchehri, N ; Mathieu-Huart, A ; Nisse, P ; Normand, JC , ANNALES DE BIOLOGIE CLINIQUE, 78, 3, 279-298
DOI: 10.1684/abc.2020.1550

High Hydrostatic Pressure-Assisted Enzymatic Hydrolysis Affect Mealworm Allergenic Proteins
Boukil, A (Boukil, Abir)[1] ; Perreault, V (Perreault, Veronique)[1] ; Chamberland, J (Chamberland, Julien)[1] ; Mezdour, S (Mezdour, Samir)[2] ; Pouliot, Y (Pouliot, Yves)[1] ; Doyen, A ,
MOLECULES, 25, 11, 2685
DOI: 10.3390/molecules25112685

How do smoothing conditions and storage time change syneresis, rheological and microstructural properties of nonfat stirred acid milk gel?, Guenard-Lampron, V (Guenard-Lampron, Valerie)[1,2,3] ; Bosc, V (Bosc, Veronique)[4] ; St-Gelais, D (St-Gelais, Daniel)[1,2,3] ; Villeneuve, S (Villeneuve, Sebastien)[2,3] ; Turgeon, SL, INTERNATIONAL DAIRY JOURNAL, 109, 104780
DOI: 10.1016/j.idairyj.2020.104780

CHIMACTIV: An Open-Access Website for Student-Centered Learning in Analytical Chemistry
Camel, V (Camel, Valerie)[1] ; Maillard, MN (Maillard, Marie-Noelle)[1] ; Piard, J (Piard, Jonathan) [2] ; Dumas, C (Dumas, Cecile)[2] ; Cladiere, M (Cladiere, Mathieu)[1] ; Fitoussi, G (Fitoussi, Gerome)[3] ; Brun, E (Brun, Emilie)[4] ; Billault, I (Billault, Isabelle)[4] ; Sicard-Roselli, C.
JOURNAL OF CHEMICAL EDUCATION, 97, 8, 2319-2326
DOI: 10.1021/acs.jchemed.0c00023

Valorizing apple by-products as emulsion stabilizers: Experimental design for modeling the structure-texture relationships. Huc-Mathis, D (Huc-Mathis, D.)[1] ; Guilbaud, A (Guilbaud, A.)[1] ; Fayolle, N (Fayolle, N.)[2] ; Bosc, V (Bosc, V)[1] ; Blumenthal, D. JOURNAL OF FOOD ENGINEERING, 287, 110115
DOI: 10.1016/j.jfoodeng.2020.110115

Commentary to the article "Inorganic arsenic exposure of the French general population. Identification of toxicity reference values". Garnier, R (Garnier, Robert)[1] ; Mathieu-Huart, A (Mathieu-Huart, Aurelie)[2] ; Ronga-Pezeret, S (Ronga-Pezeret, Sylvaine)[3] ; Nouyrigat, E (Nouyrigat, Emmanuel) [4] ; Benoit, P (Benoit, Pierre)[5] ; Gouille, JP (Gouille, Jean-Pierre)[6] ; Granon, C (Granon, Claire) [7] ; Manel, J (Manel, Jacques)[1] ; Manouchehri, N (Manouchehri, Nastaran)[8] ; Nisse, P (Nisse, Patrick)[1], TOXICOLOGIE ANALYTIQUE ET CLINIQUE, 32, 3, 235-235

DOI: 10.1016/j.toxac.2020.06.003

Inorganic arsenic exposure of the French general population. Identification of toxicity reference values
Garnier, R (Garnier, Robert)[1] ; Mathieu-Huart, A (Mathieu-Huart, Aurelie)[2] ; Ronga-Pezeret, S
(Ronga-Pezeret, Sylvaine)[3] ; Nouyrigat, E (Nouyrigat, Emmanuel)[4] ; Benoit, P (Benoit, Pierre)
[5] ; Gouille, JP (Gouille, Jean-Pierre)[6] ; Granon, C (Granon, Claire)[7] ; Manel, J (Manel,
Jacques)[1] ; Manouchehri, N (Manouchehri, Nastaran)[8] ; Nisse, P (Nisse, Patrick)[1] ,
TOXICOLOGIE ANALYTIQUE ET CLINIQUE, 32, 3, 152-193
DOI: 10.1016/j.toxac.2020.05.004

Dimensional analysis modeling of spraying operation - Impact of fluid properties and pressure nozzle
geometric parameters on the pressure-flow rate relationship
Lachin, K (Lachin, K.)[1] ; Turchiuli, C (Turchiuli, C.)[1,3] ; Pistre, V (Pistre, V)[1,2] ; Cuvelier, G
(Cuvelier, G.)[1] ; Mezdour, S (Mezdour, S.)[1] ; Ducept, F (Ducept, F.)[1]
CHEMICAL ENGINEERING RESEARCH & DESIGN, 163, 36-46
DOI: 10.1016/j.cherd.2020.08.004

