



# Carmela Maria Montone

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**Nazionalità:** Italiana

Presentazione:

Scopus Author ID: 57194015456 ORCID: <https://orcid.org/0000-0002-2953-5696>

Web of Science ResearcherID: AAJ-3640-2020

## ● **ESPERIENZA LAVORATIVA**

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01/11/2021 – ATTUALE – Roma, Italia

**ASSEGNISTA DI RICERCA – UNIVERSITÀ DEGLI STUDI DI ROMA “LA SAPIENZA”**

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**Assegnista di Ricerca, categoria B** presso il Dipartimento di Chimica, Facoltà di Scienze Matematiche, Fisiche e Naturali, Università degli Studi di Roma “La Sapienza”. Titolo del progetto: “Cutting Edge Analytical Chemistry Methodologies and Bio-Tools Diseases to Boost Precision Medicine in Hormone-Related, Finanziato nell’ambito di Progetti di ricerca di Rilevante Interesse Nazionale PRIN 2017 gestito dal Ministero dell’Università e della Ricerca.

01/11/2020 – 31/10/2021 – Roma

**ASSEGNISTA DI RICERCA – UNIVERSITÀ DEGLI STUDI DI ROMA “LA SAPIENZA”**

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**1/11/2020-31/10/2021 Assegnista di Ricerca, categoria B** presso il Dipartimento di Chimica, Facoltà di Scienze Matematiche, Fisiche e Naturali, Università degli Studi di Roma “La Sapienza”. Titolo del progetto: ORIGAMI (BiORaffineria InteGratA per la produzione di biodiesel da Microalghe) (Settore Scientifico Disciplinare CHIM/01). Finanziato nell’ambito del Programma Operativo Nazionale Ricerca e Innovazione 2014 – 2020, gestito dal Ministero dell’Università e della Ricerca.

01/11/2019 – 31/10/2020 – Roma, Italia

**ASSEGNISTA DI RICERCA – UNIVERSITÀ DEGLI STUDI DI ROMA “LA SAPIENZA”**

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**1/11/2019- 31/10/2020 Assegnista di Ricerca, categoria B** presso il Dipartimento di Chimica, Facoltà di Scienze Matematiche, Fisiche e Naturali, Università degli Studi di Roma “La Sapienza”. Titolo del progetto: ORIGAMI (BiORaffineria InteGratA per la produzione di biodiesel da Microalghe) (Settore Scientifico Disciplinare CHIM/01). Finanziato nell’ambito del Programma Operativo Nazionale Ricerca e Innovazione 2014 – 2020, gestito dal Ministero dell’Università e della Ricerca.

Roma, Italia

## ● **ISTRUZIONE E FORMAZIONE**

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19/12/2019 – Roma, Italia

**DOTTORATO DI RICERCA IN SCIENZE CHIMICHE – Università degli Studi di Roma “La Sapienza”**

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Tesi: “*Identificazione di composti bioattivi in matrici agroalimentari e prodotti di scarto*”

OTTIMO con lode

05/11/2018 – 05/05/2019 – Malmö (Svezia), Utrecht, Paesi Bassi

**VISITING STUDENT – University of Malmö (Svezia), Biofilms Research Center for Biointerfaces del Prof. Börje Sellergre**

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Titolo del progetto: *Development of molecular imprinted polymers selective for the enrichment of sulfopeptides in biological samples*

2017

**ABILITAZIONE ALLA PROFESSIONE DI CHIMICO** – Università degli Studi di Roma “La Sapienza”

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16/09/2016 – Roma, Italia

**LAUREA MAGISTRALE IN CHIMICA ANALITICA LM-54 - SCIENZE CHIMICHE** – Università degli Studi di Roma “La Sapienza”

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Tesi: “Stress ossidativo nei neonati pretermine: una nuova metodologia analitica per lo screening e il dosaggio di antiossidanti liposolubili in matrici biologiche non convenzionali”. Relatore: Prof.ssa A. Gentili  
110/110 e lode

29/10/2014 – Salerno, Italia

**LAUREA TRIENNALE IN CHIMICA L-27 - SCIENZE E TECNOLOGIE CHIMICHE** – Università degli Studi di Salerno

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Tesi: “Valutazione del contenuto in oli per e-cig” Relatore Prof. T. Caruso

07/2010

**DIPLOMA DI MATURITÀ SCIENTIFICA** – Liceo Scientifico Enrico Medi, Battipaglia (SA)

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## ● **COMPETENZE LINGUISTICHE**

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Lingua madre: **ITALIANO**

Altre lingue:

|                | COMPRESIONE |         | ESPRESSIONE ORALE |                   | SCRITTURA |
|----------------|-------------|---------|-------------------|-------------------|-----------|
|                | Ascolto     | Lettura | Produzione orale  | Interazione orale |           |
| <b>INGLESE</b> | B2          | B2      | B1                | B1                | B2        |

*Livelli: A1 e A2: Livello elementare B1 e B2: Livello intermedio C1 e C2: Livello avanzato*

## ● **COMPETENZE DIGITALI**

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### **Le mie competenze digitali**

Padronanza del Pacchetto Office (Word Excel PowerPoint ecc) | Posta elettronica | Utilizzo del browser

### **Competenze professionali**

## ● **COMPETENZE PROFESSIONALI**

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01/01/2017 – ATTUALE

### **Attività scientifiche di ricerca**

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I risultati dell'attività scientifica della Dott.ssa Montone hanno prodotto 57 pubblicazioni su riviste scientifiche internazionali, 2 capitoli di libro, 12 comunicazioni orali e 26 poster a congressi nazionali ed internazionali.

Le tematiche delle ricerche svolte hanno come oggetto lo sviluppo e la validazione di metodi analitici innovativi basati sulla cromatografia liquida accoppiata alla spettrometria di massa tandem a bassa ed alta

risoluzione per la determinazione multianalitica di sostanze naturali e di origine antropica in matrici di tipo ambientale, alimentare, vegetale e biologico.

L'attività scientifica può essere suddivisa in cinque principali linee di ricerca: proteomica e peptidomica (A), peptidomica di peptidi a catena corta (B), lipidomica (C), metabolomica (D) e analisi di piccole molecole in campo alimentare, ambientale e biologico (E).

ATTUALE

## LABORATORY SPECIALIST

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- Sviluppo, validazione ed applicazione di metodi multiresiduali in spettrometria di massa (LC-MS/MS)
- Validazione di metodi LC-MS/MS in base alle linee guida FDA
- Sviluppo di workflow analitici in Metabolomica, Proteomica e Peptidomica
- Manutenzione strumenti Thermo Fisher (ultimate 3000-UHPLC, Vanquish-UHPLC, Q-Exactive, TSQ-Vantage, Orbitrap-ELITE)

## PREMI E RICONOSCIMENTI

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### Premi e riconoscimenti

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**Premio Minerva III edizione**, categoria Dottorandi di Ricerca, macroarea A  
Università degli Studi di Roma "La Sapienza"

**Premio Giovane Ricercatore 2021**, assegnato dal Gruppo Interdivisionale di Scienza delle Separazioni  
Della Società Chimica Italiana (SCI)

**Premio Giovane Ricercatore Bioanalitica 2021**, assegnato dal Gruppo di Bioanalitica della Divisione di  
Chimica Analitica,  
Società Chimica Italiana (SCI)

**Premio per il miglior poster** al XXVII National Congress of the Analytical Chemistry Division of the Italian  
Chemical Society, Bologna 16-20 settembre 2018

**Premio di Laurea 2017**, assegnato dalla Divisione di Chimica Analitica, Società Chimica Italiana (SCI)

**Premio "Laureato Eccellente" per l'anno accademico 2015/2016**, assegnato dall'Università degli Studi di  
Roma "La Sapienza", 11 maggio 2017

### Borse di Studio

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**Borsa di Studio** del valore di mille (1000) dollari per partecipare al congresso HPLC 2022, 50th  
International Symposium and Exposition on High Performance Liquid Phase Separations and Related  
Techniques, San Diego, California USA, 18-23 giugno 2022

**Borsa di Studio** del valore di cento (100) euro per partecipare al XXVII Congress of the Italian Chemical  
Society SCI, on-line congress, 14-23 settembre 2021

**Borsa di Studio** del valore di centocinquanta (150) euro per partecipare agli Incontri di Scienza delle  
Separazioni 2019, Napoli, 28-29 novembre 2019

**Borsa di Studio** del valore di duecentotrenta (230) euro per partecipare al XXVIII Congress of the Italian  
Chemical Society SCI, Bari, 22-26 settembre 2019

**Borsa di Studio** del valore di duecentosettanta (270) euro per partecipare al 48TH International  
Symposium on High-Performance Liquid Phase Separations and Related Techniques (HPLC2019), Milano,  
16-20 giugno 2019

**Borsa di Studio** del valore di duecentosettanta (270) euro per partecipare al XXVII Congress of the Italian  
Chemical Society SCI, Bologna, 16-20 settembre 2018

