

# Veronica Lolli

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## • WORK EXPERIENCE

01/03/2026 - CURRENT - ITALY

**FIXED-TERM RESEARCHER** - DEPARTMENT OF FOOD AND DRUG, UNIVERSITY OF PARMA

Research in food chemistry and fermentation biotechnology; teaching.

01/10/2022 - 28/02/2026 - ITALY

**FIXED-TERM RESEARCHER** - DEPARTMENT OF FOOD AND DRUG, UNIVERSITY OF PARMA

AGRITECH - Agricultural Technologies. Research on green chemistry and biotechnological processes for the valorisation of agri-food side streams and the production of high-value compounds and innovative products.

2019 - 2022 - ITALY

**RESEARCH FELLOW** - SITEIA.PARMA, UNIVERSITY OF PARMA

FLIES4VALUE project: development of methods for the extraction, characterization and valorisation of lipids, proteins and chitin from insect biomasses for functional food and nutraceutical applications.

Research; laboratory activities; data analysis; scientific writing; support for teaching and training activities.

2018 - 2019 - ITALY

**RESEARCH FELLOW** - DEPARTMENT OF FOOD AND DRUG, UNIVERSITY OF PARMA

Research project: "Cyclopropane fatty acids in foods: elucidation of the origin, distribution and metabolic fate".

Research; laboratory activities; data analysis; scientific writing; support for teaching and training activities.

## • EDUCATION AND TRAINING

01/11/2015 - 31/10/2018 | AWARDED 15/03/2019 - ITALY

**PHD IN FOOD SCIENCE** - UNIVERSITY OF PARMA

Final evaluation: Outstanding, cum laude, with the additional Doctor Europaeus certificate.

PhD thesis: "Cyclic fatty acids in foods: origin, role in food authentication, relevance in the human diet, and health aspects".

Research experience: application of GC-MS and <sup>1</sup>H NMR techniques for lipid characterization in foods, particularly in food authenticity and human nutrition.

07/07/2015 - ITALY

**PROFESSIONAL QUALIFICATION AS PHARMACIST** - UNIVERSITY OF PARMA

01/09/2009 - 28/05/2015 - ITALY

**MASTER DEGREE IN PHARMACY** - UNIVERSITY OF PARMA

## • RESEARCH PROFILE

- 42 Scopus-indexed publications, 3 non-indexed publications, 1 book chapter and 36 conference abstracts.

- Experience in the extraction and molecular characterization of lipid fractions, particularly secondary microbial fatty acids and cyclic fatty acids, using gas chromatography and <sup>1</sup>H NMR. These approaches have been applied to food quality, authenticity and nutritional assessment, especially in foods of animal origin.

Research activities have subsequently expanded to amino acids, carbohydrates, innovative foods and the valorisation of agri-food side streams. Current work includes biotechnological processes, insect biomasses and the recovery of oils and other biomolecules for food and oleochemical applications.

- Development of biotechnological processes for the valorisation of agri-food by-products and residual organic fractions.
- Innovative valorisation of insect biomasses for potential food and oleochemical applications.
- Chemical and molecular analysis using advanced instrumentation, including chromatography, mass spectrometry and <sup>1</sup>H NMR.

## • TECHNICAL AND DIGITAL SKILLS

Experience in food chemistry analysis and molecular characterization by GC-MS and <sup>1</sup>H NMR. Skilled in GC-FID, HPLC-UV/FLD and HS-SPME-GC-MS for the qualitative and quantitative characterization of lipids, amino acids, carbohydrates and volatile compounds. Good command of Microsoft Office™, SPSS, MetaboAnalyst, Xcalibur, ChemStation, MassHunter, Empower, MestrelNova and Delta Software.

Qualified user of the JEOL ECZ600R NMR spectrometer at the "Giuseppe Casnati" Measurement Centre, University of Parma.