Pickering emulsions based on food byproducts: A comprehensive study of soluble and insoluble
contents
By:Huc-Mathis, D (Huc-Mathis, D.)[1] ; Almeida, G (Almeida, G.)[1] ; Michon, C (Michon, C.)[1]
JOURNAL OF COLLOID AND INTERFACE SCIENCE
Volume: 581
Pages: 226-237
Part: A
DOI: 10.1016/j.jcis.2020.07.078

Effect of the order of incorporation of cake ingredients on the formation of batter and the final
properties: contribution of the addition of pea flour
By:Monnet, AF (Monnet, A. F.)[1] ; Jeuffroy, MH (Jeuffroy, M. H.)[2] ; Villemejeane, C
(Villemejeane, C.)[1] ; Michon, C (Michon, C.)[1]
JOURNAL OF FOOD SCIENCE AND TECHNOLOGY-MYSORE
DOI: 10.1007/s13197-020-04899-0

Combined effects of ionic strength and enzymatic pre-treatment in thermal gelation of peanut proteins
extracts
By:Basse, B (Basse, Benoit)[1,2] ; Bosc, V (Bosc, Veronique)[2] ; Saiter, JM (Saiter, Jean-Marc)[1,3
] ; Chan-Huot, M (Chan-Huot, Monique)[1] ; Dupas, JP (Dupas, Jean-Pierre)[1] ; Maillard, MN
(Maillard, Marie-Noelle)[2] ; Menut, P (Menut, Paul)[2]
FOOD RESEARCH INTERNATIONAL
Volume: 137
Article Number: 109362
DOI: 10.1016/j.foodres.2020.109362

Poly lactide films produced with bixin and acetyl tributyl citrate: Functional properties for active
packaging
By:Stoll, L (Stoll, Liana)[1] ; Domenek, S (Domenek, Sandra)[2] ; Flores, SH (Hickmann Flores,
Simone)[1] ; Nachtigall, SMB (Nachtigall, Sonia Marli B.)[3] ; Rios, AD (de Oliveira Rios,
Alessandro)[1]
JOURNAL OF APPLIED POLYMER SCIENCE

Volume: 138
Issue: 17
Article Number: e50302
DOI: 10.1002/app.50302

Screening, diagnosis, treatment and follow-up of people suspected to be overexposed to inorganic arsenic due to their place of residence

By: Garnier, R (Garnier, R.)[1] ; Nouyrigat, E (Nouyrigat, E.)[2] ; Benoit, P (Benoit, P.)[3] ; Goulle, JP (Goulle, J-P)[4] ; Granon, C (Granon, C.)[5] ; Manel, J (Manel, J.)[1] ; Manouchehri, N (Manouchehri, N.)[6] ; Mathieu-Huart, A (Mathieu-Huart, A.)[7] ; Nisse, P (Nisse, P.)[1] ; Normand, JC (Normand, J-C)[8]

ARCHIVES DES MALADIES PROFESSIONNELLES ET DE L ENVIRONNEMENT

Volume: 81
Issue: 6
Pages: 770-796
DOI: 10.1016/j.admp.2020.06.004

Quantitative determination of volatile compounds using TD-GC-MS and isotope standard addition for application to the heat treatment of food

By: Lee, J (Lee, J.)[1] ; Roux, S (Roux, S.)[1] ; Descharles, N (Descharles, N.)[1] ; Bonazzi, C (Bonazzi, C.)[1] ; Rega, B (Rega, B.)[1]

FOOD CONTROL

Volume: 121
Article Number: 107635
DOI: 10.1016/j.foodcont.2020.107635

El Youssef C., Bonnarme P., Fraud S., Péron A.-C., Helinck S., Landaud S. 2020. Sensory improvement of a pea protein-based product using microbial co-cultures of lactic acid bacteria and yeasts. *Foods* 2020, 9, 349; doi:10.3390/foods9030349

Coureaud, G., Letagneaux, C., Thomas-Danguin, T., & Romagny, S. (2020). Developmental changes in elemental and configural perception of odor mixtures in young rabbits. *Developmental Psychobiology*, 62(4), 471-483. <https://doi.org/10.1002/dev.21929>

Gerkin, R. C., Ohla, K., Veldhuizen, M. G., Joseph, P. V., Kelly, C. E., Bakke, A. J., Steele, K. E., Farruggia, M. C., Pellegrino, R., Pepino, M. Y., Bouysset, C., Soler, G. M., Pereda-Loth, V., Dibattista, M., Cooper, K. W., Croijmans, I., Di Pizio, A., Ozdener, M. H., Fjaeldstad, A. W., ... Baguma, M. (2020). Recent smell loss is the best predictor of COVID-19 among individuals with recent respiratory symptoms. *Chemical Senses*, bjaa081. <https://doi.org/10.1093/chemse/bjaa081>

Ma, Y., Tang, K., Thomas-Danguin, T., & Xu, Y. (2020). Pleasantness of Binary Odor Mixtures : Rules and Prediction. *Chemical Senses*, 45(4), 303-311. <https://doi.org/10.1093/chemse/bjaa020>