**Borsa di Studio** del valore di duecento (200) euro per partecipare al XXVI National Congress of the Italian Chemical Society SCI, Paestum, 10-14 settembre 2017

**Borsa di Studio** del valore di centocinquanta (150) euro per partecipare alle Giornate di Chimica Analitica in memoria del Prof. Francesco Dondi organizzate Gruppo Interdivisionale di Scienza delle Separazioni in collaborazione con il Gruppo Divisionale di Bioanalitica, Ferrara 10-11 luglio 2017

## ● **PROGETTI DI RICERCA FINANZIATI**

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### **Progetti di ricerca finanziati (responsabile scientifico)**

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**"Progetto per Avvio alla Ricerca - Tipo 2" anno 2021**, "Sviluppo di nuovi materiali per la purificazione e l'estrazione di analiti in tracce in matrici complesse, al fine di promuovere la salute e la sicurezza alimentare", Università degli Studi di Roma "La Sapienza", numero protocollo: AR22117A863DDEF5, finanziamento: Euro 2.200

**"Progetto per Avvio alla Ricerca - Tipo 1" anno 2018**, "*Characterization of polar lipids in Spirulina Microalgae: lipidomic approaches for identification of new potential bioactive lipids*", Università degli Studi di Roma "La Sapienza", numero protocollo: AR11816435BF9553, finanziamento: Euro 1.190

**"Progetto per Avvio alla Ricerca - Tipo 1" anno 2017**, : "*Estrazione magnetica di micotossine da diverse tipologie di farina*" Università degli Studi di Roma "La Sapienza", numero protocollo: AR11715C78D45B81, finanziamento: Euro 1.300

### **Progetti di ricerca finanziati (partecipante)**

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**Progetto finanziato dalla Sapienza:** Phytocannabinoid profiling in different industrial hemp (Cannabis Sativa L.) samples. PI: Chiara Cavaliere

**Progetto finanziato dal MUR:** Integrated biorefinery for the production of biodiesel from microalgae , ORIGAMI PI: Simone Ferrari

**Progetto finanziato dall' INAIL:** Comparison between classical microbiology and alternative chemical techniques, molecular biology, metagenomics and metaproteomics, for the study of bioaerosol in the workplace. PI: Anna Laura Capriotti

**Progetto finanziato da AGER:** Valorization of Italian OLive products through INnovative analytical tools - VIOLIN. PI: Anna Laura Capriotti

## ● **ATTIVITÀ DI INSEGNAMENTO**

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### **Attività di insegnamento**

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A. A. 2021-2022: **Corso per Dottorandi in Scienze Chimiche**, Università degli Studi di Roma "La Sapienza"  
Titolo del corso: Metabolomica ( 3CFU)

2021-oggi: **Cultore di Materia del Corso: Chimica dell'Ambiente**, Università degli Studi di Roma "La Sapienza"  
LM-54 - SCIENZE CHIMICHE (1° semestre)

A. A. 2020-2021: **Corso per Dottorandi in Scienze Chimiche**, Università degli Studi di Roma "La Sapienza"  
Titolo del corso: Metabolomica ( 3CFU)

### **Attività di Tutoraggio**

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**Vincitrice dell'incarico di tutoraggio ex legge n. 170 del 2003. Bando n. 5/2018** Insegnamento dei corsi di base di Chimica del Corso di Laurea triennale in Biotecnologie agro-industriali (II semestre) (40 ore)



**Vincitrice del Bando n. 99/2017 Prot. n. 2383** Incarico di tutoraggio a supporto delle azioni previste dal piano lauree scientifiche (40 ore)

**Vincitrice dell'incarico di tutoraggio ex legge n. 170 del 2003. Bando n. 12/2017** Insegnamento di Chimica Generale ed Inorganica del Corso di Laurea in Biotecnologie Agro -Industriali (II semestre) (40 ore)

## ● **PUBBLICAZIONI SU RIVISTE INTERNAZIONALI**

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### **1- Comprehensive biomarker profiles and chemometric filtering of urinary metabolomics for effective discrimination of prostate carcinoma from benign hyperplasia**

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E. Amante, A. Cerrato, E. Alladio, A. L. Capriotti, C. Cavaliere, F. Marini, **C. M. Montone**, S. Piovesana, A. Laganà, M. Vincenti, *Comprehensive biomarker profiles and chemometric filtering of urinary metabolomics for effective discrimination of prostate carcinoma from benign hyperplasia* Scientific Reports 2022, 12 (1), art. no. 4361, doi: 10.1038/s41598-022-08435-2, (IF 4.380)

### **2- Investigating the Short Peptidome Profile of Italian Dry-Cured Ham at Different Processing Times by High-Resolution Mass Spectrometry and Chemometrics**

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A. Cerrato, S. E. Aita, A. L. Capriotti, C. Cavaliere, A. M. I. Montone, **C. M. Montone**, A. Laganà, A. *Investigating the Short Peptidome Profile of Italian Dry-Cured Ham at Different Processing Times by High-Resolution Mass Spectrometry and Chemometrics* International Journal of Molecular Sciences 2022, 23 (6), art. no. 3193, doi: 10.3390/ijms23063193, (IF: 5.924)

### **3- Detailed investigation of the composition and transformations of phenolic compounds in fresh and fermented Vaccinium floribundum berry extracts by high-resolution mass spectrometry and bioinformatics**

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A. Cerrato, S. Piovesana, S. E. Aita, C. Cavaliere, S. Felletti, A. Laganà, **C. M. Montone**, C. Vargad-de-la-Cruz, A. L. Capriotti, *Detailed investigation of the composition and transformations of phenolic compounds in fresh and fermented Vaccinium floribundum berry extracts by high-resolution mass spectrometry and bioinformatics*, 2022, Phytochemical Analysis, doi: 10.1002/pca.3105 (IF: 3.73)

### **4- Untargeted analysis of contaminants in river water samples: Comparison between two different sorbents for solid-phase extraction followed by liquid chromatography-high-resolution mass spectrometry determination**

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**C. M. Montone**, B. Giannelli Moneta, S. E. Aita, F. Aulenta, C. Cavaliere, A. Cerrato, S. Fazi, A. Laganà, V. Paolini, F. Petracchini, S. Piovesana, A. L. Capriotti, *Untargeted analysis of contaminants in river water samples: Comparison between two different sorbents for solid-phase extraction followed by liquid chromatography-high-resolution mass spectrometry determination*, Microchemical Journal, 172, 2021, doi: 10.1016/j.microc.2021.106979 (IF:4.821)

### **5- Multielement Characterization and Antioxidant Activity of Italian Extra-Virgin Olive Oils**

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M. L. Astolfi, F. Marini, M. A. Frezzini, L. Massimi, A. L. Capriotti, **C. M. Montone**, S. Canepari, *Multielement Characterization and Antioxidant Activity of Italian Extra-Virgin Olive Oils*, Frontiers in Chemistry, 9, 2021, doi: 10.3389/fchem.2021.769620 (IF: 5.221)

### **6- Fully Automated Detection of Phosphocholine-Containing Lipids through an Isotopically Labeled Buffer Modification Workflow**

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A. Cerrato, S. E. Aita, A. L. Capriotti, C. Cavaliere, **C. M. Montone**, S. Piovesana, A. Laganà, *Fully Automated Detection of Phosphocholine-Containing Lipids through an Isotopically Labeled Buffer Modification Workflow*, Analytical Chemistry, 93 (45), 2021, doi: 10.1021/acs.analchem.1c02944 (IF: 6.986)

## 7- Characterization of the trans-epithelial transport of green tea (*C. sinensis*) catechin extracts with in vitro inhibitory effect against the sars-cov-2 papain-like protease activity

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**C. M. Montone**, S. E. Aita, A. Arnoldi, A. L. Capriotti, C. Cavaliere, A. Cerrato, C. Lammi, S. Piovesana, G. Ranaldi, A. Laganà, *Characterization of the trans-epithelial transport of green tea (*C. sinensis*) catechin extracts with in vitro inhibitory effect against the sars-cov-2 papain-like protease activity*, *Molecules*, 26 (21), 2021, doi: 10.3390/molecules26216744 (IF: 4.412)

## 8- High-Resolution Mass Spectrometry and Chemometrics for the Detailed Characterization of Short Endogenous Peptides in Milk By-Products

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**C. M. Montone**, S. E. Aita, C. Cavaliere, A. Cerrato, A. Laganà, S. Piovesana, A. L. Capriotti, *High-Resolution Mass Spectrometry and Chemometrics for the Detailed Characterization of Short Endogenous Peptides in Milk By-Products*, *Molecules*, 26 (21), 6472, 2021, doi: 10.3390/molecules26216472 (IF: 4.412)

## 9- Targeted and untargeted characterization of underivatized policosanols in hemp inflorescence by liquid chromatography-high resolution mass spectrometry