## • INTERNATIONAL MOBILITY

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05/2018 - 07/2018 - SPAIN

**INTERNATIONAL PHD RESEARCH MOBILITY** - INSTITUTE OF FOOD SCIENCE RESEARCH (CIAL-CSIC-UAM), MADRID

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Research mobility within the PhD International Mobility Programme.

## • RESEARCH PROJECTS AND NETWORKS

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### Principal Investigator

- University of Parma Research Grant 2024, Action B: "Innovative valorization of bioconverter insects: investigation on lipase activity and antimicrobial properties of *Hermetia illucens*".

### Participant

- isUP-AgrO - Unlocking the Potential for Agricultural Research on an EU Outermost Region: Boosting Isoplexis Centre (HORIZON-WIDERA-2023-ACCESS-02), University of Parma and University of Madeira.
- AGRITECH National Research Centre for Agricultural Technologies (2022-2025), Spoke 8, Tasks 8.1.1 and 8.1.2: valorisation of agri-food side streams through green chemistry and biotechnology.
- PLASMAFOOD - Study and optimization of cold atmospheric plasma treatment for food safety and quality improvement (PRIN 2017).
- FLIES4VALUES - Development of methods for extraction, characterization and valorisation of lipids, proteins and chitin from insect biomasses for functional food and nutraceutical applications (POR FESR Emilia-Romagna 2014-2020).

### Research collaborator

- CONVENIENT - Conservation and valorisation of endangered local breeds (PSR 2014-2020).
- BIODIVERSITÀ - Valorisation of dairy products from regional local breeds (PSR 2014-2020).
- FRUIT4OIL - Mild Processing of Lipid-Rich Fruit Side Streams for Production of Safe Oil and Other Ingredients for Food and Cosmetic Applications.
- FRUREFINERY - Fruit side-stream valorisation based on biorefinery technologies for the extraction of bioactive compounds for food, feed and cosmetic applications.

## • TECHNOLOGY TRANSFER

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- Contribution to the development of the official UNI method for cyclopropane fatty acid analysis for Parmigiano Reggiano authentication (UNI 11650:2016).
- Collaborations with food companies and consortia, including TERE Group and the Parmigiano Reggiano Consortium, on food authenticity, sustainable processes and agri-food side-stream valorisation.

## • EDITORIAL AND PEER-REVIEW ACTIVITIES

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Review Editor activity for the Product Quality section of Frontiers in Animal Science. Reviewer activity for international peer-reviewed journals including Food Chemistry, International Journal of Food Sciences & Nutrition, European Journal of Lipid Science and Technology, Food Research International, Journal of Dairy Science, Food Analytical Methods, Foods and Molecules.

## • SCIENTIFIC MEMBERSHIPS

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- Member of the Italian Chemical Society - Food Chemistry Division.

## • ORAL PRESENTATIONS AND INVITED TALKS

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31/01/2017 - 03/02/2017

**IN VITRO SIMULATED GASTROINTESTINAL DIGESTION OF CYCLOPROPANE FATTY ACIDS: A STUDY COMBINING <sup>1</sup>H NMR AND GC-MS APPROACHES** - IV FOODINNOVA, CESENA, ITALY

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13-14/06/2017

**CYCLOPROPANE FATTY ACIDS: A NEW TOOL AGAINST PARMIGIANO REGGIANO COUNTERFEIT** - ROYAL SOCIETY OF CHEMISTRY EMERGING TECHNOLOGIES COMPETITION, MANCHESTER, UK

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25/09/2017

**DETERMINATION OF CYCLOPROPANE FATTY ACIDS IN FOOD OF ANIMAL ORIGIN BY <sup>1</sup>H NMR SPECTROSCOPY** - YOUNG RESEARCHERS IN FOOD CHEMISTRY CONFERENCE, MILAN, ITALY

