

## CURRICULUM VITÆ

4 February 2026

- Claudio Zaccone, Ph.D. -

**Personal details**

Place and date of birth: Valsinni, December 31<sup>st</sup>, 1977  
 Citizenship: Italian  
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**Education and Career**

**2022-present** (July) *Research Affiliated member*, National Institute of Geophysics and Volcanology, Italy  
**2019-present** (October) *Associate Professor*, Department of Biotechnology, University of Verona, Italy  
**2018-2019** (March / September) *Associate Professor*, Department of the Sciences of Agriculture, Food and Environment, University of Foggia, Italy  
**2017** (August) *Guest Scientist*, Department of Soil and Crop Sciences, Colorado State University, Ft Collins, USA  
**2017** (August) *National Habilitation* as Associate Professor in Analytical Chemistry (Aug. 2017 - Aug. 2029)  
**2017** (April) *National Habilitation* as Full Professor in Agricultural Chemistry (Apr. 2017 - Apr. 2029)  
**2016** (July - August) *Guest Scientist*, Institute of Agricultural Sciences, Spanish National Research Council (CSIC), Madrid, Spain  
**2014** (February) *National Habilitation* as Associate Professor in Agricultural Chemistry (Feb. 2014 - Feb. 2026)  
**2014** (February) *National Habilitation* as Associate Professor in Geochemistry (Feb. 2014 - Feb. 2026)  
**2013-2014** (June / May) *Academic Research Associate*, Faculty of Agricultural, Life and Environmental Sciences, Department of Renewable Resources, University of Alberta, Edmonton, Canada (on leave from the University of Foggia)  
**2012** (August) *Guest Scientist*, Faculty of Agricultural, Life and Environmental Sciences, University of Alberta, Edmonton, Canada  
**2010** (July - September) *Guest Scientist*, Institute of Earth Sciences, University of Heidelberg, Germany  
**2008-2018** (December / March) *Academic Researcher*, Department of the Sciences of Agriculture, Food and Environment, University of Foggia, Italy  
**2007** (May) *Ph.D. in Agricultural Chemistry*, University of Bari, Italy. Dissertation title: "Humification processes and trace elements geochemistry in a Swiss ombrotrophic peat bog"  
**2006** (March - April) Research period, Institute of Environmental Geochemistry, University of Heidelberg, Germany. Advisor: Prof. W. Shotyk  
**2005** (April - November) Research period, Institute of Environmental Geochemistry, University of Heidelberg, Germany. Advisor: Prof. W. Shotyk  
**2004** (July) Summer School organized by Italian Environment Pesticides Research Group, "Pesticides and Environment", Alghero (Italy)  
**2003-2006** *Ph.D. student* in Agricultural Chemistry, Department of Biology and Chemistry of Agro-Forestry and Environment, University of Bari, Italy. Supervisor: Prof. T. Miano  
**2003** (October) *Professional certificate of Doctor in Forest Sciences*  
**2003** (April) *Degree in Environmental Sciences and Forestry* with highest grade (110/110) "cum Laude", University of Bari (Italy). Research thesis in "Hydraulic-forest watershed management"

**Academic activity (Teaching and Institutional)**

2025-2026	<p>“Fundamentals of soil sciences”, Dept. of Biotechnology, University of Verona</p> <p>“Sustainable agriculture”, Dept. of Biotechnology, University of Verona</p> <p>“Climate change and soil functions”, Dept. of Biotechnology, University of Verona</p> <p>Member of the <i>Board of Professors</i>, Ph.D. School “Natural and Engineering Sciences”, specialization “Molecular, Industrial and Environmental Biotechnologies” (XLI cycle), University of Verona</p>
2024-2025	<p>“Fundamentals of soil sciences”, Dept. of Biotechnology, University of Verona</p> <p>“Sustainable agriculture”, Dept. of Biotechnology, University of Verona</p> <p>“Climate change and soil functions”, Dept. of Biotechnology, University of Verona</p> <p>“Soil components and processes”, International Centre for Advanced Mediterranean Agronomic Studies of Bari (CIHEAM - IAM Bari)</p> <p>Member of the <i>Board of Professors</i>, Ph.D. School “Natural and Engineering Sciences”, specialization “Molecular, Industrial and Environmental Biotechnologies” (XL cycle), University of Verona</p>
2023-2024	<p>“Fundamentals of soil sciences”, Dept. of Biotechnology, University of Verona</p> <p>“Sustainable agriculture”, Dept. of Biotechnology, University of Verona</p> <p>“Climate change and soil functions”, Dept. of Biotechnology, University of Verona</p> <p>Member of the <i>Board of Professors</i>, Ph.D. School “Natural Sciences and Engineering”, specialization “Biotechnology” (XXXIX cycle), University of Verona</p>
2022-2023	<p>“Fundamentals of soil sciences”, Dept. of Biotechnology, University of Verona</p> <p>“Sustainable agriculture”, Dept. of Biotechnology, University of Verona</p> <p>“Climate change and soil functions”, Dept. of Biotechnology, University of Verona</p> <p>“Soil components and processes”, International Centre for Advanced Mediterranean Agronomic Studies of Bari (CIHEAM - IAM Bari)</p> <p>Member of the <i>Board of Professors</i>, Ph.D. School “Natural Sciences and Engineering”, specialization “Biotechnology” (XXXVIII cycle), University of Verona</p>
2021-2022	<p>“Fundamentals of soil sciences”, Dept. of Biotechnology, University of Verona</p> <p>“Sustainable agriculture”, Dept. of Biotechnology, University of Verona</p> <p>“Climate change and soil functions”, Dept. of Biotechnology, University of Verona</p> <p>“Soil components and processes”, International Centre for Advanced Mediterranean Agronomic Studies of Bari (CIHEAM - IAM Bari)</p> <p>Member of the <i>Board of Professors</i>, Ph.D. School “Natural Sciences and Engineering”, specialization “Biotechnology” (XXXVII cycle), University of Verona</p>
2020-2021	<p>“Fundamentals of soil sciences”, Dept. of Biotechnology, University of Verona</p> <p>“Sustainable agriculture”, Dept. of Biotechnology, University of Verona</p> <p>“Climate change and soil functions”, Dept. of Biotechnology, University of Verona</p> <p>“Soil components and processes”, International Centre for Advanced Mediterranean Agronomic Studies of Bari (CIHEAM - IAM Bari)</p> <p>Member of the <i>Board of Professors</i>, Ph.D. School “Natural Sciences and Engineering”, specialization “Biotechnology” (XXXVI cycle), University of Verona</p>
2019-2020	<p>“Sustainable agriculture”, Dept. of Biotechnology, University of Verona</p> <p>“The soil: biotic and abiotic components”, International Centre for Advanced Mediterranean Agronomic Studies of Bari (CIHEAM - IAM Bari)</p> <p>Member of the <i>Board of Professors</i>, Ph.D. School “Soil and Food Sciences”, specialization “Agricultural Chemistry” (XXXV cycle), University of Bari</p>
2018-2019	<p>“Soil Chemistry”, Dept. of the Sciences of Agriculture, Food and Environment, University of Foggia</p> <p>“Soil quality and biomass management”, Dept. of the Sciences of Agriculture, Food and Environment, University of Foggia</p> <p>“Nutraceutics and Functional Foods”, Dept. of the Sciences of Agriculture, Food and Environment, University of Foggia</p> <p>“The soil: biotic and abiotic components”, International Centre for Advanced Mediterranean Agronomic Studies of Bari (CIHEAM - IAM Bari)</p> <p>Member of the <i>Board of Professors</i>, Ph.D. School “Soil and Food Sciences”, specialization “Agricultural Chemistry” (XXXIV cycle), University of Bari</p>
2017-2018	<p>“Soil Chemistry”, Dept. of the Sciences of Agriculture, Food and Environment, University of Foggia</p> <p>“Soil quality and biomass management”, Dept. of the Sciences of Agriculture, Food and Environment, University of Foggia</p>