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**C. M. Montone**, S. E. Aita, G. Cannazza, C. Cavaliere, A. Cerrato, C. Citti, L. Mondello, S. Piovesana, A. Laganà, A. L. Capriotti, *Targeted and untargeted characterization of underivatized policosanols in hemp inflorescence by liquid chromatography-high resolution mass spectrometry*. *Talanta*, 235, 2021, doi: 10.1016/j.talanta.2021.122778 (IF: 6.057)

## 10- Profiling and quantitative analysis of underivatized fatty acids in *Chlorella vulgaris* microalgae by liquid chromatography-high resolution mass spectrometry

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**C. M. Montone**, S.E.Aita, M. Catani, C. Cavaliere, A. Cerrato, S. Piovesana, A. Laganà, A. L. Capriotti, *Profiling and quantitative analysis of underivatized fatty acids in *Chlorella vulgaris* microalgae by liquid chromatography-high resolution mass spectrometry*, *Journal of Separation Science*, 2021, doi: 10.1002/jssc.202100306 (IF: 3.645)

## 11- Recent applications of mass spectrometry for the characterization of cannabis and hemp phytocannabinoids: From targeted to untargeted analysis

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A. L. Capriotti, G. Cannazza, M. Catani, C. Cavaliere, A. Cavazzini, A. Cerrato, C. Citti, S. Felletti, **C. M. Montone**, S. Piovesana, A. Laganà, *Recent applications of mass spectrometry for the characterization of cannabis and hemp phytocannabinoids: From targeted to untargeted analysis*. *Journal of Chromatography A*, 2021, doi: 10.1016/j.chroma.2021.462492 (IF: 4.759)

## 12- Protein corona profile of graphene oxide allows detection of glioblastoma multiforme using a simple one-dimensional gel electrophoresis technique: a proof-of-concept study

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R. Di Santo, E. Quagliarini, L. Digiaco, D. Pozzi, A. Di Carlo, D. Caputo, A. Cerrato, **C. M. Montone**, M. Mahmoudi, G. Caracciolo, *Protein corona profile of graphene oxide allows detection of glioblastoma multiforme using a simple one-dimensional gel electrophoresis technique: a proof-of-concept study*, *Biomaterials Science*, 2021, doi: 10.1039/d1bm00488c (IF: 6.843)

## 13- Optimal centrifugal isolating of liposome-protein complexes from human plasma

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L. Digiaco, F. Giulimondi, A. L. Capriotti, S. Piovesana, **C. M. Montone**, R. Zenezini Chiozzi, A. Laganà, M. Mahmoudi, D. Pozzi, G. Caracciolo, *Optimal centrifugal isolating of liposome-protein complexes from human plasma*, *Nanoscale Advances*, 2021, doi: 10.1039/D1NA00211B (IF: 4.553)



## 14- Andean blueberry of the genus *disterigma*: A high-resolution mass spectrometric approach for the comprehensive characterization of phenolic compounds

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S.E.Aita, Capriotti C. Cavaliere, A. Cerrato, B. Giannelli Moneta, **C. M. Montone**, S. Piovesana, A. Laganà, *Andean blueberry of the genus *disterigma*: A high-resolution mass spectrometric approach for the comprehensive characterization of phenolic compounds*, *Separations*, 8 (5), 58; 2021, doi: 10.3390/separations8050058 (IF: 2.777)

## 15- Production and Characterization of Medium-Sized and Short Antioxidant Peptides from Soy Flour-Simulated Gastrointestinal Hydrolysate

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C. Cavaliere, A.M.I. Montone, S.E.Aita, R. Capparelli, A. Cerrato, P. Cuomo, A. Laganà, **C. M. Montone\***, S. Piovesana, Anna Laura Capriotti, *Production and Characterization of Medium-Sized and Short Antioxidant Peptides from Soy Flour-Simulated Gastrointestinal Hydrolysate*, *Antioxidants*, 10(5), 734; 2021, doi: 10.3390/antiox10050734 (IF: 6.313)

## 16- Phytocannabinomics: Untargeted metabolomics as a tool for cannabis chemovar differentiation

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A. Cerrato, C. Citti, G. Cannazza, A. L. Capriotti C. Cavaliere, G. Grassi, F. Marini, **C. M. Montone**, R. Paris, S. Piovesana, A. Laganà, *Phytocannabinomics: Untargeted metabolomics as a tool for cannabis chemovar differentiation*, *Talanta*, 230, 2021, doi: 10.1016/j.talanta.2021.122313 (IF: 6.057)

## 17- In-depth cannabis fatty acid profiling by ultra-high performance liquid chromatography coupled to high resolution mass spectrometry

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S. Piovesana, S.E.Aita, G. Cannazza, A. L. Capriotti, C. Cavaliere, A. Cerrato, P. Guarnaccia, **C. M. Montone**, A. Laganà, *In-depth cannabis fatty acid profiling by ultra-high performance liquid chromatography coupled to high resolution mass spectrometry*, *Talanta*, 228, 2021, doi: 10.1016/j.talanta.2021.122249 (IF: 6.057)

## 18- Untargeted metabolomics of prostate cancer zwitterionic and positively charged compounds in urine

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A. Cerrato, C. Bedia, A. L. Capriotti, C. Cavaliere, V. Gentile, M. Maggi, **C. M. Montone**, S. Piovesana, A. Sciarra, R. Tauler, A. Laganà, *Untargeted metabolomics of prostate cancer zwitterionic and positively charged compounds in urine*, *Analytica Chimica Acta*, 1158, 2021 doi:10.1016/j.aca.2021.338381 (IF: 6.558)

## 19- Identification and Quantification of Polycyclic Aromatic Hydrocarbons in Polyhydroxyalkanoates Produced from Mixed Microbial Cultures and Municipal Organic Wastes at Pilot Scale

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C. Cavaliere, A. L. Capriotti, A. Cerrato, L. Lorini, **C. M. Montone**, F. Valentino, A. Laganà, M. Majone, *Identification and Quantification of Polycyclic Aromatic Hydrocarbons in Polyhydroxyalkanoates Produced from Mixed Microbial Cultures and Municipal Organic Wastes at Pilot Scale*, *Molecules*, 26(3), 539, 2021, doi: 10.3390/molecules26030539 (IF: 4.412)

## 20- Comprehensive identification of native medium-sized and short bioactive peptides in sea bass muscle

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A. Cerrato, S.E.Aita, C. Cavaliere, A. Laganà, **C. M. Montone**, S. Piovesana, R. Zenezini Chiozzi, A. L. Capriotti, *Comprehensive identification of native medium-sized and short bioactive peptides in sea bass muscle*, *Food Chemistry*, 343, 1,2021, doi: 10.1016/j.foodchem.2020.128443 (IF: 7.514)

## 21- Degradation of the polar lipid and fatty acid molecular species in extra virgin olive oil during storage based on shotgun lipidomics

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A. L. Capriotti, A. Cerrato, S. E. Aita, **C. M. Montone**, S. Piovesana, A. Laganà, C. Cavaliere, *Degradation of the polar lipid and fatty acid molecular species in extra virgin olive oil during storage based on shotgun lipidomics*, Journal of Chromatography A, 1639, 2021, doi: 10.1016/j.chroma.2021.461881 (IF: 4.759)

## 22- A rapid and innovative extraction and enrichment method for the metaproteomic characterization of dissolved organic matter in groundwater samples

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A. L. Capriotti, S.E.Aita, C. Cavaliere, A. Cerrato, **C. M. Montone**, S. Piovesana, A. Laganà, *A rapid and innovative extraction and enrichment method for the metaproteomic characterization of dissolved organic matter in groundwater samples*, Journal of Separation Science, 2020, doi: 10.1002/jssc.202001025 (IF: 3.645)

## 23- Developments and pitfalls in the characterization of phenolic compounds in food: From targeted analysis to metabolomics-based approaches

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S. Piovesana, C. Cavaliere, A. Cerrato, **C. M. Montone**, A. Laganà, A. L. Capriotti, *Developments and pitfalls in the characterization of phenolic compounds in food: From targeted analysis to metabolomics-based approaches*, TrAC - Trends in Analytical Chemistry, 133, 2020, doi: 10.1016/j.trac.2020.116083 (IF: 12.296)

## 24- Identification and antimicrobial activity of medium-sized and short peptides from yellowfin tuna (*Thunnus albacares*) simulated gastrointestinal digestion

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A. Cerrato, A. L. Capriotti, F. Capuano, C. Cavaliere, A. M. I. Montone, **C. M. Montone\***, S. Piovesana, R. Zenezini Chiozzi, A. Laganà, *Identification and antimicrobial activity of medium-sized and short peptides from yellowfin tuna (*Thunnus albacares*) simulated gastrointestinal digestion*, Foods, 9, 9, 2020, doi: 10.3390/foods9091185 (IF: 4.350)

## 25- A new opening for the tricky untargeted investigation of natural and modified short peptides

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A. Cerrato, S.E.Aita, A. L. Capriotti, C. Cavaliere, **C. M. Montone**, A. Laganà, S. Piovesana, *A new opening for the tricky untargeted investigation of natural and modified short peptides*, Talanta, 2020, doi: 10.1016/j.talanta.2020.121262 (IF: 6.057)