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17/04/2018

**SIMPLE CONVENTIONAL GC-MS PROCEDURES ALLOWING MEASUREMENT OF CYCLIC FATTY ACIDS AS MARKERS OF FEED QUALITY FOR DAIRY PRODUCTS AND MEAT** - FOOD INTEGRITY SCHOOL UNIPR-BARILLA, PARMA, ITALY

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16-19/09/2018

**CYCLOPROPANE FATTY ACIDS: ORIGIN, BIOACCESSIBILITY AND USE AS MOLECULAR MARKERS OF QUALITY** - 16TH EURO FED LIPID CONGRESS, BELFAST, UK

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18/10/2018

**STATE OF THE ART ON CYCLOPROPANE FATTY ACIDS: ORIGIN, BIOACCESSIBILITY AND USE AS MOLECULAR MARKERS OF QUALITY** - PARMA-WAGENINGEN WORKSHOP, UNIVERSITY OF PARMA, ITALY

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13/02/2020

**AUTHENTICITY AND SAFETY OF RAW MATERIALS FOR BALSAMIC VINEGAR: CASE STUDY ON MUSTS AND BALSAMIC VINEGAR** - WINE-CHAIN NETWORK MEETING, MARTINI & ROSSI HEADQUARTERS, PESSIONE, ITALY

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17/02/2021

**NUTRITIONAL CHARACTERISTICS OF MILK FROM THE OTTONESE BREED** - GOI CONVENIENT FINAL MEETING, ONLINE

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16/06/2021

**ANALYSIS OF THE LIPID FRACTION OF MILK FROM LOCAL BREEDS** - GOI BIODIVERSITÀ MEETING, ONLINE

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19/10/2021

**THE EFFECT OF DIET AND KILLING METHODS ON INSECT LIPIDS: THE CASE STUDY OF BLACK SOLDIER FLY (HERMETIA ILLUCENS)** - 18TH EURO FED LIPID CONGRESS AND EXPO, ONLINE

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29-31/05/2023

**MOLECULAR CHANGES OF BLACK SOLDIER FLY LIPIDS WITH DIET, KILLING METHOD AND MICROBIAL FERMENTATION** - CHIMALI 2023, MARSALA, ITALY

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12/06/2024

**FATTY ACID PROFILE ANALYSIS OF PASTEURISED CREAM: NUTRITIONAL EVALUATION OF THE LIPID FRACTION - PIÙ VALORE PR WORKSHOP, REGGIO EMILIA, ITALY** - INVITED SPEAKER

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11-13/12/2024

**CHARACTERISATION AND VALORISATION OF FRUIT BY-PRODUCTS AS UNCONVENTIONAL SOURCES OF NOVEL EDIBLE OILS** - SISSG CONGRESS 2024, PARMA, ITALY - INVITED SPEAKER

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11/07/2025

**OPTIMIZING HEMICELLULOSE AND FIBRE EXTRACTION FROM LIGNOCELLULOSIC BIOMASS THROUGH HYDROTHERMAL METHODS AND PRE-TREATMENT STRATEGIES** - CHIMALI 2025, MILAN, ITALY

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2026

**FROM BENCH TO BEDSIDE: THE ROLE OF BIOHUBS IN THE HEALTHCARE SYSTEM** - EXPOSANITÀ 2026 - INVITED SPEAKER

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## • SCIENTIFIC AND ORGANISATIONAL ROLES

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- Moderator, EFSA Parma Summer School 2023, Innovative Food Products section, Parma, 26-28 September 2023.

## • AWARDS AND HONOURS

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- 2020 - University of Parma FBHC2020-22 High Training School Grant.
- 2018 - Young Researcher Award, Italian Society for the Study of Fatty Substances (SISSG).
- 2017 - Finalist, Emerging Technologies Competition, Royal Society of Chemistry, Manchester, UK.
- 2016 - American Chemical Society press release for the Journal of Agricultural and Food Chemistry article on cyclopropane fatty acids as markers for Parmigiano Reggiano authentication.
- 2016 - Poster Prize, FoodIntegrity Conference, Prague, Czech Republic.

