

## PERSONAL INFORMATION

**Giorgio Grillo**

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🔗 Scopus Author ID: <https://www.scopus.com/authid/detail.uri?authorId=57188866027>

**BIBLIOMETRIC INDECES**

Scopus

**Documents** by author: 59**Citations** by 1305 Documents: 1510**h-index**: 25**CURRENT POSITION**

- *Assistant Professor, Junior (rtdA)*
- Vice-coordinator Green Chemistry Group, Italian Chemical Society

**PROFESSIONAL EXPERIENCE**

01/06/2022 – 31/05/2025

**Assistant Professor, Junior**

Department of Drug Science and Technology, University of Turin

Research Group of Prof. Giancarlo Cravotto

01/01/2022 – 31/12/2022

**Research Commission – Representative of Temporary Affiliates**

Department of Drug Science and Technology, University of Turin

[Representation and Mediation](#)

01/12/2020 – 31/05/2022

**Post-doc Research Fellow**

Department of Drug Science and Technology, University of Turin

Research Group of Prof. Giancarlo Cravotto

- *Development of Flow Cavitation Processes with Industrial Applications (PHENOILS, EIT Food EU project)*

[Research and Development](#)

01/06/2020 – 31/11/2020

**Post-doc Research Fellow**

Department of Drug Science and Technology, University of Turin

Research Group of Prof. Giancarlo Cravotto

- *Optimization of Extraction and Biomass Conversion Procedures Using Next-Generation Microwave Reactors*

[Research and Development](#)

01/06/2019 – 31/05/2020

**Research Fellow**

Department of Drug Science and Technology, University of Turin

Research Group of Prof. Giancarlo Cravotto

- *Integrated Technologies for the Intensification of Extractive and Synthetic Processes*

Research and Development

2015 - 2019

**Research Fellowships (supporting the PhD Program)**

Department of Drug Science and Technology, University of Turin

Research Group of Prof. Giancarlo Cravotto

- *Synthesis of Tocopherol Derivatives in Microwave Flow Reactors and Their Analytical Characterization*
- *Development of Process Methodologies for the Extraction of Secondary Metabolites from Plant Raw Materials (In collaboration with INDENA S.p.A)*
- *Technological and Application Developments of the CHIC Project (CHIC EU Project)*
- *Cavitation Processes at Laboratory and Pilot Scale for the Treatment of Matrices from the Olive Oil Supply Chain (AGER "COMPETITIVE" Project)*

Research and Development

**EDUCATION AND TRAINING**

Achieved 15/06/2023

**National Scientific Abilitation (ASN) of Second Level (Associate Professor)  
Organic Chemistry**

Achieved 24/02/2020

**PhD, Doctorate of Research**

Doctoral School in Pharmaceutical and Biomolecular Sciences

Department of Drug Science and Technology, University of Turin

*"Design of non-conventional chemical processes for biomass valorization"*

"The aim of this PhD project was the design of new processes based on non-conventional technologies (microwaves, ultrasound, hydrodynamic cavitation...) for biomass extraction and selective conversion. The investigation started on batch reactors provided suitable data for systems scale up, towards industrial applications. Furthermore, the target is a zero-wastes protocol to treat different biomasses following a circular economy approach. The combination of new green solvents, sustainable heterogeneous catalysts and non-conventional chemical reactors opened new paths for biomass conversion. Well-balanced cascade process enabled a full valorisation of biomass constituents and by-products into high-value-added chemicals."

Achieved 17/04/2015

**Master Degree in Industrial Chemistry****110/110 cum Laude**

Department of Chemistry, University of Turin

Thesis "*Microwave-Mediated Processes for Biomass Valorization*"

Achieved 17/04/2012

**Bachelor Degree in Industrial Chemistry****102/110**

Department of Chemistry, University of Turin

Thesis "*Synthesis and Characterization of Vanadyl Ligands and Complexes with Potential Antitumor Activity*"