## 26- Improved identification of phytocannabinoids using a dedicated structure-based workflow

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**C. M. Montone**, A. Cerrato, B. Botta, G. Cannazza, A. L. Capriotti, C. Cavaliere, C. Citti, F. Ghirga, S. Piovesana, A. Laganà, *Improved identification of phytocannabinoids using a dedicated structure-based workflow*, Talanta, 2020, doi: 10.1016/j.talanta.2020.121310 (IF: 6.057)

## 27- Untargeted Characterization of Chestnut (*Castanea sativa* Mill.) Shell Polyphenol Extract: A Valued Bioresource for Prostate Cancer Cell Growth Inhibition

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N. A. Cacciola, A. Cerrato, A. L. Capriotti, C. Cavaliere, M. D'Apolito, **C. M. Montone**, S. Piovesana, G. Squillaci, G. Peluso, A. Laganà, *Untargeted Characterization of Chestnut (*Castanea sativa* Mill.) Shell Polyphenol Extract: A Valued Bioresource for Prostate Cancer Cell Growth Inhibition*, Molecules, 2020, 25(12), 2730; doi: 10.3390/molecules25122730 (IF: 4.412)

## 28- Development of a Sample Preparation Workflow for Sulfopeptide Enrichment: from Target Analysis to Challenges in Shotgun Sulfopeptidomics

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A. L. Capriotti, A. Cerrato, A. Laganà, **C. M. Montone**, S. Piovesana, Susy; R. Zenezini Chiozzi, C. Cavaliere, Chiara *Development of a Sample Preparation Workflow for Sulfopeptide Enrichment: from Target Analysis to*



### 29- Determination of multi-class emerging contaminants in sludge and recovery materials from waste water treatment plants: Development of a modified QuEChERS method coupled to LC-MS/MS

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B. Benedetti, M. Majone, C. Cavaliere, **C. M. Montone**, F. Fatone, N. Frisonc, A. Lagan, A. L. Capriotti, *Determination of multi-class emerging contaminants in sludge and recovery materials from waste water treatment plants: Development of a modified QuEChERS method coupled to LC-MS/MS*, Microchemical Journal, 2020, 155, 104732 doi: 10.1016/j.microc.2020.104732 (IF: 4.821)

### 30- Does the protein corona take over the selectivity of molecularly imprinted nanoparticles? The biological challenges to recognition

---

A. L. Capriotti, S. Piovesana, R. Zenezini Chiozzi, **C. M. Montone**, A. M. Bossi, A. Laganà, *Does the protein corona take over the selectivity of molecularly imprinted nanoparticles? The biological challenges to recognition*, Journal of Proteomics 2020, 219, 103736 doi: 10.1016/j.jprot.2020.103736 (IF: 4.044)

### 31- Pitfalls in the analysis of phytocannabinoids in cannabis inflorescence

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C. Citti, F. Russo, S. Sgrò, A. Gallo, A. Zanotto, F. Forni, M. Vandelli, A. Laganà, **C. M. Montone**, G. Gigli, G. Cannazza, *Pitfalls in the analysis of phytocannabinoids in cannabis inflorescence*, Analytical and Bioanalytical Chemistry 2020, doi: 10.1007/s00216-020-02554-3 (IF: 4.157)

### 32- Isolation of a High-Affinity Cannabinoid for the Human CB1 Receptor from a Medicinal Cannabis sativa Variety: 9Tetrahydrocannabutol, the Butyl Homologue of 9Tetrahydrocannabinol

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P. Linciano, C. Citti, L. Luongo, C. Belardo, S. Maione, M. A. Vandelli, F. Forni, G. Gigli, A. Lagana, **C. M. Montone**, G. Cannazza, *Isolation of a High-Affinity Cannabinoid for the Human CB1 Receptor from a Medicinal Cannabis sativa Variety: 9Tetrahydrocannabutol, the Butyl Homologue of 9Tetrahydrocannabinol*, Journal of Natural Products, 2020, 83, 1, 88–98 doi: 10.1021/acs.jnatprod.9b00876 (IF: 4.050)

### 33- Phospholipidome of extra virgin olive oil: Development of a solid phase extraction protocol followed by liquid chromatography-high resolution mass spectrometry for its software-assisted identification

---

M. Antonelli, B. Benedetti, C. Cavaliere, A. Cerrato, **C. M. Montone**, S. Piovesana, A. Laganà, *Phospholipidome of extra virgin olive oil: Development of a solid phase extraction protocol followed by liquid chromatography-high resolution mass spectrometry for its software-assisted identification*, Food Chemistry 2020, 310, art. no. 125860, doi:10.1016%2fj.foodchem.2019.125860 (IF: 7.514)

### 34- A new software-assisted analytical workflow based on high-resolution mass spectrometry for the systematic study of phenolic compounds in complex matrices

---

A. Cerrato, G. Cannazza, A.L. Capriotti, G. La Barbera, A. Laganà, **C. M. Montone**, S. Piovesana, C. Cavaliere, *A new software-assisted analytical workflow based on high-resolution mass spectrometry for the systematic study of phenolic compounds in complex matrices*, Talanta, 2020, 209, art. no. 120573, doi: 10.1016/j.talanta.2019.120573 (IF: 6.057)

### 35- A comprehensive analysis of liposomal biomolecular corona upon human plasma incubation: The evolution towards the lipid corona

---

G. La Barbera, A.L. Capriotti, G. Caracciolo A. Cerrato, **C. M. Montone**, S. Piovesana, D.Pozzi, E. Quagliarini, A. Laganà, *A comprehensive analysis of liposomal biomolecular corona upon human plasma incubation: The evolution towards the lipid corona*, Talanta, 2020, 209, art. no. 120487, doi: 10.1016/j.talanta.2019.120487 (IF: 6.057)

### 36- Peptidomic approach for the identification of peptides with potential antioxidant and antihypertensive effects derived from Asparagus by-products

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**C. M. Montone**, R.Z. Chiozzi, N. Marchetti, A. Cerrato, M. Antonelli, A.L. Capriotti, C. Cavaliere, S. Piovesana, A. Laganà, *Peptidomic approach for the identification of peptides with potential antioxidant and antihypertensive effects derived from Asparagus by-products*, *Molecules* 2019, 24 (19), art. no. 3627, doi: 10.3390/molecules24193627 (IF: 4.412)

### 37- Graphitized Carbon Black Enrichment and UHPLC-MS/MS Allow to Meet the Challenge of Small Chain Peptidomics in Urine

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S. Piovesana, A.L. Capriotti, A. Cerrato, C. Crescenzi, G. La Barbera, A. Laganà, **C. M. Montone**, C. Cavaliere, *Graphitized Carbon Black Enrichment and UHPLC-MS/MS Allow to Meet the Challenge of Small Chain Peptidomics in Urine*, *Analytical Chemistry*, 2019, 91 (17), pp. 11474-11481. doi: 10.1021/acs.analchem.9b03034 (IF: 6.986)

### 38- A clean-up strategy for identification of circulating endogenous short peptides in human plasma by zwitterionic hydrophilic liquid chromatography and untargeted peptidomics identification

---

S. Piovesana, A. Cerrato, M. Antonelli, B. Benedetti, A.L. Capriotti, C. Cavaliere, **C. M. Montone**, A. Laganà, *A clean-up strategy for identification of circulating endogenous short peptides in human plasma by zwitterionic hydrophilic liquid chromatography and untargeted peptidomics identification*, *Journal of Chromatography A*, 2019, art. no. 460699, doi: 10.1016/j.chroma.2019.460699 (IF: 4.759)

### 39- New insights in hemp chemical composition: a comprehensive polar lipidome characterization by combining solid phase enrichment, high-resolution mass spectrometry, and cheminformatics

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M. Antonelli, B. Benedetti, G. Cannazza, A. Cerrato, C. Citti, **C. M. Montone\***, S. Piovesana, A. Laganà, *New insights in hemp chemical composition: a comprehensive polar lipidome characterization by combining solid phase enrichment, high-resolution mass spectrometry, and cheminformatics*, *Analytical and Bioanalytical Chemistry*, 2019, doi: 10.1007/s00216-019-02247-6 (IF: 4.157)

### 40- Development of an analytical method for the metaproteomic investigation of bioaerosol from work environments

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S. Piovesana, A. L. Capriotti, P. Foglia, **C. M. Montone**, G. La Barbera, R. Zenezini Chiozzi, A. Laganà, C. Cavaliere, *Development of an analytical method for the metaproteomic investigation of bioaerosol from work environments*, *PROTEOMICS* 2019, 19 (23), art. no. 1900152, doi: 10.1002/pmic.201900152 (IF: 3.984)

### 41- Enrichment procedure based on graphitized carbon black and liquid chromatography-high resolution mass spectrometry for elucidating sulfolipids composition of microalgae