## • TEACHING

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ACADEMIC YEARS 2025/2026 AND 2026/2027

**CHEMISTRY OF BIOPROCESSES AND BIOENERGETICS (3 ECTS)** - MSC IN FOOD SCIENCE AND TECHNOLOGY, UNIVERSITY OF PARMA

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ACADEMIC YEARS 2024/2025 - 2026/2027

**CHEMISTRY OF RAW MATERIALS AND LABORATORY OF CHEMICAL COMPOSITION OF RAW MATERIALS (4 ECTS)** - BSC IN QUALITY AND PROCUREMENT OF RAW MATERIALS FOR THE AGRI-FOOD SECTOR, UNIVERSITY OF PARMA

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ACADEMIC YEARS 2021/2022 AND 2022/2023

**ADJUNCT TEACHING - CHEMISTRY OF DAIRY AND MEAT PRODUCTS (16 HOURS)** - MSC IN INNOVATIVE AND SUSTAINABLE ANIMAL PRODUCTION, UNIVERSITY OF PARMA

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ACADEMIC YEAR 2017/2018

**TUTOR - ANALYTICAL CHEMISTRY (45 HOURS)** - DEGREE COURSES IN PHARMACY AND PHARMACEUTICAL CHEMISTRY AND TECHNOLOGY, UNIVERSITY OF PARMA

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## • RESEARCH SUPERVISION

- Co-supervisor of a PhD student in Food Science, 40th cycle: "Characterisation of biomolecules from insects reared on food by-products for food and feed applications".
- 2024-2025 - Scientific supervisor of a research fellow within AGRITECH Spoke 3: valorisation of agri-food side streams by green chemistry and fermentation.
- Supervisor/co-supervisor of undergraduate and MSc theses in Pharmacy, Food Science and Technology, Sustainable Animal Production and Gastronomic Sciences (2015-2024), on food lipids, amino acids, authentication, insect biomasses, dairy products and agri-food by-products.

## • ADDITIONAL TEACHING AND TRAINING ACTIVITIES

- Since 2015 - Laboratory teaching support for Applied Food Chemistry and Food Chemistry courses, University of Parma.
- 2020-2022 - Lecturer in Food Formulation (30-32 hours), ITS Tech&Food Foundation.
- 2018 - Trainer, Food Integrity School UNIPR-Barilla: GC-MS authentication of Parmigiano Reggiano and meat species discrimination using cyclic fatty acids.

## • ACADEMIC POSITIONS

- Since 2019 - Subject expert for CHEM-07/B (Food Chemistry), University of Parma; member of undergraduate and MSc degree examination committees.
- Since December 2024 - Member of the Joint Teaching-Student Committee for the BSc in Quality and Procurement of Raw Materials for the Agri-Food Sector.
- Since October 2025 - Elected Researcher Representative, University of Parma Area Committee 03, term 2026-2028.

## • EVALUATION ACTIVITIES

- 27/02/2026 - Chair of the Final PhD Examination Committee in Food Science, 38th cycle, University of Parma.
- 16/05/2025 - Alternate member of the Final PhD Examination Committee in Food Science, 37th cycle, University of Parma.
- 06/2024 - External reviewer of a PhD thesis, Universitat Rovira i Virgili, Tarragona, Spain.
- 2024-2026 - Member of selection and evaluation committees for research grants, research fellowships and academic procedures in food chemistry, metabolomics, food safety, biodiversity and agri-food biomolecules.
- Academic years 2024/2025 and 2025/2026 - Member of evaluation committees for Italian teaching qualification classes B020 and B021.