## AWARDS AND HONORS

- **RoGUILTLESSPLASTIC Prize2023** – "Innovative green technology in water recycling" (<https://www.guiltlessplastic.com/projects/from-learning-to-applicationindustry-academy-collaboration-for-an-effective-and-viablecircular-economy/ro-plastic-prize-2023/>)
- **Reaxys SCI Young Chemist Award** 2020 (1st place) – (<https://www.elsevier.com/awards/reaxys-sci-early-career-researcher-awards>)
- **Best PhD Thesis Award** in the Field of Industrial Chemistry Ed. 2021 (Industrial Chemistry Division in Industrial Chemistry, Italian Chemical Society) – (<https://www.chimind.it/seminari/265-giomata-di-studi-22-ottobre-2021>)
- **CIG2020 (Catalisi in Gioco)**: Team component, 3<sup>o</sup> place and "Best Question" – (<https://cig2020sci.wixsite.com/catalisiingioco/single-project>)
- **Scholarships**:
  - XX National Congress of Catalysis – XX National Congress of Industrial Chemistry Division (GIC-DiChIn2018)*, issued by: Catalysis Interdivisional Group (SCI).
  - Winter School "*Innovative Catalysis and Sustainability: Scientific and socio-economic aspects*", issued by: Catalysis Interdivisional Group (SCI).
  - 11<sup>th</sup> International Symposium on Catalysis in Multiphase Reactors & 10<sup>th</sup> International Symposium on Multifunctional Reactors*, issued by: Catalysis Interdivisional Group (SCI).
  - Workshop *Chemistry Meets Industry and Society – a creative showcase conference (CIS2019)*, issued by: Industrial Chemistry Division (SCI).
- Selected as **PhD representative** by the Department of Drug Science and Technology, (University of Turin) for Primo Levi commemoration.

## PROJECTS

2024 – 2028

- **MARIE SKŁODOWSKA-CURIE ACTIONS - STAFF EXCHANGE, HORIZON Unit Grant (HORIZON-MSCA-2022-SE-01)**  
*PHENOCYCLES "Exploiting the multifunctional properties of polyphenols: from wastes to high value products"*  
Part of the Research Team from UniTO and Task Leader

**Partners:** West University Of Timisoara - Romania Consiglio Nazionale Delle Ricerche - Italy; Universitat Politecnica De Valencia - Spain; Institute Of Horticulture - National Research Institute - Poland; Universidad Nacional Del Comahue - Argentina; Universidad De Antioquia - Colombia; Plant Protection Scientific Research Institute - Uzbekistan; Universidad Nacional De La Plata - Argentina.

PHENOCYCLES is addressing the environmental concern derived from agro-industrial wastes proposing their exploitation for obtaining important bioactive molecules (polyphenolic compounds: PP), to be utilized for different purposes, with a typical circular economy approach. PHENOCYCLES aims at exploring innovative uses of PP and at validating methods for their extraction with a green chemistry approach. PP extracted from agro-industrial wastes (grape, apple, berry pomaces) and herbs with therapeutic value will be purified/fractionated with pilot-scale nano/ultrafiltration membranes to recover different PP fractions, to be employed in four distinct sectors: • human health; • plant production; • environment protection; • material sciences.

- 2024 – 2026
- CRT Project**  
*IRRISAFE " From Use to Reuse: Development of a Risk Management Plan Model for the Reuse of Urban Wastewater"*  
 Part of the Research Team

The IRRISAFE project responds to the European Commission's call to address increasing pressure on water resources caused by climate change. It promotes the safe reuse of treated wastewater in the Piedmont region, with a multidisciplinary approach involving research, companies, and local institutions, in line with the University of Turin's Butterfly Area strategic project
- 2024 – 2026
- Rural Development Program (RDP) of the Sicily Region – MISURA 16.1.**  
*CANAPA NEW TECH " Technical Varieties and Eco-Sustainable Strategies for Industrial Hemp."*  
 Part of the Research Team

CANAPA NEW TECH's objectives are to support and promote the cultivation of industrial hemp with very low or no THC content in Sicily as a crop capable of contributing, on the one hand, to reducing the environmental impact of agriculture, soil consumption, desertification, and biodiversity loss, and, on the other hand, to developing integrated local agro-industrial supply chains that enhance research results and pursue local integration and the economic and industrial development of the sector in compliance with actual legislation.
- 2023 – 2027
- MARIE SKŁODOWSKA-CURIE ACTIONS Grant (01113564 - GAP-101113564)**  
*CaviPRO "Control and Applications of Hydrodynamic Cavitation Phenomena "*  
 Part of the Research Team
- 2023 – 2024
- GRANT for INTERNATIONALIZATION (GFI) - 2023**  
*TANNFRACT " Recovery and fractionation of metabolites from chestnut wood residual biomass: bioactivity of monomeric polyphenols and tannins"*  
 Principal Investigator