Parma, V., Ohla, K., Veldhuizen, M. G., Niv, M. Y., Kelly, C. E., Bakke, A. J., Cooper, K. W., Bouysset, C., Pirastu, N., Dibattista, M., Kaur, R., Liuzza, M. T., Pepino, M. Y., Schöpf, V., Pereda-Loth, V., Olsson, S. B., Gerkin, R. C., Rohlfs Domínguez, P., Alabay, J., ... Hayes, J. E. (2020b). More Than Smell—COVID-19 Is Associated With Severe Impairment of Smell, Taste, and Chemesthesis. *Chemical Senses*, 45(7), 609-622. <https://doi.org/10.1093/chemse/bjaa041>

Pierron, D., Pereda-Loth, V., Mantel, M., Moranges, M., Bignon, E., Alva, O., Kabous, J., Heiske, M., Pacalon, J., David, R., Dinnella, C., Spinelli, S., Monteleone, E., Farruggia, M. C., Cooper, K. W., Sell, E. A., Thomas-Danguin, T., Bakke, A. J., Parma, V., ... Bensafi, M. (2020). Smell and taste changes are early indicators of the COVID-19 pandemic and political decision effectiveness. *Nature Communications*, 11(1), 5152-5152. <https://doi.org/10.1038/s41467-020-18963-y>

Tromelin, A., Koensgen, F., Audouze, K., Guichard, E., & Thomas-Danguin, T. (2020). Exploring the Characteristics of an Aroma-Blending Mixture by Investigating the Network of Shared Odors and the Molecular Features of Their Related Odorants. *Molecules (Basel, Switzerland)*, 25(13). <https://doi.org/10.3390/molecules25133032>

White, T. L., Thomas-Danguin, T., Olofsson, J. K., Zucco, G. M., & Prescott, J. (2020). Thought for food : Cognitive influences on chemosensory perceptions and preferences. *Food Quality and Preference*, 79, 103776-103776. <https://doi.org/10.1016/j.foodqual.2019.103776>

Wycke, M.-A., Coureaud, G., Thomas-Danguin, T., & Sandoz, J.-C. (2020). Configural perception of a binary olfactory mixture in honey bees, as in humans, rodents and newborn rabbits. *The Journal of Experimental Biology*, 223(21), jeb227611. <https://doi.org/10.1242/jeb.227611>

Characterizing the Dynamic Taste and Retro-Nasal Aroma Properties of Oral Nutritional Supplements Using Temporal Dominance of Sensation and Temporal Check-All-That-Apply Methods. Delompré T, Lenoir L, Martin C, Briand L, Salles C. *Foods*. 2020 Oct 13;9(10):1456. doi: 10.3390/foods9101456.

Interactions Between Odorants and Glutathione Transferases in the Human Olfactory Cleft. Schwartz M, Menetrier F, Heydel JM, Chavanne E, Faure P, Labrousse M, Lirussi F, Canon F, Mannervik B, Briand L, Neiers F. *Chem Senses*. 2020 Nov 7;45(8):645-654. doi: 10.1093/chemse/bjaa055.

Factors affecting flavor perception in space: Does the spacecraft environment influence food intake by astronauts? Taylor AJ, Beauchamp JD, Briand L, Heer M, Hummel T, Margot C, McGrane S, Pieters S, Pittia P, Spence C. *Compr Rev Food Sci Food Saf*. 2020 Nov;19(6):3439-3475. doi: 10.1111/1541-4337.12633. Epub 2020 Sep 18.

COVID 19-Induced Smell and Taste Impairments: Putative Impact on Physiology. Meunier N, Briand L, Jacquin-Piques A, Brondel L, Pénicaud L. *Front Physiol*. 2021 Jan 26;11:625110. doi: 10.3389/fphys.2020.625110. eCollection 2020.

Biancolillo A, Preys S, Gaci B, Le Quere JL, Laboure H, Cheynier V, Sommerer N, Fayeulle N, Costet P, Hue C, Boulanger R, Alary K, Lebrun M, Lahon MC, Morel G, Maraval I, Davrieux F, Roger JM (2021). Multi-block analysis for multiplatform characterization of chocolate and cocoa samples. *Food Chem*, 340, 127904. <https://doi.org/10.1016/j.foodchem.2020.127904>

Watrelet A, Le Guernevé C, Halle H, Meudec E, Veran F, Garcia F, Williams P, Robillard B, Poncet-Legrand C, Cheynier V (2020) Multi-method approach for extensive characterization of gallnut tannin extracts. *J Agric Food Chem*, 68, 47, 13426–13438. <https://dx.doi.org/10.1021/acs.jafc.9b08221>