## • TRAINING

- AGRITECH 4 OPEN INNOVATION Workshop, Milan, 28-29 October 2025.
- Food Chemistry and EFSA Responsibilities in Future Scenarios, University of Parma, 21 February 2025.
- Innovative Teaching Training Project, University of Parma, 20-21 June 2024.
- EFSA's Mandate - Food Safety from Farm to Fork, University of Parma, 27 May 2024.
- ASE350 accelerated solvent extraction: method creation, optimisation and practical extraction, Thermo Scientific, 29 June 2023.
- Biorefinery processes for the valorisation of agro-industrial side streams, University of Bologna, 22 May 2023.
- Solvent signal suppression techniques in 1D and 2D NMR experiments, University of Parma, 5 July 2022.
- Introductory course on the JEOL ECZ600R spectrometer, University of Parma, 22 May 2022.

## • LANGUAGE SKILLS

Mother tongue: Italian

|         | UNDERSTANDING |         | SPEAKING          |                    | WRITING |
|---------|---------------|---------|-------------------|--------------------|---------|
|         | Listening     | Reading | Spoken production | Spoken interaction |         |
| ENGLISH | B2            | C1      | B2                | B2                 | C1      |

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user

## • CAREER BREAK

- Maternity leave: 9 October 2023 - 11 March 2024.