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M. Antonelli, B. Benedetti, C. Cavaliere, A. Cerrato, G. La Barbera, **C. M. Montone**, S. Piovesana, A. Laganà *Enrichment procedure based on graphitized carbon black and liquid chromatography-high resolution mass spectrometry for elucidating sulfolipids composition of microalgae*, *Talanta* 2019, 205, art. no. 120162, doi: 10.1016/j.talanta.2019.120162 (IF: 6.057)

### 42- Identification of bioactive short peptides in cow milk by high performance liquid chromatography on C18 and porous graphitic carbon coupled to high resolution mass spectrometry

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**C. M. Montone**, A. L. Capriotti, A. Cerrato, M. Antonelli, G. La Barbera, S. Piovesana, A. Laganà, C. Cavaliere, *Identification of bioactive short peptides in cow milk by high performance liquid chromatography on C18 and porous graphitic carbon coupled to high resolution mass spectrometry* *Analytical and Bioanalytical Chemistry* 2019, 411 (15) 3395-3404 doi: 10.1007/s00216-019-01815-0 (IF: 4.157)



#### 43- A triple quadrupole and a hybrid quadrupole orbitrap mass spectrometer in comparison for polyphenols quantitation

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C. Cavaliere, M. Antonelli, A. L. Capriotti, G. La Barbera, **C. M. Montone**, S. Piovesana, A. Laganà, *A triple quadrupole and a hybrid quadrupole orbitrap mass spectrometer in comparison for polyphenols quantitation*, Journal of Agricultural and Food Chemistry 2019, 67 (17) 4885-4896 doi: 10.1021/acs.jafc.8b07163 (IF: 5.279)

#### 44- Investigation of free and conjugated seleno-amino acids in wheat bran by hydrophilic interaction liquid chromatography-tandem mass spectrometry

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**C. M. Montone**, M. Antonelli, A. L. Capriotti, C. Cavaliere, G. La Barbera, S. Piovesana, A. Laganà, *Investigation of free and conjugated seleno-amino acids in wheat bran by hydrophilic interaction liquid chromatography-tandem mass spectrometry* Journal of Separation Science 2019, 42 (10) 1938-1947 doi: 10.1002/jssc.201900047 (IF: 3.645)

#### 45- Investigation of free seleno-amino acids in extra-virgin olive oil by mixed mode solid phase extraction cleanup and enantioselective hydrophilic interaction liquid chromatography-tandem mass spectrometry

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S. Piovesana, **C.M. Montone**, M. Antonelli, C. Cavaliere, G. La Barbera, S., Canepari, R. Samperi, A. Laganà, A.L.Capriotti, *Investigation of free seleno-amino acids in extra-virgin olive oil by mixed mode solid phase extraction cleanup and enantioselective hydrophilic interaction liquid chromatography-tandem mass spectrometry*, Food Chemistry 2019, 278 17-25 doi: 10.1016/j.foodchem.2018.11.053 (IF: 7.514)

#### 46- Sensitive untargeted identification of short hydrophilic peptides by high performance liquid chromatography on porous graphitic carbon coupled to high resolution mass spectrometry

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S. Piovesana, **C.M. Montone**, C. Cavaliere, C. Crescenzi, G. La Barbera, A. Laganà, A.L.Capriotti, *Sensitive untargeted identification of short hydrophilic peptides by high performance liquid chromatography on porous graphitic carbon coupled to high resolution mass spectrometry*, Journal of Chromatography A 2019, 73-79 doi: 10.1016/j.chroma.2018.12.066 (IF: 4.759)

#### 47- Recent Applications of Magnetic Solid-phase Extraction for Sample Preparation

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A.L. Capriotti, C. Cavaliere, G. La Barbera, **C.M. Montone**, S. Piovesana, A. Laganà, *Recent Applications of Magnetic Solid-phase Extraction for Sample Preparation*, Chromatographia 2019, 82, 8, 1251-1274 doi: 10.1007/s10337-019-03721-0 (IF: 2.044)

#### 48- Peptides from Cauliflower By-Products, Obtained by an Efficient, Ecosustainable, and Semi-Industrial Method, Exert Protective Effects on Endothelial Function

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C. Caliceti, A.L. Capriotti, D. Calabria, F. Bonvicini, R. Zenezini Chiozzi, **C.M. Montone**, S. Piovesana, M. Zangheri, M. Mirasoli, P. Simoni, A. Laganà, A. Roda, *Peptides from Cauliflower By-Products, Obtained by an Efficient, Ecosustainable, and Semi-Industrial Method, Exert Protective Effects on Endothelial Function*, Oxidative medicine and cellular longevity 2019, Article number 1046504 doi: 10.1155/2019/1046504 (IF: 6.543)

#### 49- Liquid chromatographic strategies for separation of bioactive compounds in food matrices

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C. Cavaliere, A.L.Capriotti, G. La Barbera, **C.M. Montone**, S. Piovesana, A. Laganà, *Liquid chromatographic strategies for separation of bioactive compounds in food matrices*, Molecules 2018, 23 (12) 27 doi: 10.3390/molecules23123091 (IF: 4.412)



## 50- Delving into the Polar Lipidome by Optimized Chromatographic Separation, High-Resolution Mass Spectrometry, and Comprehensive Identification with Lipostar: Microalgae as Case Study

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G. La Barbera, M. Antonelli, C. Cavaliere, G. Cruciani, L. Goracci, **C.M. Montone**, S. Piovesana, A. Laganà, A.L. Capriotti, *Delving into the Polar Lipidome by Optimized Chromatographic Separation, High-Resolution Mass Spectrometry, and Comprehensive Identification with Lipostar: Microalgae as Case Study*, Analytical Chemistry 2018, 90 (20) 12230-12238 doi: 10.1021/acs.analchem.8b03482 (IF: 6.986)

## 51- Extraction of polycyclic aromatic hydrocarbons from polyhydroxyalkanoates before gas chromatography/mass spectrometry analysis

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C. Cavaliere, **C.M. Montone**, A.L. Capriotti, G. La Barbera, S. Piovesana, M. Rotatori, F. Valentino, A. Laganà, *Extraction of polycyclic aromatic hydrocarbons from polyhydroxyalkanoates before gas chromatography/mass spectrometry analysis*, Talanta 2018, 188 671-675 doi: 10.1016/j.talanta.2018.06.038 (IF: 6.057)

## 52- , Simultaneous Preconcentration, Identification, and Quantitation of Selenoamino Acids in Oils by Enantioselective High Performance Liquid Chromatography and Mass Spectrometry

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A.L. Capriotti, **C.M. Montone**, M. Antonelli, C. Cavaliere, G. La Barbera, F. Gasparrini, S. Piovesana, A. Laganà, *Simultaneous Preconcentration, Identification, and Quantitation of Selenoamino Acids in Oils by Enantioselective High Performance Liquid Chromatography and Mass Spectrometry*, Analytical Chemistry 2018, 90 (14) 8326-8330 doi: 10.1021/acs.analchem.8b02089 (IF: 6.986)

## 53- Peptidomic strategy for purification and identification of potential ACE-Inhibitory and antioxidant peptides in Tetrademus obliquus microalgae

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**C. M. Montone**, A. L. Capriotti, C. Cavaliere, G. La Barbera, S. Piovesana, R. Zenezini Chiozzi A. Laganà, *A Peptidomic strategy for purification and identification of potential ACE-Inhibitory and antioxidant peptides in Tetrademus obliquus microalgae*, Analytical and Bioanalytical Chemistry 2018, 410 (15) 3573-3586 doi: 10.1007/s00216-018-0925-x (IF: 4.157)

## 54- Recent trends and analytical challenges in plant bioactive peptides separation, identification and validation

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S. Piovesana, A. L. Capriotti, C. Cavaliere, G. La Barbera, **C. M. Montone**, R. Zenezini Chiozzi A. Laganà, *Recent trends and analytical challenges in plant bioactive peptides separation, identification and validation*, Analytical and Bioanalytical Chemistry 2018, 410 (15) 2018, 3425- 3444 doi: 10.1007/s00216-018-0852-x (IF: 4.157)

## 55- Saliva as a source of new phosphopeptide biomarkers: development of a comprehensive analytical method based on shotgun peptidomics

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G. La Barbera, A. L. Capriotti, C. Cavaliere, F. Ferraris, **C. M. Montone**, R. Zenezini Chiozzi, A. Laganà, *Saliva as a source of new phosphopeptide biomarkers: development of a comprehensive analytical method based on shotgun peptidomics*, Talanta 2018, 183 245-249 doi: 10.1016/j.talanta.2018.02.085 (IF: 6.057)

## 56- Characterization of Antioxidant and Angiotensin-Converting Enzyme Inhibitory Peptides Derived from Cauliflower by-products by Multidimensional Liquid Chromatography and Bioinformatics

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**C. M. Montone**, A. L. Capriotti, C. Cavaliere, G. La Barbera, S. Piovesana, R. Zenezini Chiozzi, A. Laganà. *Characterization of Antioxidant and Angiotensin-Converting Enzyme Inhibitory Peptides Derived from Cauliflower by-products by Multidimensional Liquid Chromatography and Bioinformatics*, Journal of functional foods 2018, 44, 40-47 doi: 10.1016/j.jff.2018.02.022 (IF: 4.451)