“*The soil: biotic and abiotic components*”, International Centre for Advanced Mediterranean Agronomic Studies of Bari (CIHEAM - IAM Bari)  
Member of the *Board of Professors*, Ph.D. School “Soil and Food Sciences”, specialization “Agricultural Chemistry” (XXXIII cycle), University of Bari

2016-2017  
“*Soil Chemistry*”, Dept. of the Sciences of Agriculture, Food and Environment, University of Foggia  
“*Soil quality and biomass management*”, Dept. of the Sciences of Agriculture, Food and Environment, University of Foggia  
“*The soil: biotic and abiotic components*”, International Centre for Advanced Mediterranean Agronomic Studies of Bari (CIHEAM - IAM Bari)  
Member of the *Board of Professors*, Ph.D. School “Soil and Food Sciences”, specialization “Agricultural Chemistry” (XXXII cycle), University of Bari

2015-2016  
“*Soil Chemistry*”, Dept. of the Sciences of Agriculture, Food and Environment, University of Foggia  
“*Soil quality and biomass management*”, Dept. of the Sciences of Agriculture, Food and Environment, University of Foggia  
“*The soil: biotic and abiotic components*”, International Centre for Advanced Mediterranean Agronomic Studies of Bari (CIHEAM - IAM Bari)  
Member of the *Board of Professors*, Ph.D. School “Soil and Food Sciences”, specialization “Agricultural Chemistry” (XXXI cycle), University of Bari

2014-2015  
“*Soil Chemistry*”, Dept. of the Sciences of Agriculture, Food and Environment, University of Foggia  
“*Soil quality and biomass management*”, Dept. of the Sciences of Agriculture, Food and Environment, University of Foggia  
“*The soil: biotic and abiotic components*”, International Centre for Advanced Mediterranean Agronomic Studies of Bari (CIHEAM - IAM Bari)  
Member of the *Board of Professors*, Ph.D. School “Soil and Food Sciences”, specialization “Agricultural Chemistry” (XXX cycle), University of Bari

2013-2014  
“*Soil Chemistry*”, Dept. of the Sciences of Agriculture, Food and Environment, University of Foggia  
“*Soil quality and biomass management*”, Dept. of the Sciences of Agriculture, Food and Environment, University of Foggia  
Member of the *Board of Professors*, Ph.D. School “Soil and Food Sciences”, specialization “Agricultural Chemistry” (XXIX cycle), University of Bari

2012-2013  
“*Soil Chemistry*”, Dept. of the Sciences of Agriculture, Food and Environment, University of Foggia  
“*Soil and Environment*”, Dept. of the Sciences of Agriculture, Food and Environment, University of Foggia  
“*Soil quality and biomass management*”, Dept. of the Sciences of Agriculture, Food and Environment, University of Foggia  
“*The soil: biotic and abiotic components*”, International Centre for Advanced Mediterranean Agronomic Studies of Bari (CIHEAM - IAM Bari)  
Member of the *Board of Professors*, Ph.D. School “Soil and Food Sciences”, specialization “Agricultural Chemistry” (XXVIII cycle), University of Bari

2011-2012  
“*Soil Chemistry*”, Faculty of Agriculture, University of Foggia  
“*Soil and Environment*”, Faculty of Agriculture, University of Foggia  
“*Soil quality and biomass management*”, Faculty of Agriculture, University of Foggia  
Member of the *Board of Professors*, Ph.D. School “Soil and Food Sciences”, specialization “Agricultural Chemistry” (XXVII cycle), University of Bari

2010-2011  
“*Soil Chemistry*”, Faculty of Agriculture, University of Foggia  
“*Soil and Environment*”, Faculty of Agriculture, University of Foggia  
“*Agricultural Chemistry*”, Faculty of Agriculture, University of Molise  
Member of the *Board of Professors*, Ph.D. School “Environment and Landscape Cultures”, specialization “Rural Land and Sustainable Agro-systems” (XXVI cycle), University of Foggia  
Member of the *Board of Professors*, Ph.D. School “Soil and Food Sciences”, specialization “Agricultural Chemistry” (XXVI cycle), University of Bari

2009-2010  
“*Soil Chemistry*”, Faculty of Agriculture, University of Foggia  
“*Soil and Environment*”, Faculty of Agriculture, University of Foggia  
Member of the *Board of Professors*, Ph.D. course “Food Quality and Human Nutrition” (XXV cycle), University of Foggia

Member of the *Board of Professors*, Ph.D. course “Agricultural Chemistry” (XXV cycle), University of Bari

2008-2009      “*Soil Chemistry*”, Faculty of Agriculture, University of Foggia

Tutor/Advisor (to date): 9 BSc students, 15 MSc students (1 as International Advisor), 4 scholarship fellow, 4 PhD students, and 6 post-doc researchers.

Member of the *Scientific Commission* of the Dept. of Biotechnology, University of Verona (2024/2025-present)

Member of the *Giunta* of the Dept. of Biotechnology, University of Verona (2021/22-2023/2024)

Vice President of the *School of Sciences and Engineering*, University of Verona (2020/21-2021/22)

Member of the Scientific Commission of the Department of the Sciences of Agriculture, Food and Environment, University of Foggia (2016-2019)

*Elected Member and Secretary* of the Scientific Commission, University of Foggia (2012-2016)

Member of the Teaching Commission of the programme in Agricultural Science and Technology (B.Sc. and M.Sc.), University of Foggia (2009-2019)

## **Scientific activity**

Main research fields: Soil Chemistry, Environmental Chemistry, Biogeochemistry.

Main research interests: *i*) mechanisms of carbon sequestration in soils and sediments, *ii*) evolution of organic matter in soils and sediments in relation to climate changes, *iii*) peatlands as 'natural archives' of environmental changes and anthropic impact during centuries, and *iv*) sustainable utilization of waste biomass in agriculture.

- Peer-reviewed articles (WoS-JCR) with Impact Factor	107
- Book Chapters	20
- Contributions in Conference Proceedings and in Journals without Impact Factor	> 230
- Seminars and invited lectures	> 75
- Scientific/Organizing Committees	> 30
- Convener/Chairperson during scientific conferences and congresses	> 65

Bibliometrics:

*H-index*: Scopus, 35; WoS, 34; g-Scholar, 39

*Citations*: Scopus, 3695; WoS, 3308; g-Scholar, 4725

<https://www.scopus.com/authid/detail.uri?authorId=22433862000>

<https://www.webofscience.com/wos/author/record/672556>

<http://orcid.org/0000-0003-4391-354X>

<https://scholar.google.it/citations?user=7XKHK0AAAAJ&hl>

[https://www.researchgate.net/profile/Claudio\\_Zaccone](https://www.researchgate.net/profile/Claudio_Zaccone)

<https://it.linkedin.com/in/claudio-zaccone-univr>

## **Synergistic activities and Services**

### *i) Scientific Society and Academia memberships*

International Humic Substances Society (IHSS, since 2005), European Geosciences Union (EGU, since 2007), International Union of Soil Sciences (IUSS, since 2006), Italian Society of Soil Science (SISS, since 2006), Italian Society of Agricultural Chemistry (SICA, since 2006), Accademia dei Georgofili (since 2022).