**Partners:** University of Pau and the Adour Region, France; University of Zagreb, Croatia

The research focuses on the valorization of plant residues from the local agro-food supply chain of chestnut wood. The project aims to establish a comprehensive "*benign-by-design*" valorization framework, targeting the production of high value-added products through sequential fractionation and purification, utilizing readily available and easily scalable technologies.
- 2022 - 2023
- GRANT for INTERNATIONALIZATION (GFI) - 2022**  
*"Valorization of Biomass from the Pedemontana Agri-Food Chain for the Production of Extracts for Health Applications"*  
 Part of the Research Team as Assistant Professor (Junior)

**Partners:** University of Savoie Mont Blanc, France

The research is focused on the valorization of production and processing waste from plant biomass in the local agri-food chain, with the aim of identifying and extracting bioactive compounds that could be applied in the health sector, both for humans (nutraceutical and cosmetic) and animals (nutritional).
- 2020 – 2021
- EIT Food**, co-funded EU project.  
*PHENOILS "New technologies implementation in RIS regions' olive oil mills for healthier olive oil extraction"*  
<https://www.eitfood.eu/projects/PHENOILS>  
 Research Fellow

PHENOILS is an EIT Food project focused on developing new technologies for the market to extract high-quality extra virgin olive oil. The main goal of the project is to increase the presence of substances such as tocopherols, polyphenols, and other bioactive components that have been shown to have positive effects on cardiovascular diseases and metabolic syndromes.

- 2015 – 2019 • **Bio-based Industries Joint Undertaking (BBI JU)**, EU project.  
US4GREENCHEM "Combined Ultrasonic and Enzyme treatment of Lignocellulosic Feedstock as Substrate for Sugar Based Biotechnological Applications"  
(<https://www.bbi-europe.eu/projects/us4greenchem>)  
Part of the Research Team

Application of ultrasonic and enzymatic treatments on lignocellulosic matrices to obtain monosaccharide substrates for biotechnological applications. The project involved a pilot-scale plant capable of processing 50 kg/day of matrix, leading to the on-site production of the concentrated hydrolysed fraction.

## GROUPS/ ASSOCIATIONS

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- From 2016 • **Member of the Italian Chemical Society (SCI)** (n. 20594), affiliated to:  
Organic Chemistry Division  
Industrial Chemistry Division  
Green Chemistry – Chimica Sostenibile (GC-CS) Interdivisional Group  
Catalysis (GIC) Interdivisional Group
- 2025-2027 • **Advisory Board Green Chemistry – Chimica Sostenibile Interdivisional Group, SCI**  
Elected Member – Vice-coordinator
- 2022-2024 • **Advisory Board Green Chemistry – Chimica Sostenibile Interdivisional Group, SCI**  
Elected Member
- 2019-2021 • **Advisory Board Green Chemistry – Chimica Sostenibile Interdivisional Group, SCI**  
Young Group Representative

## CONGRESS ORGANIZATION

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Member of the Organizing Committee for 4 International Conferences and Member of the Scientific Committee for 10 National and International Events, including Conferences and PhD Awards.

- Organizing Committee • **XI National Workshop of the Green Chemistry-Chimica Sostenibile Interdivisional Group**, 24<sup>th</sup> - 25<sup>th</sup> October 2024, Turin, Italy. [CHAIR of the Congress]  
(<https://scigreenchemistry.wixsite.com/workshop-gccc-xi-to>)
- **International School of Process Chemistry (ISPROCHEM 2021)**, 4th Ed. 10<sup>th</sup>-12<sup>th</sup> May 2021, virtual edition.  
(<https://drive.google.com/drive/folders/1G9gEHqXIKbVsU93IIOUXGT3vIm7Frxwa?usp=sharing>)
- **International Summer School on Organic Synthesis "Attilio Corbella" (ISOS 2021)**, XLV Ed., 14<sup>th</sup> - 17<sup>th</sup> June 2021, virtual edition.  
(<https://drive.google.com/drive/folders/1GOKRTgKRmy7XEU2IIxwvigWpCdWOOUZe?usp=sharing>)
- **EU H2020 MSCA ETN COSMIC 5th Network Wide Event**, 25<sup>th</sup>-28<sup>th</sup> March 2019, Turin, Italia. ([https://drive.google.com/file/d/1FUTkbwnEKgxWgMKDFiOcrll\\_fHB53Efm/view?usp=sharing](https://drive.google.com/file/d/1FUTkbwnEKgxWgMKDFiOcrll_fHB53Efm/view?usp=sharing))
- **GENP, Green Extraction of Natural Products (II Ed.)**, 31<sup>st</sup> May-1<sup>st</sup> June 2016, Torino, Italia. ([https://www.dstf.unito.it/do/home.pl/View?doc=GENP\\_2016.html](https://www.dstf.unito.it/do/home.pl/View?doc=GENP_2016.html))