## 57- Chromatographic column evaluation for the untargeted profiling of glucosinolates in cauliflower by means of ultra-high performance liquid chromatography coupled to high resolution mass spectrometry

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A. L. Capriotti, C. Cavaliere, G. La Barbera, **C. M. Montone**, S. Piovesana, R. Zenezini Chiozzi A. Laganà, *Chromatographic column evaluation for the untargeted profiling of glucosinolates in cauliflower by means of ultra-high performance liquid chromatography coupled to high resolution mass spectrometry*, *Talanta* 2018, 179 792-802 doi: 10.1016/j.talanta.2017.12.019 (IF: 6.057)

## 58- Label free shotgun proteomics approach to characterize muscle tissue from farmed and wild European sea bass (*Dicentrarchus labrax*)

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R. Zenezini Chiozzi, A. L. Capriotti, C. Cavaliere, G. La Barbera, **C. M. Montone**, S. Piovesana, A. Laganà *Label free shotgun proteomics approach to characterize muscle tissue from farmed and wild European sea bass (*Dicentrarchus labrax*)*, *Food analytical methods* 2018, 11 (1) 292- 301 doi: 10.1007/s12161-017-0999-7 (IF: 3.366)

## 59- Liquid chromatography-high resolution mass spectrometry for the analysis of phytochemicals in vegetal-derived food and beverages

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G. La Barbera, A. L. Capriotti, C. Cavaliere, **C. M. Montone**, S. Piovesana, R. Samperi, R. Zenezini Chiozzi, A. Laganà *Liquid chromatography-high resolution mass spectrometry for the analysis of phytochemicals in vegetal-derived food and beverages*, *Food Research International* 2017, 100 28-52 doi: 10.1016/j.foodres.2017.07.080 (IF: 6.475)

## 60- A rapid magnetic solid phase extraction method followed by liquid chromatography-tandem mass spectrometry analysis for the determination of mycotoxins in cereals

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G. La Barbera, A. L. Capriotti, C. Cavaliere, P. Foglia, **C. M. Montone**, R. Zenezini Chiozzi, A. Laganà *A rapid magnetic solid phase extraction method followed by liquid chromatography- tandem mass spectrometry analysis for the determination of mycotoxins in cereals*, *Toxins* 2017, 9(4), doi: 10.3390/toxins9040147 (IF: 4.546)

## ● COMUNICAZIONI ORALI A CONFERENZE

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### Comunicazioni orali

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[1] *Development of an analytical workflow and nanoHPLC-MS/MS methods for sulfopeptide enrichment and sequence analysis with site localization*, **26th International Symposium on Separation Sciences**, 2022, Ljubljana, Slovenia, 28 giugno-1luglio

[2] *Untargeted characterization of medium- and short-sized antioxidant peptides from soybeans*, **Merck Young Chemists' Symposium (MYCS)** 2021, Rimini, 22-24 novembre 2021

[3] *Production and characterization of medium-sized and short antioxidant peptides from soy flour-simulated gastrointestinal hydrolysates*, **Autumn Meeting for Young Chemists in Biomedical Sciences (AMYC-BIOMED 2021)**, online, 3- 5 novembre 2021

[4] *Untargeted characterization and quantitative analysis of underivatized fatty acids in *Chlorella vulgaris* microalgae*, **XXVII National Congress of the Italian Chemical Society SCI**, online, 14-23 settembre 2021

[5] *Characterization of short and medium-sized antioxidant peptides from Soy Flour-Simulated Gastrointestinal Hydrolysate*, **Giornata Bioanalitica 2021 "Chimica bioanalitica per il benessere: ambiente, salute ed alimentazione"**, online, 13 luglio 2021

[6] *Valorization of extra virgin olive oil: from selenoamino acids to lipids*, **Chimica Bioanalitica per la valorizzazione dell' Olio EVO**, online, 13 luglio 2021

[7] *Development of a new integrated analytical platform for the identification of short peptides in cow milk*. **Giornata Scientifica Bioanalitica, Parma**, 6 dicembre 2019

[8] *Protein Tyrosine Sulfation: Proof-of-Concept Enrichment Methods for a too Longly Neglected Post-Translational Modification*. **Incontri di Scienza delle Separazioni**, Napoli, 28-29 novembre **2019**

[9] *Development of a new analytical strategy for the selective enrichment of phospho-tyrosine peptides by molecularly imprinted polymers*. **XXVIII Congress of the Italian Chemical Society SCI**, Bari, 22-26 settembre **2019**

[10] *Identification and quantitation of seleno-amino acids in wheat bran: a new methodological approach*. **Chimica Bioanalitica per la salute, l'ambiente e la sicurezza alimentare**, Bologna, 21 settembre **2018**

[11] *Development of an analytical strategy for the purification and identification of bioactive peptides from microalgae*. **XXVI National Congress of the Italian Chemical Society SCI**, Paestum, 10-14 settembre **2017**

[12] *Determination of Mycotoxins in Cereals by a Rapid Magnetic Solid Phase Extraction Method followed by Liquid Chromatography-Tandem Mass Spectrometry Analysis*. **Giornate di Chimica Analitica in memoria del Prof. Francesco Dondi organizzate Gruppo Interdivisionale di Scienza delle Separazioni in collaborazione con il Gruppo Divisionale di Bioanalitica**, Ferrara 10-11 luglio **2017**

### Comunicazioni orali su invito

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*Microalgae as feedstock for biofuel: fatty acids characterization as selection criteria*. Meet on Biotechnology and Bioengineering **(BIOTECHMEET2021)**, in Porto, Portugal 16 - 18, Settembre **2021**

## ● INCARICHI ISTITUZIONALI

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**Membro del Direttivo di Chimica Analitica della Società Chimica Italiana, SCI.**

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2022-2024 Rappresentante Giovani Chimica Analitica

**Consigliere nel Direttivo Giovani della Società Chimica Italiana, SCI.**

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2022-2024- Rappresentante Chimica Analitica

**Rappresentante degli Assegnisti nel Consiglio di Dipartimento di Chimica**

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2021-oggi Università "La Sapienza" di Roma

**Rappresentante dei Dottorandi nella Giunta del Dipartimento di Chimica**

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2017-2019 Università "La Sapienza" di Roma

**Rappresentante dei Dottorandi nel Consiglio di Dipartimento di Chimica**

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2017-2019 Università "La Sapienza" di Roma

## ● EDITORIAL BOARDS E GUEST EDITORS

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**Guest Editor**

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2021-oggi **Guest Editor** della rivista Toxins per lo Special Issue "Detection, Control and Contamination of Mycotoxins" (ISSN 2072-6651) **Impact Factor**: 4.546 ([https://www.mdpi.com/journal/toxins/special\\_issues/detection\\_mycotoxins](https://www.mdpi.com/journal/toxins/special_issues/detection_mycotoxins))



## Editorial Board

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2021-oggi **Membro del Board in Advances in Pharmaceutical Sciences**  
(<https://mediterraneanjournals.com/index.php/aps/about/editorialTeam>)

## Reviewer board (Environmental Analysis)

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2021-oggi **Membro del Board di Environmental Analysis**  
sezione di Frontiers in Analytical Science (<https://www.frontiersin.org/journals/analytical-science/sections/environmental-analysis#editorial-board>)

## Assistant Guest Editor

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2020-2021: **Assistant Guest Editor** della rivista *Molecules* per lo Special Issue  
"Advancements in Analytical Techniques for Proteomics" (ISSN 1420-3049) Impact Factor: 4.412  
([https://www.mdpi.com/journal/molecules/special\\_issues/analy\\_proteomics](https://www.mdpi.com/journal/molecules/special_issues/analy_proteomics))

## Reviewer board (Antioxidants)

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2020-oggi Membro dell '**Reviewer board** di Antioxidants.  
Impact Factor: 6.313 ([https://www.mdpi.com/journal/antioxidants/submission\\_reviewers](https://www.mdpi.com/journal/antioxidants/submission_reviewers))

## ● ATTIVITÀ DI REFERAGGIO PER RIVISTE SCIENTIFICHE INTERNAZIONALI

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### Attività di referaggio per riviste scientifiche internazionali

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International Journal of Molecular Sciences (2022)  
Talanta (2021)  
Journal of Mass Spectrometry (2021)  
Antibiotics (MDPI) (2021)  
Journal of Essential Oil Research (2020)  
Journal of Fungi (MDPI) (2020)  
Membranes (MDPI) (2020)  
Plants (MDPI) (2020)  
Processes (MDPI) (2020)  
SN Applied Sciences (2020)  
Nutrients (2020)  
Plant Foods for Human Nutrition (2020)  
Drug Design, Development and Therapy (2020)  
Antioxidants (2020)  
Food Chemistry (2020)  
Foods (2019)  
Journal of Food Science (2019)  
Molecules (2019)  
Journal of Functional Foods (2019)  
International Journal of Experimental Spectroscopic Techniques (2018)  
Chiang Mai Journal of Science (2018)