### *ii) Appointments*

*President*, Italian Society of Soil Science (SISS) (January 2025-to date; elected)

*Technical Scientific Committee member*, Re Soil Foundation (October 2024-to date)

*Vice President / President Elect*, Italian Society of Soil Science (SISS) (January 2023-December 2024; elected)

*Accademico Aggregato*, Accademia dei Georgofili (December 2022-to date)

*Chair*, Division 4 (The Role of Soils in Sustaining Society and the Environment), International Union of Soil Sciences (IUSS) (August 2022-present; elected)

*Board of Directors member*, International Humic Substances Society (IHSS) (September 2020-August 2024; September 2024-to date; elected)

*Board of Directors member*, Italian Society of Agricultural Chemistry (SICA) (January 2020-December 2021; January 2022-December 2023; elected)

*President*, Soil System Sciences (SSS) division, European Geosciences Union (EGU) (April 2019-April 2021; May 2021-April 2023; elected)

*Programme Group Chair*, Soil System Sciences (SSS) division, European Geosciences Union (EGU) (January 2019-April 2023)

*Board of Directors member*, Italian Society of Soil Science (SISS) (January 2019-December 2020; January 2021-December 2022; elected)

*IT Administrator*, International Humic Substances Society (IHSS) (September 2018-to date)

*Vice Chair*, Commission 4.1. (Soils and the Environment), Division 4, International Union of Soil Sciences (IUSS) (March 2018-August 2022; elected)

*Secretary-Treasurer*, Italian Society of Agricultural Chemistry (SICA) (January 2018-January 2020)

*Member* of the Italian National Focal Point, Soil Global Partnership - Pillar 5 “Harmonization of methods, measurements and indicators for the sustainable management and protection of soil resources” (March 2016-present)

*Member*, Division IV (Environmental and Social Role of Soil), Italian Society of Soil Science (SISS) (January 2015-December 2018; elected)

*Treasurer*, Italian Society of Soil Science (SISS) (January 2015-December 2016; January 2017-December 2018; elected)

*Science Officer*, Soil System Sciences (SSS) division, European Geosciences Union (EGU) (May 2014-April 2021)

*Expert* nominated by the Italian Ministry of Agricultural, Food and Forestry Policies (MIPAAF) to draw up the Strategic Plan for the Innovation and Research in the agriculture, food and forestry field (2014-2020) – Sector II “Climatic change, biodiversity, soil functionality and other ecological and social functions” (October 2013) (ISBN: 9788899595463)

*Chair*, Soil Chemistry Sub-division, Soil System Sciences (SSS) division, European Geosciences Union (EGU) (May 2012-May 2014)

*Member*, Commission II (Soil Chemistry) and Commission VIII (Soil and Environment), Italian Society of Soil Science (SISS) (2012-2014; elected)

*Auditor*, Italian Society of Soil Science (SISS) (2012-2014; elected)

*Web Officer*, International Humic Substances Society (IHSS) (July 2011-September 2018)

*Outreach Officer*, Soil System Sciences (SSS) division, European Geosciences Union (EGU) (April 2011-April 2012)

iii) Editorial activity

Associate Editor of *Critical Reviews in Environmental Science and Technology* (Taylor & Francis), a WoS-JCR journal (July 2025-to date)

Member of the Editorial Board of *Pedosphere* (Elsevier), a WoS-JCR journal (July 2024-to date)

Member of the Editorial Board of *Soil & Environmental Health* (Elsevier), a WoS-JCR journal (December 2023-to date)

Member of the Editorial Board of *Critical Reviews in Environmental Science and Technology* (Taylor & Francis), a WoS-JCR journal (December 2023-June 2025)

Member of the Editorial Board of *Soil Systems* (MDPI), a WoS-JCR journal (May 2021-to date)

Member of the Editorial Board of *Sustainability* (MDPI), a WoS-JCR journal (September 2019-February 2022)

Member of the Editorial Board of *Frontiers in Earth Science* (Frontiers) and *Frontiers in Environmental Science* (Frontiers), WoS-JCR journals (June 2018-April 2024)

Member of the Editorial Board of *Journal of Soils and Sediments* (Springer), a WoS-JCR journal (January 2017-to date)

Member of the Editorial Board of *Helijon* (Elsevier), a WoS-JCR journal (March 2015-July 2019)

Member of the Editorial Board of *Cogent Food & Agriculture* (Taylor & Francis), a WoS-JCR journal (April 2014-to date)

Member of the Editorial Board of *Soil* (Copernicus Publications), a WoS-JCR journal (May 2013-to date)

Member of the Editorial Board of *Geoderma* (Elsevier), a WoS-JCR journal (May 2013-August 2021)

Member of the Editorial Board of *Journal of Chemistry* (Wiley), a WoS-JCR journal (March 2012-to date)

*Guest Editor* for the following (8) WoS -JCR journals: *Environmental Research* (“IHSS2024 - Natural Organic Matter and Sustainable Development Goals”); *Soil Systems*, MDPI (“Selected Soil-Related Papers from the First Joint Meeting on Soil and Plant System Sciences - SPSS 2019”); *Plants*, MDPI (“Selected Plant-Related Papers from the First Joint Meeting on Soil and Plant System Sciences - SPSS 2019”); *Journal of Soils and Sediments*, Springer (“Natural Organic Matter: chemistry, function and fate in the environment”; Volume 18, April 2018); *Catena*, Elsevier (“Man versus Nature:

natural and anthropogenic footprints recorded in the soil archives”; Volume 132, September 2015); *European Journal of Soil Science*, Wiley-Blackwell (“Soils and paleosols as archives of natural and anthropogenic environmental changes”; Volume 65, Issue 4, July 2014); *Quaternary International*, Elsevier (“Soils as a Record of the Past”; Volume 306, September 2013); *Biology and Fertility of Soils*, Springer (“Mechanisms of C stabilization and sequestration in soils”; Volume 49, Issue 5, July 2013)

**iv) Peer-review activity**

*Expert Evaluator*, Marie Skłodowska-Curie Postdoctoral Fellowships call 2025 (Horizon-MSCA-2025-PF).

*Panel Member* in the Scientific Assessment of finalized ERC Projects (PE10) (SAP2022).

*Evaluator* for the ANVUR-VQR (Research Quality Evaluation) 2011-2014, 2015-2019 and 2020-2024.

*Research Project Evaluator* for the University of Milano (Italy; 2011), the Free University of Bozen-Bolzano (Italy; 2013), the Emilia-Romagna Region (Italy; 2016, 2017), the Swiss National Science Foundation (2014, 2021), the Croatian Science Foundation (2015), the Cyprus Research Promotion Foundation (2017), the German Research Foundation (2017), the Dutch Research Council (2019), the Polish National Science Centre (2019, 2020), the Swedish Research Council for Sustainable Development (2019-2023), the Academy of Finland (2022-2023) and the Research Council of Finland (2023-2024-2025).