## Scientific Committee

- **XI National Workshop of the Green Chemistry-Chimica Sostenibile Interdivisional Group**, 24<sup>th</sup> - 25<sup>th</sup> October 2024, Turin, Italy. [CHAIR of the Congress] (<https://scigreenchemistry.wixsite.com/workshop-gccs-xi-to>)
- **1st Joint Day Green Chemistry – Chimica Sostenibile Interdivisional Group and Industrial Chemistry Division of the Italian Chemical Society - X National Workshop of the Green Chemistry-Chimica Sostenibile Interdivisional Group**, Sustainability in Biomass Valorization and Circular Economy, 6<sup>th</sup> October 2023, Firenze, Italia. (<https://scigreenchemistry.wixsite.com/workshop-gccs-x>) [Secretary]
- **EuChemS Conference on Green and Sustainable Chemistry (VI Ed.) (6th EuGSC)**, 3rd – 6th September 2023, Salerno (<https://www.6eugsc.org/>)
- **GENP, Green Extraction of Natural Products (IV Ed.)**, 27<sup>th</sup> - 29<sup>th</sup> October 2022, Poreč, Croatia. (<http://genp2022.pbf.hr/>)
- **IX National Workshop of the Green Chemistry-Chimica Sostenibile Interdivisional Group**, 22<sup>th</sup> -23<sup>th</sup> June 2022, Pavia, Italia. (<http://www-2.unipv.it/photogreenlab/GC2022/index.php>)
- Virtual Workshop **Clima di Cambiamenti: “Noi & la Chimica, per un futuro più sostenibile”**, Intended for Secondary Schools and Bachelor’s Degrees. 21<sup>st</sup> May 2021. ([https://www.soc.chim.it/it/sci\\_giovani/eventi/workshop](https://www.soc.chim.it/it/sci_giovani/eventi/workshop))
- **“COP26operiamo Insieme” Award**, 21<sup>st</sup> May 2021.
- **“Cinzia Chiappe” Award for the Best PhD Thesis in the field of Green Chemistry - Chimica Sostenibile**, issued by: Green Chemistry-Chimica Sostenibile Interdivisional Group (SCI). Editions 2019-2024
- Virtual Workshops **“Giornate della Green Chemistry”**: (<https://drive.google.com/drive/folders/1c-K-2uPAvhBVSBlEH7u-Sbbmjul6ai8?usp=sharing>)
  - CO<sub>2</sub> as a strategic green carbon source for the synthesis of the target materials – 27<sup>th</sup> April 2021;
  - Ultrasound as a key modern tool for green synthesis and processing – 4<sup>th</sup> May 2021;
  - Microalgae, a source for future biobased green processes – 11<sup>th</sup> May 2021.
- **VIII National Workshop of the Green Chemistry-Chimica Sostenibile Interdivisional Group**, Virtual Edition, 29<sup>th</sup> September 2020. (<https://drive.google.com/drive/folders/1c-K-2uPAvhBVSBlEH7u-Sbbmjul6ai8?usp=sharing>)
- **VII National Workshop of the Green Chemistry-Chimica Sostenibile Interdivisional Group**, 5<sup>th</sup> July 2019, Padova, Italia. (<https://drive.google.com/drive/folders/1c-K-2uPAvhBVSBlEH7u-Sbbmjul6ai8?usp=sharing>)

## TEACHING ACTIVITIES

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### PhD **Tutor**

- PhD Program in Pharmaceutical and Biomolecular Science

*Cycle XXXVII*

Project:

*"Development of industrial green technology for the agro/food chain".*

### **Scientific Committee PhD Thesis** (1<sup>st</sup> year discussion)

- Ecole Doctorale Sciences Ingénierie Environnement, Université Savoie Mont-Blanc – UNITA

Project:

*"Development of enabling technologies for regional residual biomass valorization in a context of circular economy".*

Tutor: Gregory Chatel

Co-tutor: Giancarlo Cravotto

### Courses **First Level Teaching Activities:**

- Molecular and Taste Sciences (SG366) – First Modulus

University of Gastronomic Sciences (UniSG) - Adjunct Professor

### **Third Level Teaching Activities:**

- EIT Courses (<https://elearning.unito.it/dstf/course/index.php?categoryid=68>)

- New technologies implementation in RIS regions' olive oil mills for healthier olive oil extraction.
- Innovazione tecnologica nella filiera di produzione dell'olio extra-vergine di oliva (EVOO): aspetti salutistici ed economici
- Ultrasound-assisted eco-sustainable process for extra virgin olive oil production chain
- Aspetti tecnici ed analitici della produzione di olio extravergine di oliva assistita da ultrasuoni

- EU H2020 MSCA ETN COSMIC 5th Network Wide Event

- Soft skill & Science training: "Industry-academia collaboration. Examples of patent applications"

- Green Chemistry Applications on Selected Medicinal and Aromatic Plants in the Artvin Region (GreenChem), Erasmus+ Key Action, Kick-off Meeting, 24<sup>th</sup>-28<sup>th</sup> April 2023, Turin.

- Ultrasound Technology in Plant Extraction
- Microwave Technology in Plant Extraction

- Biomasses as a valuable resource: recovery, treatments and applications, MSCA - Staff Exchange (HORIZON-MSCA-2022-SE-01) [PHENOCYCLES] Workshop, 14<sup>th</sup> February 2025, Turin.

- Enabling technologies for biomass valorisation: extraction

Thesis Supervisor **Co-tutor** of 16 Master Thesis Degree:

- Estrazione di composti ad attività antiossidante da bucce di patate viola mediante tecnologie e solventi non convenzionali – Relatrice: Dr.ssa E. Calcio Gaudino
- Utilizzo di tecnologie non convenzionali per la conversione catalitica di biomassa a molecole di interesse farmaceutico – Relatrice: Prof.ssa M. Manzoli
- Sviluppo di procedure sostenibili per la sintesi dell'acido 2,5-furandicarbossilico: monomero rinnovabile per la produzione di biopolimeri – Relatrice: Dr.ssa E. Calcio Gaudino
- Intensificazione di processo per la valorizzazione di scarti della filiera agroalimentare – Relatore: Prof. G. Cravotto
- Sviluppo di processi estrattivi in acqua subcritica dal laboratorio alla scala pilota – Relatrice: Dr.ssa A. Binello
- Green Extraction Techniques: A novel trend to valorise food waste – Relatore: Prof. G. Cravotto
- Valorizzazione degli scarti di frantoio: Estrazioni di polifenoli dalle acque di vegetazione e dalla sansa mediante estrazioni non convenzionali assistite da ultrasuoni – Relatrice: Dr.ssa E. Calcio Gaudino
- Ottimizzazione e scale-up in flusso di amminazioni riduttive catalizzate a 5-metilpirrolidoni N-sostituiti in reattori a microonde – Relatrice: Prof.ssa M. Manzoli
- Nuove tecnologie per la valorizzazione di sottoprodotti della filiera agroalimentare su scala semi-industriale – Relatore: Prof. G. Cravotto
- Valorizzazione del frutto e dei sottoprodotti di *Opuntia ficus-indica* L. Mill. – Relatore: Prof. G. Cravotto
- Processi sostenibili per il trattamento e la valorizzazione dei sottoprodotti dell'industria dell'olio extravergine d'oliva – Relatrice: Prof.ssa S. Tabasso
- Valorizzazione di biomasse residuali mediante preparazione di "active lignin carriers" mediante tecniche di attivazione non convenzionali quali Microonde ed Ultrasuoni – Relatrice: Dr.ssa E. Calcio Gaudino
- Valorizzazione degli scarti della filiera dell'olio di oliva in un'ottica di economia circolare finalizzata alla produzione di packaging funzionale/attivo – Relatrice: Dr.ssa E. Calcio Gaudino
- Processi sostenibili per la produzione di acido lattico da biomasse residuali – Relatrice: Prof.ssa S. Tabasso
- 5-hydroxymethylfurfural (HMF) hydrodeoxygenation over mono and bimetallic supported carbon catalysts – Relatrice: Prof.ssa M. Manzoli
- Sviluppo di processi efficienti di bioraffineria per l'ottenimento di acido lattico dai raspi d'uva – Relatrice: Prof.ssa S. Tabasso