2020

### ATTIVITA' DI REFEREE PER PROGETTI

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Per la **Czech Science Foundation**. Remuneration of 2500 CZK

## ● AFFILIAZIONE A SOCIETÀ

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2017 - ATTUALE

**Membro della Società Chimica Italiana per la Divisione di Chimica Analitica e il Gruppo Interdivisionale di Scienza delle Separazioni.**

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**Numero di tessera: 21029**

## ● CHAIRMAN A CONGRESSI

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2019

**Convegno Giovani Ricercatori 2019**

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**Convegno Giovani Ricercatori 2019**

Roma, 25-26 giugno 2019, Dipartimento di Chimica, Università degli Studi di Roma "La Sapienza"

18/06/2022 - 23/06/2022

**Convegno HPLC 2022**

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**50th International Symposium and Exposition on High Performance Liquid Phase Separations and Related Techniques, San Diego, California USA, 18-23 giugno 2022**

## ● BREVETTI

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**Metodo per l'estrazione di policosanoli da canapa industriale e relativa miscela**

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Capriotti A. L., Cavaliere C., Cerrato A., Laganà A., Micalizzi G., Mondello L, **Montone C. M.**, Piovesana S. "Metodo per l'estrazione di policosanoli da canapa industriale e relativa miscela" **depositato in Italia**, Provisional n° 102021000020228. (2021) **Brevetto per invenzione**

**Isolamento di nuovi fitocannabinoidi dalla Cannabis Sativa L.**

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Laganà A., Capriotti A. L., **Montone C. M.**, Cannazza G., Linciano P., Citti C., Russo F., Luongo L., Iannotta M., Belardo C., Maione S., Vandelli M. A., Forni F., Gigli G. Isolamento di nuovi fitocannabinoidi dalla Cannabis sativa L.(2020) **depositato negli USA**: Provisional n° US63/050,240\_10.07.2020. **Brevetto per invenzione**

## ● POSTER A CONFERENZE

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**HPLC 2022, 50th International Symposium and Exposition on High Performance Liquid Phase Separations and Related Techniques, San Diego, California USA, 18-23 Giugno 2022**

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**Carmela Maria Montone**, Carmen Bedia, Roma Tauler, Alessandro Sciarra, Anna Laura Capriotti, Untargeted Metabolomics of Prostate Cancer Zwitterionic and Positively Charged Compounds In Urine. HPLC 2022, 50th International Symposium and Exposition on High Performance Liquid Phase Separations and Related Techniques, San Diego, California USA, 18-23 Giugno 2022.

Anna Laura Capriotti, Sara Elsa Aita, Andrea Cerrato, **Carmela Maria Montone**, Aldo Laganà, A New Opening for the Tricky Untargeted Investigation of Natural and Modified Short Peptides, HPLC 2022, 50th International Symposium and Exposition on High Performance Liquid Phase Separations and Related Techniques, San Diego, California USA, 18-23 Giugno 2022.

Andrea Cerrato, Sara Elsa Aita, Benedetta Giannelli Moneta, **Carmela Maria Montone**, Enrico Taglioni, Chiara Cavaliere, Metaproteomic Characterization of Dissolved Organic Matter in Groundwater by a Simple and Innovative Enrichment Approach based on Extra-Wide Pore C18, HPLC 2022, 50th International

Symposium and Exposition on High Performance Liquid Phase Separations and Related Techniques, San Diego, California USA, 18-23 Giugno 2022.

### **Incontri di Scienza delle Separazioni 2019, NAPOLI, 28-29 Novembre 2019**

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Anna Laura Capriotti, **Carmela Maria Montone**, *Metaproteomic Investigation of Bioaerosol from Work Environments*, Incontri di Scienza delle Separazioni 2019, NAPOLI, 28-29 Novembre 2019

### **Giornata Scientifica Bioanalitica 2019, PARMA, 6 Dicembre 2019**

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Anna Laura Capriotti, **Carmela Maria Montone**, *Metaproteomic investigation of bioaerosol from work environments* Giornata Scientifica Bioanalitica 2019, PARMA, 6 Dicembre 2019

Chiara Cavaliere, **Carmela Maria Montone**, Michela Antonelli, Andrea Cerrato, Sara Elsa Aita, Barbara Benedetti, Aldo Laganà, *Characterization of polar lipidome of spirulina microalgae by an optimized liquid chromatography separation and high-resolution mass spectrometry*, Giornata Scientifica Bioanalitica 2019, PARMA, 6 Dicembre 2019

Andrea Cerrato, Sara Elsa Aita, Michela Antonelli, **Carmela Maria Montone**, Susy Piovesana, Aldo Laganà, *Graphitized carbon black enrichment procedure for the detection of phospholipids in olive oil by liquid chromatography-high resolution mass spectrometry* Giornata Scientifica Bioanalitica 2019, PARMA, 6 Dicembre 2019

### **XXVIII Congress of the Italian Chemical Society SCI, BARI, 22-26 Settembre 2019**

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Chiara Cavaliere, Michela Antonelli, Barbara Benedetti, Giorgia La Barbera, **Carmela Maria Montone**, Aldo Laganà, *Microalgae as a source of bioactive peptides: extraction, identification and assessment of their activities* XXVIII Congress of the Italian Chemical Society SCI, BARI, 22-26 Settembre 2019

### **Euroanalysis XX Conference ISTANBUL, 1-5 Settembre 2019**

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**Carmela Maria Montone**, Barbara Benedetti, Anna Laura Capriotti, Andrea Cerrato, Michela Antonelli, Aldo Laganà, *Development of an Analytical Method for the Metaproteomic Investigation of Bioaerosol deposited on quartz Filters in different Environmental Sites*, Euroanalysis XX Conference ISTANBUL, 1-5 Settembre 2019

### **Convegno giovani ricercatori 2019 "C'è futuro nella ricerca!" ROMA, 25-26 Giugno 2019**

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**Carmela Maria Montone**, Anil Incel, Börje Sellergren, Anna Laura Capriotti, Susy Piovesana, Aldo Laganà, *Core shell molecularly imprinted polymers for selective magnetic enrichment of phospho-tyrosine-peptides*, Convegno giovani ricercatori 2019 "C'è futuro nella ricerca!" ROMA, 25-26 Giugno 2019

Andrea Cerrato, Michela Antonelli, Barbara Benedetti, **Carmela Maria Montone**, Sara Elsa Aita Susy Piovesana, Anna Laura Capriotti, Aldo Laganà, *Innovative analytical platform for enrichment and identification of short peptides in urine* Convegno giovani ricercatori 2019 "C'è futuro nella ricerca!" ROMA, 25-26 Giugno 2019

Sara Elsa Aita, Michela Antonelli, Barbara Benedetti, Andrea Cerrato, **Carmela Maria Montone**, Chiara Cavaliere, Aldo Laganà, *Comparison of two enrichment procedures using GCB and WAX cartridges for the detection of phospholipids in olive oil by liquid chromatography-high resolution mass spectrometry* Convegno giovani ricercatori 2019 "C'è futuro nella ricerca!" ROMA, 25-26 Giugno 2019

Michela Antonelli Sara Elsa Aita,, Barbara Benedetti, Andrea Cerrato, **Carmela Maria Montone**, *Polar lipidome microalgae research through optimized chromatographic separation, High-Resolution Mass Spectrometry, and Comprehensive Identification with Lipostar*. Convegno giovani ricercatori 2019 "C'è futuro nella ricerca!" ROMA, 25-26 Giugno 2019



## 48TH International Symposium on High-Performance Liquid Phase Separations and Related Techniques, MILANO, 16-20 Giugno 2019

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**Carmela Maria Montone**, Michela Antonelli, Barbara Benedetti, Andrea Cerrato, Aldo Laganà. *Graphitized carbon black enrichment procedure for the detection of phospholipids in olive oil by liquid chromatography-high resolution mass spectrometry*, 48TH International Symposium on High-Performance Liquid Phase Separations and Related Techniques, MILANO, 16-20 Giugno 2019

Michela Antonelli, Barbara Benedetti, Andrea Cerrato, **Carmela Maria Montone**, Aldo Laganà, Anna Laura Capriotti, *Analytical strategy for the metaproteomic investigation of atmospheric bioaerosol for environmental analysis* 48TH International Symposium on High-Performance Liquid Phase Separations and Related Techniques, MILANO, 16-20 Giugno 2019

Andrea Cerrato, **Carmela Maria Montone**, Chiara Cavaliere, Susy Piovesana, Anna Laura Capriotti, Aldo Laganà, *New insight in urinary peptidomics: innovative strategy for short peptide analysis*, 48TH International Symposium on High-Performance Liquid Phase Separations and Related Techniques, MILANO, 16-20 Giugno 2019