Referee for >90 international peer-reviewed journals (WoS-JCR), including: *Applied Geochemistry* (Elsevier), *Applied Soil Ecology* (Elsevier), *Archives of Agronomy and Soil Science* (Taylor & Francis), *Biology and Fertility of Soils* (Springer), *Catena* (Elsevier), *Chemical Geology* (Elsevier), *Chemosphere* (Elsevier), *Communications Earth & Environment* (Nature Publishing Group), *Communications in Soil Science and Plant Analysis* (Taylor & Francis), *Environmental Chemistry* (CSIRO), *Environmental Pollution* (Elsevier), *Environmental Science and Pollution Research* (Springer), *Environmental Science & Technology* (ACS), *Environmental Science: Processes & Impacts* (RCS), *European Journal of Soil Science* (Wiley), *Geoderma* (Elsevier), *Global and Planetary Change* (Elsevier), *Global Change Biology* (Wiley), *International Journal of Recycling of Organic Waste in Agriculture* (Springer), *Journal of Environmental Management* (Elsevier), *Journal of Environmental Monitoring* (RSC), *Journal of Environmental Quality* (Amer. Soc. Agronomy), *Journal of Plant Nutrition and Soil Science* (Wiley), *Journal of Soils and Sediments* (Springer), *Land Degradation & Development* (Wiley), *Organic Geochemistry* (Elsevier), *Nature Food* (Nature Publishing Group), *Palaeogeography, Palaeoclimatology, Palaeoecology* (Elsevier), *Science Advances* (AAAS), *Science of the Total Environment* (Elsevier), *Scientific Reports* (Nature Publishing Group), *Soil Ecology Letters* (Springer), *Soil & Tillage Research* (Elsevier), *Soil Science* (Lippincott Williams & Wilkins), *The Holocene* (SAGE), *Water, Air, & Soil Pollution* (Springer).

**v) Scientific and Organizing Committees**

1. Member of the *Scientific Committee* of the 23rd World Congress of Soil Science “Soil and the Shared Future for Humanity”, June 7-12, 2026, Nanjing, China
2. Member of the *Scientific Committee* of the 44° National Congress of the Italian Society of Soil Science “La Ricerca sul Suolo per Supportare l’Implementazione delle Politiche”, December 11-12, 2025, Napoli, Italy
3. Member of the *Scientific Committee* of the VII International Congress EUROSOL 2025, September 08-12, 2025, Seville, Spain
4. Member of the *Scientific Committee* of the 15th National Conference on Biodiversity/2nd International Conference on Mediterranean Biodiversity, June 3-6, 2025, Perugia, Italy
5. Member of the *Organizing Committee* of the International Congress GreenWINE, May 19-20, 2025, Verona, Italy
6. Member of the *Scientific Committee* of the “Giornata Mondiale del Suolo: dall’evidenza scientifica ad una diversa consapevolezza”, December 5, 2024, Roma, Italy
7. Member of the *Scientific and Organizing Committee* of the 22<sup>nd</sup> Meeting of the International Humic Substances Society “The role of NOM and HS in achieving Sustainable Development Goals”, August 25-30, 2024, Rimini, Italy
8. Member of the *Scientific and Organizing Committee* of the Centennial Celebration and Congress of the International Union of Soil Sciences (1924-2024) “100 years of global soil science: achievements and future challenges”, May 19-21, 2024, Firenze, Italy
9. Member of the *Scientific Committee* of the III Joint Meeting Suolo, Pianta, Ambiente (SPA 2023) “Sinergie nel sistema suolo-pianta per la tutela dell’ambiente e la sicurezza alimentare”, September 12-15, 2023, Palermo, Italy
10. Member of the *International Scientific Committee* of the 21<sup>st</sup> Meeting of the International Humic Substances Society “Natural organic matter and humic substances for sustainable development”, August 6-11, 2023, Santiago, Chile
11. Member of the *Scientific Committee* of the 43° National Congress of the Italian Society of Soil Science “Il suolo nella transizione ecologica”, October 5-7, 2022, Roma, Italy
12. Member of the *Scientific and Organizing Committee* of the Winter School “Circular Economy for the Sustainable Bio-based Products: from waste to soil”, November 15-16, 2021, online
13. Member of the *Scientific and Organizing Committee* of the First Joint Meeting on Soil and Plant System Sciences (SPSS 2019) “Natural and Human-induced Impacts on the Critical Zone and Food Production”, September 23-26, 2019, Bari, Italy

14. Member of the *International Scientific Committee* of the 8th International Symposium on Interactions of Soil Minerals with Organic Components and Microorganisms (ISMOM) “Understanding Soil Interfacial Reactions for Sustainable Soil Management and Climatic Change Mitigation”, June 23-28, 2019, Seville, Spain
15. Member of the *Scientific Committee* of the XI School of Soil Biodiversity, June 4-7, 2019, Portici, Italy
16. Member of the *International Scientific Committee* of the 19<sup>th</sup> Meeting of the International Humic Substances Society “Humic Substances and their contribution to the climate change mitigation”, September 16-21, 2018, Albena Resort, Varna Region, Bulgaria
17. Member of the *Scientific Committee* of the XXXVI National Congress of the Italian Society of Agricultural Chemistry “Il ruolo della Chimica Agraria per la gestione sostenibile delle risorse agrarie e forestali”, September 24-26, 2018, Reggio Calabria, Italy
18. Member of the *Scientific Committee* of the 1<sup>o</sup> National joint meeting of the Italian Society of Soil Science – Italian Society of Pedology “Il ruolo della Scienza del suolo per gli obiettivi dello sviluppo sostenibile”, September 10-13, 2018, Palermo, Italy
19. Member of the *Scientific Committee* of the X School of Soil Biodiversity, May 22-24, 2018, Giussago, Italy
20. Member of the *Scientific Committee* of the 42<sup>o</sup> National Congress of the Italian Society of Soil Science “Il suolo al servizio degli ecosistemi”, December 4-7, 2017, Firenze, Italy
21. Member of the *Scientific Committee* of the IX School of Soil Biodiversity, July 6-7, 2017, Palermo, Italy
22. Member of the *Scientific Committee* of the 41<sup>o</sup> National Congress of the Italian Society of Soil Science “Soil: a world to discover”, December 5-7, 2016, Ancona, Italy
23. Member of the *Scientific Committee* of the XL National Congress of the Italian Society of Soil Science, December 1-3, 2015, Roma, Italy
24. Member of the *Scientific Committee* of the International workshop “Plant-soil-water interfaces in hydromorphic subaqueous ecosystems”, 23-24 June, 2015, Imola, Italy
25. Member of the *Scientific and Organizing Committee* of the International Conference “ELS 2014 - the Earth Living Skin: Soil, Life and Climate Changes”, 22-25 September, 2014, Bari, Italy
26. Member of the *Scientific and Organizing Committee* of the 17<sup>th</sup> Meeting of the International Humic Substances Society “Natural Organic Matter: Structure, Dynamics, Innovative applications”, September 1-5, 2014, Ioannina, Greece
27. Member of the *National Organizing Committee* of the International Conference “Biochars, Composts, and Digestates. Production, Characterization, Regulation, Marketing, Uses and Environmental Impact (BCD 2013)”, October 17-20, 2013, Bari, Italy
28. Member of the *Scientific and Organizing Committee* of the 29<sup>th</sup> International Conference of the Society for Environmental Geochemistry and Health, July 8-12, 2013, Toulouse, France
29. Member of the *Scientific Committee* of the National Congress of the Italian Society of Soil Science, June 25-28, 2013, Viterbo, Italy
30. Member of the *Scientific and Organizing Committee* of the 16<sup>th</sup> Meeting of the International Humic Substances Society “Functions of Natural Organic Matter in Changing Environment”, September 9-14, 2012, Hangzhou, China
31. Member of the *National Organizing Committee* of the 4<sup>th</sup> International Congress EUROSOL 2012, July 02-06, 2012, Bari, Italy
32. Member of the *Scientific and Organizing Committee* of the XXIX National Congress of the Italian Society of Agricultural Chemistry, September 21-23, 2011, Foggia, Italy
33. Member of the *National Scientific and Organizing Committee* of the III National Congress on “Soil Quality, Food and Health”, May 20-22, 2010, Naples, Italy
34. Member of the *National Organizing Committee* of the 15<sup>th</sup> International Symposium on “Environmental Pollution and its Impact on Life in the Mediterranean Region”, October 7-11, 2009, Bari, Italy