- Fayeulle N, Preys S, Roger JM, Cheynier V, Sommerer N. (2020) Multiblock analysis to relate polyphenol targeted mass spectrometry and sensory properties of chocolates and cocoa beans. *Metabolites* 10(8), 311. <https://doi.org/10.3390/metabo10080311>
- Savouré, T., Dornier, M., Maraval, I., & Collignan, A. (2021). Sensory quantitative descriptive analysis of African slimy okra (*Abelmoschus esculentus*) preparations and its correlation with instrumental parameters. *Journal of Texture Studies*, 1-20. <https://doi.org/10.1111/jtxs.12583>
- Yohan Reynaud, Michel Lopez, Alain Riaublanc, Isabelle Souchon, Didier Dupont. Hydrolysis of plant proteins at the molecular and supra-molecular scales during in vitro digestion *Food Research International*, Elsevier, 2020, 134, pp.109204. [10.1016/j.foodres.2020.109204](https://doi.org/10.1016/j.foodres.2020.109204)
- Emilie Dumas, Alice Feurtey, Ricardo C. Rodriguez de la Vega, Stephanie Le Prieur, Alodie Snirc et al. Independent domestication events in the blue-cheese fungus *Penicillium roqueforti* *Molecular Ecology*, Wiley, 2020, pp.1-22. [10.1111/451773](https://doi.org/10.1111/451773)
- Domitille de Guibert, Marie Hennes, Francois Martin, Thierry Six, Yingying Gu et al. Flow process and heating conditions modulate the characteristics of whey protein aggregates. *Journal of Food Engineering*, Elsevier, 2020, 264, pp.109675. [10.1016/j.jfoodeng.2019.07.022](https://doi.org/10.1016/j.jfoodeng.2019.07.022)
- Pauline Henriot, Flemming Jessen, Mar Vall-Llosera, Rodolphe Marie, Mastaneh Jahromi et al. Physical Stability of Oil-In-Water Emulsion Stabilized by Gelatin from Saithe (*Pollachius virens*) *Skin Foods*, MDPI, 2020, 9 (11), pp.1718. [10.3390/foods9111718](https://doi.org/10.3390/foods9111718)
- Geeshani Somaratne, Françoise Nau, Maria J. Ferrua, Jaspreet Singh, Aiqian Ye et al. Characterization of egg white gel microstructure and its relationship with pepsin diffusivity *Food Hydrocolloids*, Elsevier, 2020, 98, pp.105258. [10.1016/j.foodhyd.2019.105258](https://doi.org/10.1016/j.foodhyd.2019.105258)
- Ahmed Zouari, Pierre Schuck, Frederic Gaucheron, Mehdi Triki, Guillaume Delaplace et al. Microstructure and chemical composition of camel and cow milk powders' surface *LWT - Food Science and Technology*, Elsevier, 2020, 117, pp.108693. [10.1016/j.lwt.2019.108693](https://doi.org/10.1016/j.lwt.2019.108693)
- Marine Vincent, Olivia Ménard, Julie Etienne, Jordane Ossemond, Annie Durand et al. Human milk pasteurisation reduces pre-lipolysis but not digestive lipolysis and moderately decreases intestinal lipid uptake in a combination of preterm infant in vitro models *Food Chemistry*, Elsevier, 2020, 329, pp.126927. [10.1016/j.foodchem.2020.126927](https://doi.org/10.1016/j.foodchem.2020.126927)
- J. Bauland, M.H. Famelart, S. Bouhallab, R. Jeantet, S. Roustel et al. Addition of calcium and magnesium chlorides as simple means of varying bound and precipitated minerals in casein micelle: Effect on enzymatic coagulation *Journal of Dairy Science*, American Dairy Science Association, 2020, 103 (11), pp.9923-9935. [10.3168/jds.2020-18749](https://doi.org/10.3168/jds.2020-18749)
- Amelia Torcello-Gómez, Didier Dupont, Julien Jardin, Valérie Briard-Bion, Amélie Deglaire et al. The pattern of peptides released from dairy and egg proteins is highly dependent on the simulated digestion scenario *Food and Function*, Cambridge : Royal Society of Chemistry, 2020, 11 (6), pp.5240-5256. [10.1039/D0FO00744G](https://doi.org/10.1039/D0FO00744G)

Jun Wang, Guilherme de Figueiredo Furtado, Nathalie Monthean, Didier Dupont, Frédérique Pédrone et al. CaCl₂ supplementation of hydrophobised whey proteins: Assessment of protein particles and consequent emulsions
International Dairy Journal, Elsevier, 2020, 110, pp.104815. (10.1016/j.idairyj.2020.104815)

Le Feunteun Steven, Alan Robert Mackie, Didier Dupont. In silico trials of food digestion and absorption: how far are we?
Current Opinion in Food Science, Elsevier, 2020, 31, pp.121-125. (10.1016/j.cofs.2020.04.006)

Ahmed Zouari, Valérie Briard-Bion, Frederic Gaucheron, Pierre Schuck, Claire Gaiani et al. Effect of pH on the physicochemical characteristics and the surface chemical composition of camel and bovine whey protein's powders
Food Chemistry, Elsevier, 2020, 333, pp.127514. (10.1016/j.foodchem.2020.127514)

Hervé This, Pour que demain soit meilleur qu'aujourd'hui (éditorial), L'Actualité chimique, N°447, janvier 2020, pp 2-3.