## American Society for Mass Spectrometry ASMS, 2019 Atlanta 2-6 Giugno 2019

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Susy Piovesana; **Carmela Maria Montone**; Chiara Cavaliere; Giorgia La Barbera; Aldo Laganà Anna Laura Capriotti; Carlo Crescenzi. *Enhanced detection of short and hydrophilic peptides fraction using porous graphitic carbon*, American Society for Mass Spectrometry ASMS, 2019 Atlanta 2-6 Giugno 2019

## 2nd International Symposium on Bioactive Peptides, VALENCIA, 22-24 Maggio 2019

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**Carmela Maria Montone**, Anna Laura Capriotti, Giorgia La Barbera, Michela Antonelli, Andrea Cerrato, Aldo Laganà, *Development of a new peptidomic platform for the extraction, separation, and identification of bioactive peptides in microalgae*. 2nd International Symposium on Bioactive Peptides, VALENCIA, 22-24 Maggio 2019

## XXVII National Congress of the Analytical Chemistry Division of the Italian Chemical Society., BOLOGNA, 16-20 Settembre 2018

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**Carmela Maria Montone**, Michela Antonelli, Anna Laura Capriotti, Chiara Cavaliere, Aldo Laganà *Identification of polycyclic aromatic hydrocarbons in polyhydroxyalkanoate biopolymers obtained from urban solid waste by gas chromatography/mass spectrometry analysis* XXVII National Congress of the Analytical Chemistry Division of the Italian Chemical Society., BOLOGNA, 16-20 Settembre 2018 (**best poster**)

Michela Antonelli, Giorgia La Barbera, **Carmela Maria Montone**, Susy Piovesana, Aldo Laganà *Polar lipid profile of spirulina microalga by liquid chromatography coupled to high resolution mass spectrometry* XXVII National Congress of the Analytical Chemistry Division of the Italian Chemical Society, BOLOGNA, 16-20 Settembre 2018

Chiara Cavaliere, Michela Antonelli, Giorgia La Barbera, **Carmela Maria Montone**, Susy Piovesana, Aldo Laganà *Tetrademus obliquus microalgae as a source of bioactive peptides: purification and identification by multidimensional liquid chromatography - mass spectrometry* XXVII National Congress of the Analytical Chemistry Division of the Italian Chemical Society., BOLOGNA, 16-20 Settembre 2018

## 42nd International Symposium on Capillary Chromatography and 15th GCxGC Symposium, RIVA DEL GARDA, 13-18 Maggio 2018

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**Carmela Maria Montone**, Michela Antonelli, Giorgia La Barbera, Susy Piovesana, Roberto Samperi, Aldo Laganà. *A rapid magnetic solid phase extraction method followed by liquid chromatography-tandem mass spectrometry analysis for the determination of mycotoxins in cereals* 42nd International Symposium on Capillary Chromatography and 15th GCxGC Symposium, RIVA DEL GARDA, 13-18 Maggio 2018

Patrizia Foglia, Riccardo Zenezini Chiozzi, Anna Laura Capriotti, Michela Antonelli, **Carmela Maria Montone**, Aldo Laganà *Development of an analytical method for the metaproteomic investigation of air particulate matter deposited on teflon filters for environmental analysis* 42nd International Symposium on Capillary Chromatography and 15th GCxGC Symposium, RIVA DEL GARDA, 13-18 Maggio 2018

Anna Laura Capriotti, Michela Antonelli, Patrizia Foglia, **Carmela Maria Montone**, Roberto Samperi, Aldo Laganà *Development of an extraction method for polycyclic aromatic hydrocarbons in polyhydroxyalkanoate biopolymers before gas chromatography-mass spectrometry analysis* 42nd International Symposium on Capillary Chromatography and 15th GCxGC Symposium, RIVA DEL GARDA, 13-18 Maggio 2018

Chiara Cavaliere, Michela Antonelli, Giorgia La Barbera, **Carmela Maria Montone**, Riccardo Zenezini Chiozzi, Aldo Laganà *Multidimensional liquid chromatography coupled to mass spectrometry for purification and identification of potential ace-inhibitory and antioxidant peptides in tetrademus obliquus microalgae* 42nd International Symposium on Capillary Chromatography and 15th GCxGC Symposium, RIVA DEL GARDA, 13-18 Maggio 2018

Susy Piovesana, Michela Antonelli, Chiara Cavaliere, **Carmela Maria Montone**, Giorgia La Barbera, Aldo Laganà *Characterization of the endogenous phosphopeptides in saliva by metal oxide affinity chromatography and shotgun peptidomics* 42nd International Symposium on Capillary Chromatography and 15th GCxGC Symposium, RIVA DEL GARDA, 13-18 Maggio 2018

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## **XXVI National Congress of the Italian Chemical Society SCI, PAESTUM, 10-14 Settembre 2017**

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Chiara Cavaliere , Francesca Ferraris , Giorgia La Barbera , **Carmela Maria Montone** , Aldo Laganà *UHPLC-HRMS Study of Glucosinolates in Cauliflower Waste Products* XXVI National Congress of the Italian Chemical Society SCI, PAESTUM, 10-14 Settembre 2017

Anna Laura Capriotti , Francesca Ferraris , **Carmela Maria Montone** , Susy Piovesana , Aldo Laganà *Label free shotgun proteomics approach to characterize muscle tissue from farmed and wild european sea bass (Dicentrarchus labrax)* XXVI National Congress of the Italian Chemical Society SCI, PAESTUM, 10-14 Settembre 2017

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## **“Giornate di Chimica Analitica in memoria del Prof. Francesco Dondi” FERRARA (Italy) 11-12 Luglio 2017**

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Chiara Cavaliere, Francesca Ferraris, **Carmela Maria Montone**, Susy Piovesana, Aldo Laganà *Magnetic Solid Phase Extraction Followed by Liquid Chromatography - Tandem Mass Spectrometry for UV Filter Determination in Surface Water*, “Giornate di Chimica Analitica in memoria del Prof. Francesco Dondi” FERRARA (Italy) 11-12 Luglio 2017

## ● **CAPITOLO LIBRO**

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### **Methodologies for extraction and separation of short-chain bioactive peptides**

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A. Cerrato, S. E. Aita, **C. M. Montone**, A. L. Capriotti, S. Piovesana, A. Laganà. Chapter 4: “Methodologies for extraction and separation of short-chain bioactive peptides” in *Biologically Active Peptides*, (2021), 75-86, ISBN: 9780128213896, DOI: 10.1016/B978-0-12-821389-6.00002-9 (non appare su Scopus)

### **Analytical Methodologies for Lipidomics in Hemp Plant”**

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A. Cerrato, A.L. Capriotti, **C.M. Montone\***, S. E. Aita, G. Cannazza, C. Citti, S. Piovesana, A. Laganà. Chapter 17: “Analytical Methodologies for Lipidomics in Hemp Plant”, in *Mass Spectrometry-Based Lipidomics: Methods and Protocols*, (2021), 257-273, DOI: 10.1007/978-1-0716-1410-5\_17

● **ABILITAZIONE SCIENTIFICA NAZIONALE**

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Settore Concorsuale 03/A1 - Professore di II Fascia - Dal 31/01/2022 al 31/01/2031

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● **ORGANIZZAZIONE DI CONGRESSI E CONFERENZE**

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**Membro del Comitato Scientifico del AMYC-BIOMED 2022**

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Autumn Meeting for Young Chemists in Biomedical Sciences, Napoli 17-19 Ottobre 2022

**Membro del Comitato Scientifico del XXIX Congresso della Divisione di Chimica Analitica**

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*La Chimica Analitica per un futuro verde e sostenibile*, XXIX Congresso della Divisione di Chimica Analitica della Società Chimica Italiana (SCI) – 11-15 Settembre 2022- Castello di Milazzo (ME).

**Membro del Comitato organizzatore del Y-RICH 2022 Annual Workshop**

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Elevator pitch e colloqui di lavoro: comunicare la ricerca in modo accattivante ed efficace. 23 Maggio 2022 - h10.30-16.30, Sede Centrale SCI, Viale Liegi 48C, Roma

**Membro del Comitato organizzatore del Y-RICH 2017 Annual Workshop**

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Comunicare e Pubblicare la Chimica ad Alto Impatto, Venerdì 23 Giugno 2017 -h.10:30/ 17:00, Aula A – Dipartimento di Chimica (1°piano -Edificio Cannizzaro) Sapienza –Università di Roma

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*Autorizzo il trattamento dei miei dati personali presenti nel CV ai sensi dell'art. 13 d. lgs. 30 giugno 2003 n. 196 - "Codice in materia di protezione dei dati personali" e dell'art. 13 GDPR 679/16 - "Regolamento europeo sulla protezione dei dati personali".*

La sottoscritta Carmela Maria Montone dichiara di essere consapevole che il presente curriculum vitae sarà pubblicato sul sito istituzionale dell'Ateneo, nella Sezione "Amministrazione trasparente", nelle modalità e per la durata prevista dal d.lgs. n. 33/2013, art. 15.

Data

30/09/2022

f.to

Carmela Maria Montone