vi) Session organization and chairing

1. *Co-convener* of SSS4.6 “Dynamics of new and traditional amendments and other sustainable practices in the soil-plant-microorganism system”, European Geosciences Union General Assembly (EGU), 27 April - 2 May, 2025, Vienna, Austria
2. *Co-convener* and *Chairperson* of Session 133822 “Peatlands in a changing world”, Centennial Celebration and Congress of the International Union of Soil Sciences, May 19-21, 2024, Florence, Italy
3. *Co-convener* of Session 133570 “Digging deeper: advances in subsoil science”, Centennial Celebration and Congress of the International Union of Soil Sciences, May 19-21, 2024, Florence, Italy
4. *Co-convener* of Session 133539 “Development of efficient soil education scheme for tomorrow”, Centennial Celebration and Congress of the International Union of Soil Sciences, May 19-21, 2024, Florence, Italy
5. *Co-convener* and *Chairperson* of Session 131303 “Soil organic matter transformation, stabilization and storage”, Centennial Celebration and Congress of the International Union of Soil Sciences, May 19-21, 2024, Florence, Italy

6. *Co-convener and Chairperson* of Session 131145 “Dynamics and functions of soil organic matter under new and traditional amendments”, Centennial Celebration and Congress of the International Union of Soil Sciences, May 19-21, 2024, Florence, Italy
7. *Co-convener and Chairperson* of Session SSS5.3 “Biogeochemical and climate change-related processes controlling carbon and element cycling in the soil-plant system”, European Geosciences Union General Assembly (EGU), 14-19 April, 2024, Vienna, Austria
8. *Co-convener* of Session SSS4.2 “Soil health under global change and human activities”, European Geosciences Union General Assembly (EGU), 14-19 April, 2024, Vienna, Austria
9. *Convener and Chairperson* of the “Join Session DCE EuChemS – DCE IUPAC: Humic substances (HS) and natural organic matter (NOM) dynamics and environmental impact”, 18th International Conference on Chemistry and the Environment (ICCE2023), June 11-15, 2023, Venice, Italy
10. *Convener and Chairperson* of Session SSS5.2 “Dynamics and functions of SOM pools under new and traditional soil amendments, with a special focus on pyrolytic carbon”, European Geosciences Union General Assembly (EGU), 24-28 April, 2023, Vienna, Austria
11. *Co-convener and Chairperson* of Session SSS5.3/ BG3/CL3 “Mechanisms of soil organic matter transformation, stabilization and storage”, European Geosciences Union General Assembly (EGU), 24-28 April, 2023, Vienna, Austria
12. *Co-convener and Chairperson* of Interdivisional Session 8 “Sustainable land use”, 22nd World Congress of Soil Science, 31 July – 5 August, 2022, Glasgow, Scotland
13. *Convener and Chairperson* of Session SSS5.2/BG3 “Dynamics and functions of SOM pools under new and traditional soil amendments”, European Geosciences Union General Assembly (EGU), 23-27 May, 2022, Vienna, Austria
14. *Co-convener and Chairperson* of Session SSS5.3/BG3/CL2 “Mechanisms of soil organic matter transformation, stabilization and storage”, European Geosciences Union General Assembly (EGU), 23-27 May, 2022, Vienna, Austria
15. *Co-convener and Chairperson* of Session BG3.15 “Peatlands under pressure”, European Geosciences Union General Assembly (EGU), 23-27 May, 2022, Vienna, Austria
16. *Co-convener* of Union Symposium US2 “The role of the geosciences in preserving and restoring biodiversity”, European Geosciences Union General Assembly (EGU), 23-27 May, 2022, Vienna, Austria
17. *Co-convener and Chairperson* of Session SSS3.5/GM12 “Soils as records of past environmental conditions, climate change and anthropogenic impact”, European Geosciences Union General Assembly (vEGU), 19-30 April, 2021
18. *Co-convener and Chairperson* of Session SSS5.1/BG3/CL3.1 “Mechanisms of soil organic matter stabilization and carbon sequestration”, European Geosciences Union General Assembly (vEGU), 19-30 April, 2021
19. *Co-convener* of Union Symposium US1 “Integrating geoscience into the European Green Deal”, European Geosciences Union General Assembly (vEGU), 19-30 April, 2021
20. *Convener* of Session SSS5.7/BG3 “Dynamics and functions of SOM pools under new and traditional soil amendments”, European Geosciences Union General Assembly (vEGU), 19-30 April, 2021
21. *Convener and Chairperson* of Session SSS5.5 “Biomass and waste valorization within a circular economy: from urban mining to soil amendments”, European Geosciences Union General Assembly (Sharing Geoscience Online), 4-8 May, 2020
22. *Co-convener and Chairperson* of Session SSS5.2/BG3 “Mechanisms of soil organic matter stabilization and carbon sequestration”, European Geosciences Union General Assembly (Sharing Geoscience Online), 4-8 May, 2020
23. *Chairperson* of Session 4(I) “Dynamics of pollutants at soil interfaces – What is new and how can environmental biotechnology be beneficial for soil restoration and bioremediation?”, 8th International Symposium on Interactions of Soil Minerals with Organic Components and Microorganisms (ISMOM) “Understanding Soil Interfacial Reactions for Sustainable Soil Management and Climatic Change Mitigation”, June 23-28, 2019, Seville, Spain
24. *Co-convener and Chairperson* of Session SSS5.9/ERE2.10 “Waste management and soil: impacts, benefits and risks of biochar, wood ash and other amendments”, European Geosciences Union General Assembly, 7-12 April, 2019, Vienna, Austria
25. *Co-convener and Chairperson* of Session SSS5.14 “Soil minerals and the cycling of elements with special focus on carbon”, European Geosciences Union General Assembly, 7-12 April, 2019, Vienna, Austria
26. *Convener* of Session SSS5.6 “General Soil Chemistry: from basic research to environmental aspects to food security”, European Geosciences Union General Assembly, 8-13 April, 2018, Vienna, Austria
27. *Co-convener* of Session SSS5.13 “Biogeochemistry and hydrology of hydromorphic soils”, European Geosciences Union General Assembly, 8-13 April, 2018, Vienna, Austria