Hervé This, La chimie n'est pas partout, L'Actualité chimique (point de vue), N° 450, juin 2020, pp. 8-9.

Hervé This, L'analyse critique des manuscrits et les conseils donnés aux auteurs. A propos des publications : Klebel et al., 2020, Stern and O'Shea, 2019; Sarabipour et al., 2019; Inrae, 2016. Notes Académiques de l'Académie d'agriculture, 2020, 2, 1-14.

Hervé This, An essay on gastronomics, a part of foodomics for molecular gastronomy, Reference Module in Food Sciences on Comprehensive Foodomics, December 2020, <https://doi.org/10.1016/B978-0-08-100596-5.22796-0>

Hervé This, Profiter des temps confinés pour prévoir une rénovation des études supérieures, L'Actualité chimique, juin 2020, pp. 7-11.

Hervé This, Tester les précisions culinaires : des activités expérimentales pour tous les âges, L'Actualité chimique, N°453, juillet-août 2020, pp. 12-14.

Hervé This, Le concours de blanc en neige : un « atelier expérimental du goût », L'Actualité chimique, N° 453, juillet-août, pp. 15-19.

di Corcia, S., Dhuique-Mayer, C., & Dornier, M. (2020). Concentrates from citrus juice obtained by crossflow microfiltration: Guidance of the process considering carotenoid bioaccessibility. *Innovative Food Science and Emerging Technologies*, 66, 102526. <https://doi.org/10.1016/j.ifset.2020.102526>

Jimenez, N., Bassama, J., Dornier, M., Vaillant, F., Perez, A. M., & Bohuon, P. (2020). Coupling osmotic dehydration with heat treatment for green papaya impregnated with blackberry juice solution. *International Journal of Food Science & Technology*, 55, 2551-2561. <https://doi.org/10.1111/ijfs.14507>

Santos da Silveira, J., Mertz, C., Morel, G., Lacour, S., Belleville, M. P., Durand, N., & Dornier, M. (2020). Alcoholic fermentation as a potential tool for coffee pulp detoxification and reuse: analysis of phenolic composition and caffeine content by HPLC-DAD-MS/MS. *Food Chemistry*, 319, 126600. <https://doi.org/10.1016/j.foodchem.2020.126600>

Savouré, T., Dornier, M., Vachoud, L., & Collignan, A. (2020). Clustering of instrumental methods to characterize the texture and the rheology of slimy okra (*Abelmoschus esculentus*) suspensions *Journal of Texture Studies*, 51, 426-443. <https://doi.org/10.1111/jtxs.12505>

Servent, A., Abreu, F. A. P., Dhuique-Mayer, C., Belleville, M. P., & Dornier, M. (2020). Concentration and purification by crossflow microfiltration with diafiltration of carotenoids from a by-product of cashew apple juice processing. *Innovative Food Science and Emerging Technologies*, 66, 102519. <https://doi.org/10.1016/j.ifset.2020.102519>

Colin Kay, Michael Clifford, Pedro Mena, Gordon Mcdougall, Cristina Andres-Lacueva, et al.. Recommendations for standardizing nomenclature for dietary (poly)phenol catabolites. *American Journal of Clinical Nutrition*, American Society for Nutrition, 2020, 112 (4), pp.1051-1068. {10.1093/ajcn/nqaa204}. {hal-02968474}

Bitter-Taste Receptors: From Sequence to Structure. C. Bouysset, J. Topin, S. Antonczak, M. Rhyu, J. Golebiowski, S. Fiorucci. *Chem. Senses*, 2020,45(8), 800.

More than just smell - COVID-19 is associated with severe impairment of smell, taste, and chemesthesis. Global Consortium of Chemosensory Research#. *Chem. Senses*, 2020, 45(7), 609-622. #Among them: C. Bouysset, S. Fiorucci & J. Golebiowski.

{{2019}}

Metal ions activate the human TAS2R7 receptor. Y. Wang, A.L. Soohoo, W. Lei, R.F. Margolskee, C. Bouysset, J. Golebiowski, H. Zhao, S. Fiorucci, P. Jiang. *Chem. Senses*, 2019, 44, 339-347.

Conserved residues control the T1R3-specific allosteric signaling pathway of the mammalian sweet taste receptor. J.B. Chéron, A. Soohoo, Y. Wang, J. Golebiowski, S. Antonczak, P. Jiang, S. Fiorucci. *Chem. Senses*, 2019, 44, 303-310.

Natural Sweeteners. J.B. Chéron, A. Marchal, S. Fiorucci. In: Melton, L., Shahidi, F., Varelis, P. (Eds.), *Encyclopedia of Food Chemistry*, vol. 1, 2019, pp. 189–195. Elsevier.