## CONFERENCE PRESENTATIONS

Author of 7 Poster Communications, 3 Flash Presentations, 20 Oral Communications (7 invited), and one Lecture at International and National Conferences.

- Poster
- G. Grillo, A. Binello, S. Mantegna, L. Rotolo, G. Cravotto, Green enabling technologies for process intensification in biomass extraction and conversion, *GENP2016: Green Extraction of Natural Products*, 31<sup>st</sup> May-1<sup>st</sup> June 2016, Turin, Italy.
  - G. Grillo, E. Calcio Gaudino, M. Manzoli, S. Tabasso, G. Cravotto Sonochemical preparation of Pd/Al<sub>2</sub>O<sub>3</sub> spheres for selective hydrogenation in a flow microwave reactor, *Innovative Catalysis and Sustainability: Scientific and socio-economic aspects*, 7<sup>th</sup>-11<sup>th</sup> Bardonecchia, Italy.
  - G. Grillo, M. Manzoli, S. Tabasso, G. Cravotto, Microwave-mediated catalytic hydrolysis of cellulose: synergistic effect of sulfated zirconia and zeolite, *XXI Congresso Chimica Industriale*, 27 Agosto 2019, Salerno, Italia.

Poster  
(Continue from above)

- G. Grillo, V. Gunjević, K. Radošević, I. Radojčić Redovniković, G. Cravotto, Nonconventional Technologies and Natural Deep Eutectic Solvents: Synergistic Application for Bioactives Recovery from Blueberry-Peels, *XXVII Congresso Nazionale della Società Chimica Italiana, SCI2021*, 14–23 Settembre 2021, Simposio Virtuale.
- G. Grillo, S. Tabasso, M. Manzoli, E. Calcio Gaudino, F. Mariatti, F. Bucciol, G. Cravotto, Design of non-conventional chemical processes for biomass valorization, *XXVII Congresso Nazionale della Società Chimica Italiana, SCI2021*, 14–23 Settembre 2021, Simposio Virtuale.
- G. Grillo, L. Lamberti, C. Aimone, D. Carnaroglio, G. Cravotto, Recent Advances in Microwave-Assisted Extraction: A Case Study Roadmap, *GENP, Green Extraction of Natural Products (IV Ed.)*, 27<sup>th</sup> October-29<sup>th</sup> October 2022, Poreč, Croatia.
- G. Grillo, G. Capaldi, E. Calcio Gaudino, G. Cravotto, Towards a Circular Future: Sustainable Strategies for Agri-Food Waste Valorization, *XXVIII National Congress of the Italian Chemical Society SCI2024*, 26<sup>th</sup> - 30<sup>th</sup> August 2024, Milano, Italy.

Flash Communications

- G. Grillo, S. Tabasso, D. Carnaroglio, G. Cravotto, Microwave assisted processes for Biomass Valorization, *Sigma-Aldrich Young Chemists Symposium*, 27<sup>th</sup>-29<sup>th</sup> October 2015, Rimini, Italy.
- G. Grillo, S. Tabasso, D. Carnaroglio, G. Cravotto, Microwave assisted processes for Biomass Valorization, *Sigma-Aldrich Young Chemists Symposium*, 27<sup>th</sup>-29<sup>th</sup> October 2015, Rimini, Italy.
- G. Grillo, G. Cravotto, C. Gallone, S. Bensaid, G. Cavaglià, Processo estrattivo multi fase ad ultrasuoni per scarti di lavorazione del tè, *VI Workshop Nazionale Gruppo Interdivisionale di Green Chemistry - Chimica Sostenibile.*, 15 Giugno 2018, Milano, Italia.