## • FULL LIST OF SCIENTIFIC PUBLICATIONS

### Scopus-indexed publications

1. Caligiani, A.; Nocetti, M.; Lolli, V.; Marseglia, A.; Palla, G. Development of a Quantitative GC-MS Method for the Detection of Cyclopropane Fatty Acids in Cheese as New Molecular Markers for Parmigiano Reggiano Authentication. *Journal of Agricultural and Food Chemistry*. 2016. <https://doi.org/10.1021/acs.jafc.6b00913>.
2. Lolli V\*, Dall'Asta M, Del Rio D, Caligiani A. In Vitro digestibility of Cyclopropane Fatty Acids in Grana Padano cheese: a study combining <sup>1</sup>H NMR and GC-MS techniques. *Journal of Food Engineering*. 2018. <https://doi.org/10.1016/j.jfoodeng.2018.05.034>.
3. Lolli V; Marseglia A; Palla G; Zanardi E; Caligiani A. Determination of Cyclopropane Fatty Acids in Food of Animal Origin by (1)H NMR. *Journal of Analytical Methods in Chemistry*. 2018. <https://doi.org/10.1155/2018/8034042>.
4. Lolli V\*, Dall'Asta M, Del Rio D, Palla G, Caligiani A. Presence of Cyclopropane Fatty Acids in Foods and Estimation of Dietary Intake in the Italian population. *International Journal of Food Sciences and Nutrition*. 2019. <https://doi.org/10.1080/09637486.2018.1540556>.
5. Marseglia A, Dellafiara L, Prandi B, Lolli V, Sforza S, Cozzini P, Tedeschi T, Galaverna G, Caligiani A. Simulated Gastrointestinal Digestion of Cocoa: Detection of Resistant Peptides and In Silico/In Vitro Prediction of Their ACE Inhibitory Activity. *Nutrients*. 2019. <https://doi.org/10.3390/nu11050985>.
6. Caligiani, A.; Marseglia, A.; Sorci, A.; Bonzanini, F.; Lolli, V.; Maistrello, L.; Sforza, S. Influence of the killing method of the black soldier fly on its lipid composition. *Food Research International*. 2019. <https://doi.org/10.1016/j.foodres.2018.08.033>.
7. Lolli V\*, Dall'Asta M, Del Rio D, Caligiani A. Identification of Cyclopropane Fatty Acids in Human Plasma after Controlled Dietary Intake of Specific Foods. *Nutrients*. 2020. <https://doi.org/10.3390/nu12113347>.
8. Lolli V\*, Toral P, Caligiani A, Gómez Cortés P. Determination of Cyclopropenoid Fatty Acids in Ewe Milk Fat by GC-MS after Intravenous Administration of Sterculic Acid. *Foods*. 2020. <https://doi.org/10.3390/foods907090>.
9. Lolli V\*, Acharjee A, Angelino A, Tassotti M, Del Rio D, Mena P, Caligiani A. Chemical Characterization of Capsule-Brewed Espresso Coffee Aroma from the Most Widespread Italian Brands by HS-SPME/GC-MS. *Molecules*. 2020. <https://doi.org/10.3390/molecules25051166>.
10. Lolli V\*, Zanardi E, Moloney AP, Caligiani A. An Overview on Cyclic Fatty Acids as Biomarkers of Quality and Authenticity in the Meat Sector. *Foods*. 2020. <https://doi.org/10.3390/foods9121756>.
11. Marchini M, Rosi A, Giopp F, Lolli V, Scazzina F, Carini E. The "Pappa di Parma" integrated approach against moderate acute malnutrition. *Innovative Food Science & Emerging Technologies*. 2020. <https://doi.org/10.1016/j.ifset.2020.102534>.
12. Lanza I, Lolli V\*, Segato S, Caligiani A, Contiero B, Lotto A, Galaverna G, Magrin L, Cozzi G. Use of GC-MS and <sup>1</sup>H NMR low-level data fusion as an advanced and comprehensive metabolomic approach to discriminate milk from dairy chains based on different types of forage. *International Dairy Journal*. 2021. <https://doi.org/10.1016/j.idairyj.2021.105174>.
13. Lolli V\*, Caligiani A, Gachiuta O, Pizzamiglio V, Bani P. Study on the Effect of Ensiling Process and Ruminant Digestion on the Synthesis and Release of Cyclopropane Fatty Acids in Cow Feeding. *Journal of Agricultural and Food Chemistry*. 2021. <https://doi.org/10.1021/acs.jafc.1c03204>.
14. Lolli V\*, Renes E, De la Fuente MA, Gómez Cortés P. Cyclopropane Fatty Acids as Quality Biomarkers of Cheeses from Ewes Fed Hay- and Silage-Based Diets. *Journal of Agricultural and Food Chemistry*. 2021. <https://doi.org/10.1021/acs.jafc.1c03312>.
15. Accardo F., Miguéns-Gómez A., Lolli V, Faccini A., Ardévol A., Terra X., Caligiani A., Pinent M., Sforza S. Molecular composition of lipid and protein fraction of almond, beef and lesser mealworm after in vitro simulated gastrointestinal digestion and correlation with the hormone-stimulating properties of the digesta. *Food Research International*. 2022. <https://doi.org/10.1016/j.foodres.2022.111499>.