Millet, M., Poupard, P., Guilois-Dubois, S., Poiraud, A., Fanuel, M., Rogniaux, H., & Guyot, S. (2020). Heat-unstable apple pathogenesis-related proteins alone or interacting with polyphenols contribute to haze formation in clear apple juice. *Food Chemistry*, 309. DOI: 10.1016/j.foodchem.2019.125636

Ma, W., Tribet, C., Guyot, S., & Zanchi, D. (2019). Tannin-controlled micelles and fibrils of kappa-casein. *Journal of Chemical Physics*, 151(24). DOI: 10.1063/1.5128057

Kinetic modelling of individual starch granules swelling, Palanisamy, A (Palanisamy, Arnesh) ; Deslandes, F ; Ramaioli, M ; Menut, P ; Plana-Fattori, A ; Flick, D. *FOOD STRUCTURE-NETHERLANDS*, 26, 100150

Impact of *Pleurotus ostreatus* beta-Glucans on Oxidative Stability of Active Compounds Encapsulated in Powders during Storage and In Vitro Digestion, Gallotti, F ; Lavoisier, A ; Turchiuli, C ; Lavelli, V . *ANTIOXIDANTS*, 9, 12, 1219. DOI: 10.3390/antiox9121219

Novel scaffold of natural compound eliciting sweet taste revealed by machine learning. C. Bouysset, C. Belloir, S. Antonczak, L. Briand, S. Fiorucci. *Food Chem.*, 2020, 324, 126864.

Molecular insights into the structure-function relationships of bitter taste receptors. C. Bouysset, J. Topin, Y. Wang, P. Jiang, J. Golebiowski, S. Antonczak, S. Fiorucci. *Chem. Senses*, 2020, 45, 153.

Boland, M., Kaur, L., Chian, F. M., & Astruc, T. (2019). Muscle Proteins. In L. Melton, F. Shahidi, & P. Varelis (Eds.), *Encyclopedia of Food Chemistry* (pp. 164-179). Oxford: Academic Press.
<https://doi.org/10.1016/B978-0-08-100596-5.21602-8>

Théron L., Sayd T., Chambon C., Vénien A., Viala D., Astruc T., Vautier A., Santé-Lhoutellier V. 2019. Deciphering PSE-like muscle defect in cooked hams: A signature from the tissue to the molecular scale. *Food Chemistry*, 270 (1), 359-366.

Chian F-M., Kaur L., Oey I., Astruc T., Hodgkinson S., Boland M. 2019. Effect of pulsed electric fields (PEF) on the ultrastructure and in vitro protein digestibility of bovine longissimus thoracis. *LWT-Food Science and Technology*, 103, 253-259.

Portanguen S., Tournayre P., Sicard J., Astruc T., Mirade P-S. 2019. Toward the design of functional foods and biobased products by 3D printing: A review. *Trends in Food Science and Technology*, 86, 188-198.

Astruc T., Loison, O., Jamme F., Réfrégiers M., Vénien A. 2019. Preferred metabolic pathway of bovine muscle fibre revealed by synchrotron–deep ultraviolet fluorescence imaging. *Journal of Spectral Imaging*, 8, ID a14.

Joanna Moro, Nadezda Khodorova, Catherine Chaumontet, Patrick Even, Anne Blais, Serge Pilard, Douglas N. Rutledge, Delphine Jouan-Rimbaud Bouveresse, Julien Piedcoq, N. Delhaye, Claire Gaudichon, Daniel Tomé, Dalila Azzout-Marniche
Molecular markers of dietary essential amino-acid deficiency
13th European Nutrition Conference, Dublin (Ireland), 15-18 October 2019.

L. S. Guedes, J. L. P. Segundo Neto, I. C. S. F. Jardim, D. N. Rutledge, C. C. Santana¹, M. C. Breitzkreitz. Quantification of bioactive compounds of palm oil using Supercritical Fluid Chromatography and Chemometrics. Poster : XVII Latin American Symposium on Chromatography and Related Techniques (XVII COLACRO), Aracaju (Brésil), 14-19 July 2019.

D. N. Rutledge. Independent Component Analysis (ICA) and Common Component Analysis (ComDim). Invited : XVII Latin American Symposium on Chromatography and Related Techniques (XVII COLACRO), Aracaju (Brésil), 14-19 July 2019.

Baninia Habchi, Sandra Alves, Michèle Guillaume, Sylvie Streel, Anne-Françoise Donneau, Brice Appenzeller, Douglas N. Rutledge, Alain Paris, Estelle Rathahao-Paris
High throughput metabolomics using DI-HRMS on a FT-ICR equipped with a dynamically harmonized cell: a methodology for improving the assessment of metadata quality in epidemiological studies.
Poster : 12èmes Journées Scientifiques du Réseau Francophone de Métabolomique et Fluxomique, Clermont-Ferrand, 21 – 23 Mai 2019

Joanna Moro, Nadezda Khodorova, Catherine Chaumontet, Patrick Even, Anne Blais, Serge Pilard, Delphine Jouan-Rimbaud Bouveresse, Julien Piedcoq, N. Delhaye, Claire Gaudichon, Daniel Tomé,

Dalila Azzout-Marniche. Molecular markers of dietary essential amino-acid deficiency. Nutrition 2019, Baltimore, 8-11 June 2019

Rutledge D. N., Schmidtke L.