Oral Communications

- G. Grillo, S. Tabasso, D. Carnaroglio, A. Binello, G. Cravotto, Intensificazione di processi estrattivi e di valorizzazione di biomasse mediante tecnologie non convenzionali, *IV Workshop Nazionale SCI Gruppo Interdivisionale Green Chemistry-Chimica Sostenibile*, 10 Giugno 2016, Firenze, Italia.
- G. Grillo, G. Santagata, S. Tabasso, B. Immirzi, G. Cravotto, Non-conventional technologies for alginates extraction. Sargassum seaweeds: from wastes to bio-derived polymer, *2<sup>nd</sup> Green and Sustainable Chemistry Conference*, 14<sup>th</sup> -17<sup>th</sup> May 2017, Berlin, Germany.
- G. Grillo, S. Tabasso, E. Tommasi, E. Tagliavini, G. Cravotto, Enhancement of lipid extraction from microalgae by synergistic pretreatment with deep eutectic solvent under microwaves, *Merck Young Chemists Symposium*, 13<sup>th</sup>-15<sup>th</sup> November 2017, Milano Marittima, Italy
- G. Grillo, M. Manzoli, S. Tabasso, F. Bucciol, G. Cravotto, MW-assisted synthesis of 1,4-pentandiol over Au catalysts: Metal/support synergy, *Merck Young Chemists Symposium – 19<sup>th</sup>-21<sup>th</sup> November 2018*, Rimini, Italy.
- G. Grillo, S. Tabasso, E. Calcio Gaudino, G. Cravotto, Microwave technology towards a greener chemistry. *Microwave technology: a sustainable energy source for extraction and synthetic processes*, 24<sup>th</sup> April 2018, Avignon, France. **[INVITED]**
- G. Grillo, A. Binello, R. Solarino, L. Boffa, G. Cravotto, S. Bensaid, G. Cavaglià, Mass transfer kinetic design of multi-stage ultrasound-assisted extraction of tea leaves, *GENP2018-green extraction of Natural Products*, 12<sup>th</sup>-13<sup>th</sup> November 2018. Bari, Italy. **[INVITED]**
- G. Cravotto, K. Martina, A. Barge, G. Grillo. Soft skill & Science training: “Industry–academia collaboration. Examples of patent applications”, *EU H2020 MSCA ETN COSMIC 5th Network Wide Event*, 25<sup>th</sup>-28<sup>th</sup> March 2019, Torino, Italy. **[INVITED]**
- G. Grillo, A. Binello, S. Tabasso, M. Manzoli, G. Cravotto, Multi-stage ultrasound-assisted extraction of tea process-residues: a kinetic approach, *CIS2019: Chemistry meets Industry and Society*, Salerno, 28<sup>th</sup>-30<sup>th</sup> August 2019.
- G. Grillo, E. Calcio Gaudino, M. Manzoli, S. Tabasso, G. Cravotto, Flow microwave-assisted alkyne semi-hydrogenation on alumina sonochemical loaded Pd nanoparticles, *Merck Young Chemists Symposium*, 25<sup>th</sup>-27<sup>th</sup> November 2019, Rimini, Italy.
- G. Grillo, V. Gunjevic, D. Carnaroglio, M. Taurisano, G. Cravotto, Estrazione assistita con microonde: Potenziali applicazioni per la canapa, *Utilizzo dei prodotti di scarto della canapa industriale come fonte di biopesticidi*, Camerino, 6 Dicembre 2019. **[INVITED]**

Oral Communications  
(Continue from above)

- [G. Grillo](#), Scientific database, a new enabling technology?, *SCI Giovani Award Ceremony*, Virtual event, 7<sup>th</sup> October 2020. **[INVITED]**
- [G. Grillo](#), M. Manzoli, S. Tabasso, F. Buccioli, G. Cravotto, Base-free oxidative esterification of furfural under Au/CeO<sub>2</sub> catalysis, *SCI-ViSYOChem2020 Online Symposium*, 3<sup>th</sup>-6<sup>th</sup> November 2020.
- [G. Grillo](#), S. Tabasso, E. Calcio Gaudino, M. Manzoli, G. Cravotto, Design of non-conventional chemical processes for biomass valorization, *SCI-Divisione Chimica Industriale: Giornata di Studi – Auditorium MAPEI*, 22 Ottobre 2021. **[INVITED]**
- [G. Grillo](#), V. Gunjević, K. Radošević, I. Radojčić Redovniković, G. Cravotto, Antiproliferative bioactives from blueberry-peels valorization: harnessing natural deep eutectic solvents and enabling technologies, *Merck Young Chemists Symposium*, 22<sup>th</sup>-24<sup>th</sup> November 2021, Rimini, Italy.
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Lecture

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During the 2016-2024 period, I co-authored 58 articles in international journals, 2 book chapters, along with 4 outreach articles in national journals.