28. *Co-convenor* of Session SSS5.2 "New and traditional soil amendments: impacts, benefits, and risks", European Geosciences Union General Assembly, 8-13 April, 2018, Vienna, Austria
29. *Co-convenor and Chairperson* of Session SSS5.1/CL3.06 "Mechanisms of soil organic matter stabilization and C sequestration", European Geosciences Union General Assembly, 8-13 April, 2018, Vienna, Austria
30. *Convener and Chairperson* of Session SSS5.17 "General Soil Chemistry: from basic research to environmental aspects to food security", European Geosciences Union General Assembly, 23-28 April, 2017, Vienna, Austria
31. *Co-convenor and Chairperson* of Session SSS5.12 "Chemistry of exogenous and native soil organic matter: accrual, mineralization, stabilization and management", European Geosciences Union General Assembly, 23-28 April, 2017, Vienna, Austria
32. *Co-convenor* of Session SSS6.5/BG9.55 "Natural and pyrogenic organic carbon and nitrogen in soils: Function, fate, analytical challenges and how this relates to the concept of humic substances", European Geosciences Union General Assembly, 23-28 April, 2017, Vienna, Austria
33. *Convener and Chairperson* of Session SSS5.6 "Peatlands and wetlands in the tropics and beyond: biogeochemistry, ecology, and carbon cycle", European Geosciences Union General Assembly, 23-28 April, 2017, Vienna, Austria
34. *Co-convenor* of Session SSS5.4 "Future challenges in biochar research", European Geosciences Union General Assembly, 23-28 April, 2017, Vienna, Austria
35. *Chairperson* of the Session "Environment", XXXIV National Conference of the Italian Society of Agricultural Chemistry, 5-7 October, 2016, Perugia, Italy
36. *Chairperson* of Session 3 "Dynamics of NOM in diverse environments", 18<sup>th</sup> International Conference of the International Humic Substance Society, 11-16 September, 2016, Kanazawa, Japan
37. *Co-convenor and Chairperson* of Session SSS9.12 "Element biogeochemistry and ecological functions of paddy, peatland and wetland soils", European Geosciences Union General Assembly, 17-22 April, 2016, Vienna, Austria
38. *Co-convenor and Chairperson* of Session SSS6.2 "Natural and pyrogenic organic carbon and nitrogen in soils: Function, fate, analytical challenges and how this relates to the concept of humic substances", European Geosciences Union General Assembly, 17-22 April, 2016, Vienna, Austria
39. *Convener and Chairperson* of Session SSS5.10 "New and traditional soil amendments: impacts, benefits, and risks", European Geosciences Union General Assembly, 17-22 April, 2016, Vienna, Austria
40. *Co-convenor and Chairperson* of Session SSS5.6/CL2.18 "Mechanisms and models of soil organic matter stabilization, C and N sequestration and losses, including greenhouse gas emissions", European Geosciences Union General Assembly, 17-22 April, 2016, Vienna, Austria
41. *Convener and Chairperson* of Session SSS6.5 "Biogeochemical cycles in hydromorphic and agro-forestal soils", European Geosciences Union General Assembly, 12-17 April, 2015, Vienna, Austria
42. *Convener and Chairperson* of Session SSS5.5 "Soil organic matter amendments: impacts, benefits, and risks", European Geosciences Union General Assembly, 12-17 April, 2015, Vienna, Austria
43. *Co-convenor and Chairperson* of Session SSS5.2 "Mechanisms and models of soil organic matter stabilization, mineralization and greenhouse gas emissions", European Geosciences Union General Assembly, 12-17 April, 2015, Vienna, Austria
44. *Convener and Chairperson* of Session ELS04 "Ecology and biogeochemistry of organic-carbon-rich soils in a changing world", ELS 2014 "The Earth Living Skin: Soil, Life and Climate Changes", 22-25 September, 2014, Bari, Italy
45. *Co-convenor and Chairperson* of Session ELS02 "Plant and soil interaction in a changing climate", ELS 2014 "The Earth Living Skin: Soil, Life and Climate Changes", 22-25 September, 2014, Bari, Italy
46. *Co-convenor* of Session SSS10.11/SC21 "Short course on forest fire effects on soil properties", European Geosciences Union General Assembly, 27 April - 02 May, 2014, Vienna, Austria
47. *Convener and Chairperson* of Session SSS5.4 "Geochemical processes and C sequestration in peatlands and organic soils", European Geosciences Union General Assembly, 27 April - 02 May, 2014, Vienna, Austria
48. *Co-convenor* of Session SSS5.3 "Fire impacts on physical and chemical properties of ash, soils, and thermal analysis in soil science", European Geosciences Union General Assembly, 27 April - 02 May, 2014, Vienna, Austria
49. *Co-convenor and Chairperson* of Session SSS3.3 "Use of soil records in geoecology and landscape archaeology", European Geosciences Union General Assembly, 27 April - 02 May, 2014, Vienna, Austria
50. *Chairman* of Session S3.8. "Long-term survivability of biochar and digestates in soils and soil carbon sequestration with agricultural implications - myth or reality?", International Conference "Biochars, Composts, and Digestates - Production, Characterization, Regulation, Marketing, Uses and Environmental Impact" (BCD 2013), 17-20 October, 2013, Bari, Italy

51. *Chairman* of Session S3.7. "Soil organic matter amendments: impacts, benefits, and risks", International Conference "Biochars, Composts, and Digestates - Production, Characterization, Regulation, Marketing, Uses and Environmental Impact" (BCD 2013), 17-20 October, 2013, Bari, Italy
52. *Chairman* of Session I "Soil", XXXI National Meeting of the Italian Society of Agricultural Chemistry, 16-17 September, 2013, Napoli, Italy
53. *Co-convener* and *Chairperson* of Session BG2.7/SSS1.1 "Molecular, isotopic and associated modeling techniques focusing on terrestrial ecosystem", European Geosciences Union General Assembly, 7-12 April, 2013, Vienna, Austria
54. *Co-convener* of Session SSS1.2 "Element cycling and ecological functions of paddy and wetland soils", European Geosciences Union General Assembly, 7-12 April, 2013, Vienna, Austria
55. *Co-convener* and *Chairperson* of Session SSS5.3 "Soil as a Record of the Past: Soil science in cultural and natural landscapes", European Geosciences Union General Assembly, 7-12 April, 2013, Vienna, Austria
56. *Co-convener* and *Chairperson* of Session S07.06 "Mechanisms of C sequestration and stabilization in soils", 4<sup>th</sup> International Congress EUROSOL 2012", July 02-06, 2012, Bari, Italy
57. *Co-convener* and *Chairperson* of Session S05.01 "Soils organic matter amendments: impacts, benefits, and risks", 4<sup>th</sup> International Congress EUROSOL 2012", July 02-06, 2012, Bari, Italy
58. *Convener* and *Chairperson* of Session S01.01 "Soils and sediments as natural archives", 4<sup>th</sup> International Congress EUROSOL 2012", July 02-06, 2012, Bari, Italy
59. *Convener* and *Chairperson* of Session SSS10.2 "Soils as record of the past", European Geosciences Union General Assembly, 22-27 April, 2012, Vienna, Austria
60. *Chairperson* of Session SSS1.1 "Milestones in Soil Science Research", European Geosciences Union General Assembly, 22-27 April, 2012, Vienna, Austria
61. *Chairperson* of the Session "Humus substances chemistry and structure", IX National Meeting of the International Humic Substances Society - Italian Chapter "Molecular Aspects of Humic Substances and Biological Functionality in Soil Ecosystems", December 5-7, 2011, Portici, Italy
62. *Convener* of Session SSS4.3 "Molecular carbon cycling in the environment and implications on humus bioactivity and global changes", European Geosciences Union General Assembly, 3-8 April, 2011, Vienna, Austria
63. *Co-convener* and *Chairperson* of Session SSS1.3 "Molecular proxies for studying biogeochemical changes in the environment", European Geosciences Union General Assembly, 3-8 April, 2011, Vienna, Austria
64. *Co-convener* and *Chairperson* of Session SSS17 "Dehydrated and rewetted peatlands: hydrological, physical and chemical changes", European Geosciences Union General Assembly, 2-7 May, 2010, Vienna, Austria
65. *Co-convener* and *Chairperson* of Session SSS23 "Soil Organic Matter: structures, functions, management strategies, and C cycle", European Geosciences Union General Assembly, 2-7 May, 2010, Vienna, Austria
66. *Chairperson* of Session 2 "Soil quality, pollution, degradation and desertification", 15<sup>th</sup> International Symposium on "Environmental Pollution and its Impact on Life in the Mediterranean Region", October 7-11, 2009, Bari, Italy