ComDim-ICA : A procedure to perform Multiblock Independent Components Analysis

Chimiométrie XX - 2019, Montpellier, 30 janvier- 01 février 2019

Rutledge D. N., Schmidtke L.
ComDim-ICA : A procedure to perform Multiblock Independent Components Analysis. Chimiométrie XX - 2019, Montpellier, 30 janvier- 01 février 2019

F. Puig-Castellví, L. Cardona, C. B. Y. Cordella, D. Jouan-Rimbaud Bouveresse, L. Mazeas, D. N. Rutledge. Unraveling the microbial community interactions in anaerobic digesters with Common Components Analysis. Chimiométrie XX - 2019, Montpellier, 30 janvier- 01 février 2019

John C. Castura, Douglas N. Rutledge, Allison K. Baker, Carolyn F. Ross

Investigating perception dynamics and uncertainty in temporal sensory data via independent components analysis (ICA). 13th Pangborn Sensory Science Symposium, Edinburgh, 28 July-1 August 2019

Castillo-Fraire, C. M., Poupard, P., Guilois-Dubois, S., Salas, E., & Guyot, S. (2019). Preparative fractionation of 5'-O-caffeoylquinic acid oxidation products using centrifugal partition chromatography and their investigation by mass spectrometry. Journal of Chromatography A, 1592, 19-30. DOI: 10.1016/j.chroma.2019.01.071

Taste Perception of Nutrients Found in Nutritional Supplements: A Review.

Delompré T, Guichard E, Briand L, Salles C. Nutrients. 2019 Sep 2;11(9):2050. doi: 10.3390/nu11092050.

Estimation of individual starch granule swelling under hydro-thermal treatment

Deslandes, F (Deslandes, Francois)[1,2] ; Plana-Fattori, A (Plana-Fattori, Artemio)[1] ; Almeida, G (Almeida, Giana)[1] ; Moulin, G (Moulin, Gabrielle)[1] ; Doursat, C (Doursat, Christophe)[1] ; Flick, D (Flick, Denis)[1]

FOOD STRUCTURE-NETHERLANDS 22, 100125. DOI: 10.1016/j.foostr.2019.100125

Drying Characteristics of Lemon By-product (Citrus limon. v. lunari): Effects of Drying Modes on Quality Attributes Kinetics'

Ghanem, N (Ghanem, Nesrine)[1,4] ; Mihoubi, D (Mihoubi, Daoued)[2] ; Bonazzi, C (Bonazzi, Catherine)[3] ; Kechaou, N (Kechaou, Nabil)[1] ; Boudhrioua, N (Boudhrioua, Nourhene)[4]
WASTE AND BIOMASS VALORIZATION, 11 (1), 303-32

{{2018}}

Millet, M., Poupard, P., Guilois-Dubois, S., Zanchi, D., & Guyot, S. (2019). Self-aggregation of oxidized procyanidins contributes to the formation of heat-reversible haze in apple-based liqueur wine. Food Chemistry, 276, 797-805. DOI: 10.1016/j.foodchem.2018.09.171

Rutledge D. N. Comparison of Principal Components Analysis, Independent Components Analysis and Common Components Analysis. Invited : 7th International Meeting on Chemometric and Quality, Fez (Maroc), 23-25 octobre, 2018

Novel scaffold of natural compound eliciting sweet taste revealed by machine learning.

Bouysset C, Belloir C, Antonczak S, Briand L, Fiorucci S. *Food Chem.* 2020 Sep 15;324:126864. doi: 10.1016/j.foodchem.2020.126864. Epub 2020 Apr 18.

I. M. Santana, L. Pinto, L. V. de Melo, I. C.S. F. Jardim, D. N. Rutledge, M. C. Breitzkreitz, Development of a Multiproduct Method for the Analysis of Cholesterol-Lowering Drugs by Ultra High Performance Supercritical Fluid Chromatography (UHPSFC) and Chemometrics.. 32nd International Symposium on Chromatography ISC 2018, Cannes, 23-27 septembre 2018.

H. Mitsutake, G. H. Rodrigues da Silva, L. Nunes de Moraes Ribeiro, E. de Paula, D. N. Rutledge, R. J. Poppi, M. C. Breitzkreitz. Diferenciação entre cera de abelha natural e sintética para desenvolvimento de NLC usando Análise Discriminante por Componentes Independentes (IC-DA). Encontros Nacionais de Química Analítica, Caldas Novas (Brésil), 16-19 septembre 2018.