1. S. Tabasso, [G. Grillo](#), D. Carnaroglio, E. Calcio Gaudino, G. Cravotto, Microwave-Assisted - Valerolactone Production for Biomass Lignin Extraction: A Cascade Protocol, *Molecules*, **2016**, 21, 413-422. oi: 10.3390/molecules21040413.
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## Book Chapters

1. S. Tabasso, G. Grillo, G. Cravotto, Alternative techniques and sustainable methods for the valorisation of lignocellulosic biomass, *Biomass Burning in Sub-Saharan Africa, Chemical Issues and Action Outreach*, Mammino L. (Ed.) Springer Netherlands, Springer Nature B.V., **2020**. doi: 10.1007/978-94-007-0808-2\_7.
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## Outreach Publications

1. E. Tommasi, D. Prini, C. Samori, P. Galletti, E. Tagliavini, S. Tabasso, G. Grillo, G. Cravotto., Deep Eutectic Solvents: Liquidi Ionici "Green" di nuova generazione, *La Chimica e L'Industria online*, **2017**, 5, 40-47.
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4. G. Grillo, Un Modello Di Bioraffineria: Per Un Futuro Sostenibile, *La Chimica e L'Industria online*, **2021**, 2, 59-61.

## Guest Editor

**Special Issue Title:** Green Technologies for Food Extraction and Processing: Application in food manufacturing, engineering and production optimization (GENP2022 dedicated SI, [http://genp2022.pbf.hr/?page\\_id=480](http://genp2022.pbf.hr/?page_id=480))  
**Journal:** Applied Food Research  
**Publisher:** Elsevier

**Special Issue Title** Deep Eutectic Solvents for the Extraction of Bioactive Compounds from Natural Sources ([https://www.mdpi.com/journal/molecules/special\\_issues/K463D23H73](https://www.mdpi.com/journal/molecules/special_issues/K463D23H73))  
**Journal:** Molecules  
**Publisher:** MDPI

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- ACS Reviewer Lab Certificate of Completion (ACS Reviewer Lab) from American Chemical Society
- **Editorial Board Member:** Antioxidants (MDPI)

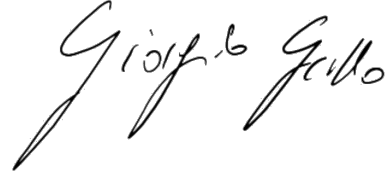
Reviewer activity carried out for various international publishers, with a total of **36 certified reviews**.

- **ACS**  
ACS Sustainable Chemistry & Engineering (1)
- **Beilstein Institut**  
Beilstein Journal of Organic Chemistry (1)
- **Elsevier**  
Biomass and Bioenergy (2)  
International Journal of Biological Macromolecules (3)  
Ain Shams Engineering Journal (2)  
Chemometrics and Intelligent Laboratory Systems (1)  
Fuel Processing Technology (1)  
Industrial Crops and Products (1)  
Journal of Engineering and Applied Science (1)
- **MDPI**  
Molecules (5)  
Antioxidants (2)  
Gels (2)  
International Journal of Molecular Sciences (1)  
Applied Sciences (2)  
Foods (2)  
Technologies (2)
- **Royal Society of Chemistry**  
RSC Advances (3)
- **Springer Nature**  
Biomass Conversion and Biorefinery (2)  
Scientific Reports (1)
- **The Royal Society**  
Royal Society Open Science (1)

I hereby consent to the processing of my personal data provided in this CV in accordance with applicable data protection regulations

**Turin, 29 August 2025**

**Dr. Giorgio Grillo**

A handwritten signature in black ink that reads "Giorgio Grillo". The signature is written in a cursive style with a large, sweeping initial 'G'.