### **Awards**

<b>2025</b>	<i>Soil Guardian for 2025</i> (MIdA Foundation – Museum of Soil)
<b>2017</b>	<i>Outstanding Contribution in Reviewing award</i> for 2017 (Environmental Pollution, Elsevier)
<b>2017</b>	<i>Recipient</i> of the "Annual individual funding for fundamental research activities - FFABR 2017", Italian National Agency for the Evaluation of the University and Research Systems (ANVUR)
<b>2016</b>	<i>Excellence in Reviewing award</i> for 2016 (Chemosphere, Elsevier)
<b>2016</b>	<i>Excellence in Reviewing award</i> for 2016 (Journal of Soils and Sediments, Springer)
<b>2012</b>	<i>Research Award</i> , Rotary Club Foggia Capitanata (District 2120)
<b>2011</b>	<i>Outstanding Young Scientists Award</i> (OYSA) 2012, Division on Soil System Sciences (SSS), European Geosciences Union (EGU) [ <a href="http://www.egu.eu/sss/awards-medals/">http://www.egu.eu/sss/awards-medals/</a> ]
<b>2010</b>	<i>Best Ph.D. Thesis award</i> from the Italian Society of Agricultural Chemistry
<b>2009</b>	<i>Training award</i> from the Italian Society of Soil Science
<b>2009</b>	<i>Travel bursary</i> , COST Action 639 BurnOut (Greenhouse gas budgets from soils under changing climate and land use), Helsinki (Finland), May 19-20
<b>2008</b>	<i>Travel bursary</i> , COST Action 639 BurnOut (Greenhouse gas budgets from soils under changing climate and land use), Birmensdorf (Switzerland), March 6-8
<b>2007</b>	<i>Young Scientist's Travel Award for Europeans</i> (YSTA), European Geosciences Union (EGU) General Assembly, Vienna (Austria), 15 - 20 April

**2006** *Travel bursary, 13<sup>th</sup> Meeting of the International Humic Substances Society (IHSS), Karlsruhe (Germany), July 30 - August 4*

**2005** *Travel bursary, VI National Congress of International Humic Substances Society (IHSS) - Italian section, Perugia (Italy), 15-16 December*

#### **Previous work experiences and Research contracts**

**2011** (May-June) Teaching contracts with several junior/senior high schools (“Losapio” school, Gioia del Colle; “Stefano da Putignano” school, Putignano; “Don S. Bavaro” school, Giovinazzo) as expert in the environmental field

**2008** (June-September) Research contract with the Dep. of Biology and Chemistry of Agro-Forestry and Environment, University of Bari, Italy. Object: Physico-chemical and spectroscopic characterization of Posidonia oceanica residues. POPRURA, Interreg IIIA/GRECIA-ITALIA 2000-2006

**2008** (April-June) Teaching contract with the “G. Falcone” junior high school (Adelfia) as expert in the environmental field

**2007-2008** (December / July) Research contract with the Dep. of Biology and Chemistry of Agro-Forestry and Environment, University of Bari (Italy). Object: Physico-chemical and spectroscopic characterization of Posidonia oceanica residues. POPRURA, Interreg IIIA/GRECIA-ITALIA 2000-2006

**2007** (October-December) Contract with the Agro-Forestal and Environmental System Planning and Management Department, University of Bari (Italy). Object: Guidelines about the protected area management. INTEGRA, Interreg – Cards – Phare Measure 1.1

**2007** (October-December) Contract with the University of Bari. Object: Guidelines about the protected area management. Interreg III B – Archimed “INNOVA” project

**2007** (March-June) Contract with the University of Bari. Object: Guidelines about the protected area management. Interreg III B – Archimed “INNOVA” project

**2007** (January-March) Contract with C.I.H.E.A.M.-I.A.M.B., “Interreg III A Italia-Albania project – action b

**2006** (November) Teaching contracts with “E. Majorana” Institute of Bari as expert in the environmental field

**2005** (May) Research contract with the Environmental Geochemistry Institute, University of Heidelberg, Germany

**2004-2005** Member of Posidonia s.c.a.r.l. board, society working in the cultural and environmental field

**2004** (April) Research contract with the Agro-Forestry and Environmental System Planning and Management Department, University of Bari (Italy). Area of interest: erosion, slope stabilization, rivers, GIS

**2003** (September) Tutor, Eureka s.r.l., Bari, Italy

**2003** (August) Research contract with the Agro-Forestry and Environmental System Planning and Management Department, University of Bari (Italy). Area of interest: biotechnical slope stabilization, low environmental impact measures, check dams

#### **Research projects and Scientific consulting**

“Clim-Act! Verona - Reti e competenze per comuni, professionisti e imprese in transizione ecologica”. Cariverona Foundation [Mag.2025-Giu.2026]

“SOS\_Root – Sustainability and Resilience of the Potato Production Sector in a Climate Change Scenario”. Veneto Region. DGR n. 1084/2024. [Principal Investigator, June.2025-Dec.2026]

“Carbon sequestration in vineyard: biomass utilization in a climate change scenario”. Ministry of Agriculture, Food Sovereignty and Forests (MASAF) project, call 2023 (D.M n. 419782 del 14/08/2023). [Principal Investigator, Jan.2024-Dec.2026]

“DNA occurrence in organic matter fractions isolated from amended, agricultural soils”. Cassa di Risparmio di Puglia Foundation. [Principal Investigator, June.2016-June.2018]

“Climate warming and vegetation change in peatlands: spatial and temporal effects on biogeochemistry” (VEGANPEAT - Task #2. Seasonal variability of DOC in peatland pore-water: a quantitative and qualitative approach along an altitudinal gradient). Swiss National Science Foundation. [External Collaborator; Feb.2014-Feb.2015]