16. Luparelli, A.V., Hadj Saadoun, J., Lolli, V., Sforza, S., Caligiani, A. Dynamic changes in molecular composition of black soldier fly prepupae and derived biomasses with microbial fermentation. *Food Chemistry: X*. 2022. Article no. 100327. <https://doi.org/10.1016/j.fochx.2022.100327>.
17. Rodolfi, M., Rinaldi, M., Caligiani, A., Paciulli, M., Lolli, V., Chiancone, B., Ganino, T. Hop green sprouts preservation and valorisation as semi-finished and finished products: impact of different treatments on microstructural, physical and chemical traits. *European Food Research and Technology*. 2022. <https://doi.org/10.1007/s00217-021-03956-y>.
18. Lolli V\*, Dall'Asta M, Caligiani A, Del Rio D, De la Fuente MA, Gómez-Cortés P. Detection of Cyclopropane Fatty Acids in human breastmilk by GC-MS. *Food Composition Analysis*. 2022. <https://doi.org/10.1016/j.jfca.2021.104379>.
19. Beghè, D., et al. (2022). Characterization of Pomegranate (*Punica granatum* L.) through the Morphoanatomical and Lipid Profile of Seeds for the Valorisation of Italian Accessions. *Sustainability Switzerland*, 14(22), 14780.
20. Vitali, L., Lolli, V., Sansone, F., Concas, A., & Lutz, G. A. (2022). Effect of mixotrophy on lipid content and fatty acids methyl esters profile by *Chlorella zofingiensis* grown in media containing sugar cane molasses. *BioEnergy Research*, 16(3), pp. 1851–1861.
21. Ramazzina, I., Lolli, V., Lacey, K., Tappi, S., Rocculi, P., & Rinaldi, R. (2022). Effect of Plasma Activated Water (PAW) technology on *Eruca sativa*: Evaluation of antioxidant capacity, polyphenolic profile and redox status in Caco-2 cells. *Nutrients*, 14(24), 5337.
22. Tedeschi, T., Prandi, B., Lolli, V., Gasparini, A., Leni, G., Loffi, C., Nocetti, M., Pizzamiglio, V., & Caligiani, A. (2022). A novel approach based on enzymatic hydrolysis for the valorization of edible Parmigiano Reggiano cheese rinds. *International Dairy Journal*, 134, 105454.
23. Accardo, F., Miguéns-Gómez, A., Lolli, V., Faccini, A., Ardévol, A., Terra, X., Caligiani, A., Pinent, M., & Sforza, S. (2022). Molecular composition of lipid and protein fraction of almond, beef and lesser mealworm after in vitro simulated gastrointestinal digestion and correlation with the hormone-stimulating properties of the digesta. *Food Research International*, 158, 111499.
24. Luparelli, A. V., Hadj Saadoun, J., Lolli, V., Sforza, S., & Caligiani, A. (2022). Dynamic changes in molecular composition of black soldier fly prepupae and derived biomasses with microbial fermentation. *Food Chemistry: X*, 100327.
25. Dhenge, R., Langialonga, P., Alinovi, M., Lolli, V., Aldini, A., & Rinaldi, M. (2022). Evaluation of quality parameters of orange juice stabilized by two thermal treatments (helical heat exchanger and ohmic heating) and non-thermal (high-pressure processing). *Food Control*, 141, 109150.
26. Fabrice, M. P., Ghidini, S., Caligiani, A., Ianieri, A., & Zanardi, E. (2023). <sup>1</sup>H NMR metabolomics on pigs' liver exposed to antibiotics administration: An explorative study. *Foods*, 12(23), 4259.
27. Lolli, V., et al. (2023). Oil and protein extraction from fruit seed and kernel by-products using a one pot enzymatic-assisted mild extraction. *Food Chemistry: X*, 19, 100819.
28. Bertola, M., et al. (2023). Perenniality, more than genotypes, shapes biological and chemical rhizosphere composition of perennial wheat lines. *Frontiers in Plant Science*, 14, 1172857.
29. Miotti, T., et al. (2023). Dairy Wastewater to Promote Mixotrophic and Heterotrophic Metabolism in *Chlorella vulgaris*: Effect on Growth and FAME Profile. *Chemical Engineering Transactions*, 98, pp. 81–86.
30. Fuso, A., et al. (2023). Protease-Assisted Mild Extraction of Soluble Fibre and Protein from Fruit By-Products: A Biorefinery Perspective. *Foods*, 12(1), 148.
31. Becchi, P. P., Lolli, V., Zhang, L., Pavanello, F., Caligiani, A., & Lucini, L. (2024). Integration of LC-HRMS and <sup>1</sup>H NMR metabolomics data fusion approaches for classification of Amarone wine based on withering time and yeast strain. *Food Chemistry: X*, 23, 101607.
32. Viscusi, P., Fuso, A., Larocca, S., Lolli, V., & Caligiani, A. (2024). Systematic multistep extraction process for the total valorization of fiber fractions from fruit seeds. *LWT*, 208, 116702.