Mitsutake, H., de Castro, S. R., de Paula, E., Poppi, R. J., Rutledge, D. N., Breitzkreitz, M. C., Evaluation of Different P. Mishra, A. Karami, A. Nordon, D. N. Rutledge, J-M. Roger Automatic pre-processing of hyperspectral images with a wavelength-specific shearlet-based image noise reduction method. CAC2018, Halifax,(Canada), 25-29 june 2018

Chemometrics Methods associated with Raman Mapping to Study Miscibility of Excipients in Lipid-Based Pharmaceutical Formulations.

9th International Conference on Advanced Vibrational Spectroscopy, Victoria, BC (Canada) 11-16 juillet 2018

P. Mishra, A. Karami, A. Nordon, D. N. Rutledge, J-M. Roger. Automatic pre-processing of hyperspectral images with a wavelength-specific shearlet-based image noise reduction method CAC2018, Halifax,(Canada), 25-29 june 2018

Douglas N. Rutledge, D. Jouan-Rimbaud Bouveresse. Quelques extensions de la methode ComDim. Invited : 50e Journées de Statistique de la SFdS, Saclay, (France), 28 mai-01 juin, 2018

Douglas N. Rutledge. Comparison of 3 exploratory multivariate data analysis methods. Invited : 1st Colloquium on Chemometrics, Spectroscopic Imaging and Cultural Heritage Analysis, Paris, (France), 16 janvier, 2018

M. Loudiyi, D. N. Rutledge, A. Aït-Kaddour. Study of salts, gentle heating and ripening effects on experimental Cantal cheese by a multi-block approach. International Conference on Food Processing and Entrepreneurship; A Way Toward Economic Stability, Faisalabad, (Pakistan), 29-30 janvier 2018

M. de Figueiredo, C. B. Y. Cordella, D. Jouan-Rimbaud Bouveresse, D. N. Rutledge The area under the ROC curve as a variable selection criterion for multiclass classification problems. Chimométrie XIX - 2018, Paris, 30-31 janvier 2018

A. Kassouf, D. Jouan-Rimbaud Bouveresse, D. N. Rutledge. Détermination du nombre optimal de composantes dans l'analyse en composantes indépendantes. Chimométrie XIX - 2018, Paris, 30-31 janvier 2018

F. L. F. Soares, N. Locquet, R. L. Carneiro, D.N. Rutledge, D. Jouan-Rimbaud Bouveresse, C.B. Y. Cordella. Aromatech®: a compound identification and chemometric toolbox based on Kováts index. Poster : Chimiométrie XIX-2018, Paris (France), 30-31 Janvier 2018.

N. Estephan, S. Azzi, D. Rutledge, JM. Roger. Suivi de la fermentation des mouts de raisins par l'application de l'ICA et de la PLS-DA sur les données de la GC-MS. Poster : Chimiométrie XIX-2018, Paris (France), 30-31 Janvier 2018.

S. Guyader, F. Thomas, E. Jamin, B. Bertrand, G. Remaud, D. N. Rutledge. Combination of ¹H-NMR and Chemometrics to observe introgression in green Arabica coffee. Poster : Chimiométrie XIX-2018, Paris (France), 30-31 Janvier 2018.

K. K. Beltrame, T. R. Gonçalves, S.T. M. Gomes, M. Matsushita, D. N. Rutledge, P. H. Março, P. Valderrama. Pseudo-univariate calibration based on ICA applied to image analysis. Poster : Chimiométrie XIX-2018, Paris (France), 30-31 Janvier 2018.

Douglas N. Rutledge. Comparison of Principal Components Analysis, Independent Components Analysis and Common Components Analysis. Invited : AgroStat 2018, Marseille, (France), 13-16 mars, 2018

M. Loudiyia, D. N. Rutledge, A. Aït-Kaddour. ComDim for multi-block data analysis of Cantal-type cheeses: effects of salts, gentle heating and ripening
Oral : International Conference on Raw Materials to Processed Foods, Antalya (Turkey) 11 - 13 avril 2018,

Hery Mitsutake, Douglas N. Rutledge, Ronei J. Poppi, Márcia C. Breitreitz
Estudo de miscibilidade e transformações estruturais em misturas de PEG 6000/Tween 80® empregando imagem Raman e análise de componentes independentes. Oral : IX Workshop de Quimiometria, Natal (Brésil) 23 - 27 avril 2018,

2017

Ces molécules qui éveillent nos papilles. J.B. Chéron, J. Golebiowski, S. Antonczak, S. Fiorucci. L'Act. Chim. 2017, 416, 11-18.

The anatomy of mammalian sweet taste receptors. J.B. Chéron, J. Golebiowski, S. Antonczak, S. Fiorucci. Proteins. 2017, 85, 332-341.

Sweetness prediction of natural compounds. J.B. Chéron, J. Golebiowski, S. Antonczak, S. Fiorucci. Food. Chem. 2017, 221, 1421-1425.