33. Lolli, V., & Caligiani, A. (2024). How nuclear magnetic resonance contributes to food authentication: Current trends and perspectives. *Current Opinion in Food Science*, 58, 101200.
34. Rinaldi, M., Dhenge, R., Rodolfi, M., Chiancone, B., Ganino, T., & Lolli, V. (2024). The effects of high-pressure processing pre-treatment on apple fruit for juice production. *Foods*, 13(14), 2182.
35. Fuso, A., Leni, G., Prandi, B., Lolli, V., & Caligiani, A. (2024). Novel foods/feeds and novel frauds: The case of edible insects. *Trends in Food Science & Technology*, 147, 104457.
36. Miotti, T., Sansone, F., Lolli, V., Concas, A., & Lutz, G. A. (2024). Mixotrophic and heterotrophic metabolism in brewery wastewater by *Chlorella vulgaris*: Effect on growth, FAME profile, and biodiesel properties. *Chemical Engineering Transactions*, 109, 97–102.
37. Rocchetti, G., Leni, G., Errico, M., Sigolo, S., Lolli, V., Scansani, A., Frolidi, F., Rebecchi, A., Caligiani, A., Bertuzzi, T., Lucini, L., & Prandini, A. (2025). An integrated approach based on UHPLC-HRMS, <sup>1</sup>H-NMR and sensory analysis reveals the exclusive lipid fingerprint of long-ripened protected designation of origin Coppa Piacentina. *Food Chemistry*, 469, 142612.
38. Vitali, L., Lolli, V., Sansone, F., Concas, A., & Lutz, G. A. (2025). Lipid content and fatty acid methyl ester profile by *Chromochloris zofingiensis* under chemical and metabolic stress. *Biomass Conversion and Biorefinery*, 15(4), 4941–4954.
39. Galaverni, M., Fontechiari, L., Hadj Saadoun, J., Marchioni, I., Lolli, V.\*, Del Vecchio, L., Cirilini, M., Sylvester, S., Lino, T., Accardo, F., Lazzi, C., Ganino, T., Beghè, D., Tedeschi, T., & Rodolfi, M. (2025). Open field assessment of kiwifruit waste-derived biostimulants on tomato quality under water stress. *Journal of Agriculture and Food Research*, 24, 102397.
40. Pedrazzani, C., Fuso, A., Viscusi, P., Lolli, V., & Caligiani, A. (2025). Development of a <sup>1</sup>H qNMR method for the identification and quantification of monosaccharides in dietary fibre fractions. *Communications Chemistry*, 8(1), 311.
41. Fontechiari, L., Accardo, F., Bonzanini, F., Bonomini, M.G., Caligiani, A., Lolli, V.\*, & Tedeschi, T. Kiwifruit waste valorisation: Chemical characterisation of by-products and enzymatic production of seed protein hydrolysates. *Food Chemistry Advances*. DOI:10.1016/j.focha.2026.101249
42. Bonomini, M.G., D'Ambra, K., Minelli, G., Lo Fiego, D.P., Lolli, V., & Caligiani, A. (2026). Characterization of eggs from laying hens fed insect-enriched diets. *Food Chemistry*, 508, 148387. <https://doi.org/10.1016/j.foodchem.2026.148387>.

#### Book chapter

1. Caligiani A and Lolli V. Cyclic fatty acids in food: an under investigated class of fatty acids. *Biochemistry and Health Benefits of Fatty Acids*. In: *Fatty Acids*. Intech open, 2018. ISBN: 978-1-78984-873-1.

#### Non-indexed publications

1. Bortolazzo E, Caligiani A, Franceschi P, Lolli V, Malacarne M. Le potenzialità nascoste nel latte di razze autoctone. *Supplemento A. L'informatore Agrario* 33/2020.
2. Caligiani A, Lolli V, Palla G, Pizzamiglio V, Nocetti M. Preliminary evaluation of 3-keto-4-cholestene in Parmigiano Reggiano P.D.O. cheese. *Scienza e Tecnica lattiero-casearia Journal*. 2019. DOI: 10.36138/STLC.01.2019.02.
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**Personal data and declaration.** I authorise the processing of the personal data contained in this CV in accordance with Regulation (EU) 2016/679 (GDPR) and applicable Italian legislation, and I declare that the information provided is true and accurate.

Parma, 6 June 2026 - Veronica Lolli