“Atmospheric Deposition of Organic Contaminants in NE Alberta: Background Values and Industrial Contributions of the Past 60 years”. Alberta Innovates - Energy and Environment Solutions, Canada. [Research Unit member; Apr.2012-to date]

“Chemical and biomolecular indicators for reconstructing environmental changes in natural archives” (RU topic: “Influence of humification process on the possibility of peat bogs to be used as “reliable archives” of environmental changes”). Ministry of Education, Universities and Research (MIUR), Research Projects of National Interest program, call 2009. [Research Unit leader; Oct.2011-Oct.2013]

“In.Te.R.R.A. - Innovazioni tecnologiche e di processo per il riutilizzo irriguo delle acque reflue urbane e agro-industriali ai fini della gestione sostenibile delle risorse idriche (Technology and process innovations for irrigation reuse of treated municipal and agro-industrial wastewaters in order to achieve sustainable water resources management)”. PON 2007-2013; Project Cod. 01\_01480. [Task leader; 2011-2013]

“STAR-AgroEnergy - Scientific & Technological Advancement in Research on Agro-Energy: an integrated approach to renewable energy generation according to sustainability criteria”. REGPOT-2011-1; EU FP7 (Grant agreement n: 286269). [WP leader; 2011-Jun.2012]

“AZBSASP - Agrozootecnia biologica: Considerazioni in termini di Sicurezza Alimentare e problemi di Salute pubblica” (RU topic: Fattori influenzanti la produzione ed il destino dello Ptaquiloside nel sistema suolo-pianta in regime di agrozootecnia biologica). Ministry of Agricultural, Food and Forestry Policies (MIPAAF) project, call 2007 (D.M. 15847/7742/09). [Task leader; 2009-2014]

“PROPURA - *Posidonia oceanica* (L.) Del.: protection, restoring of meadows and use of beached residues in agriculture”. PIC INTERREG IIIA / GREECE-ITALY 2000-2006. Research project, Asse 3 - Misura 3.1. [Research Unit member; 2008]

“INNOVA - Establishing common models of integrated sustainable monitoring, planning and management of high environmental value areas to control natural resources degradation”. INTERREG III B – ARCHIMED. [Research Unit member; 2007]

*Influence of soil features on grape resilience to water stress* [2026-2028; Consorzio di Bonifica di II grado Lessinio Euganeo Berico, Italy]

*Influence of climate change on crop yields in the Veneto region* [2023-2024; Consorzio di Bonifica di II grado Lessinio Euganeo Berico, Italy]

*Physico-chemical characterization of peat from the Fiavè mire* [2023; Provincia Autonoma di Trento - Servizio Sviluppo Sostenibile e Aree Protette, Italy]

*Main soil features affecting the sustainable management of water resources in agriculture* [2023-2025; Consorzio di Bonifica di II grado Lessinio Euganeo Berico, Italy]

*Studying the impact of an incinerator located in the province of Foggia on the concentration of trace elements in surrounding agricultural soils* [2022; E.T.A. Energie Tecnologie Ambiente S.r.l., Italy]

*Analysis and sustainable management of water resources and soil in agriculture* [2021-2023; Consorzio di Bonifica di II grado Lessinio Euganeo Berico, Italy]

*Determination of depositional fluxes and enrichment factors of trace elements (Pb, Sb e Th) throughout a 4-m deep peat profile: lithogenic vs. anthropogenic sources* [2017; Dept. of Soil, Plant and Food Sciences – University of Bari Aldo Moro, Italy]

*Studying the impact of an incinerator located in the province of Foggia on the concentration of trace elements in surrounding agricultural soils* [2016; E.T.A. Energie Tecnologie Ambiente S.r.l., Italy]

*Investigating the fate of Br in the plant-soil system in organic agriculture* [2016; BonassisaLab S.r.l., Italy]

*Studying the impact of an incinerator located in the province of Foggia on the concentration of major and trace elements in surrounding agricultural soils* [2012; E.T.A. Energie Tecnologie Ambiente S.p.a., Italy]

*Studying the humification processes in peat bogs* [2011; Institute of Earth Science - University of Heidelberg, Germany]

## **Scientific publications**

### **A) Peer-reviewed publications (WoS-JCR) with Impact Factor (n = 107, since 2007; \* = corresponding author)**

1. Celletti, S., Fedeli, R., Grattacaso, M., Celi, L., **Zacccone, C.**, Loppi, S. (in press) Distinct and combined applications of biochar and wood distillate modulate functional responses in young *Vitis vinifera* L. *Journal of Plant Growth Regulation*.

Impact factor (-): 4.4  
PLANT SCIENCES (41/273)

2. Cassetta, M., Capitani, G.C., Chaudary, R., La Felice, S., Giordano, D., Biesuz, M., Gomes Silva, B., Araujo, J.F.D.F., Del Rosso, T., **Zacccone, C.**, Enrichi, F., Daldosso, N. (2025) Nanolite cargo evolution in trachybasaltic glass comparing magnetite and augite. *Scientific Reports*, 15: 39170.

Impact factor (-): 3.9  
MULTIDISCIPLINARY SCIENCES (25/135)

3. Giannetta, B., Caporale, A.G., Olivera de Souza, D., Adamo, P., **Zacccone, C.** (2025) Evolution of soil organic matter pools during Martian regolith terraforming, with a focus on organo-Fe (oxyhydr)oxide interactions. *Environmental Research*, 285: 122362.  
Impact factor (-): 7.7  
ENVIRONMENTAL SCIENCES (41/374), PUBLIC, ENVIRONMENTAL & OCCUPATIONAL HEALTH (18/419)
4. de Celis, M., de Sosa, L.L., Picca, G., González Polo, N., Gómez Ruano, C., Beneduce, L., **Zacccone, C.**, Panettieri, M. (2025) Biochar-based organic substrates enhance tomato growth by promoting specific microbial communities in rooftop farming. *Environmental Microbiome*, 20: 82.  
Impact factor (-): 5.4  
MICROBIOLOGY (23/163)
5. Danise, T., Goldoni, S.E., Dainese, M., **Zacccone, C.\*** (2025) Influence of land management on soil organic matter pools, plant traits and enzymatic activity in mountain grasslands. *Journal of Environmental Management*, 387: 125846.  
Impact factor (-): 8.4  
ENVIRONMENTAL SCIENCES (31/374)
6. Galluzzi, G., Plaza, C., Giannetta, G., Priori, S., **Zacccone, C.\*** (2025) Time and climate roles in driving soil carbon distribution and stability in particulate and mineral-associated organic matter pools. *Science of the Total Environment*, 963: 178511.  
Impact factor (-): 8.0  
ENVIRONMENTAL SCIENCES (39/374)
7. Danise, T., De Castro, O., **Zacccone, C.**, Guggenberger, G., Menta, C., Innangi, M., De Luca, D., Di Iorio, E., Turchetti, B., Fioretto, A. (2025) Implications of nurse species in mixed forest plantations management on soil fungal community diversity. *Applied Soil Ecology*, 206: 105892.  
Impact factor (-): 5.0  
SOIL SCIENCE (9/48)
8. Sofia, G., Sinatra, M., Tarolli, P., **Zacccone, C.** (2025) Upscaling drought resilience by coupling soil data and UAV-multispectral imageries. *Science of the Total Environment*, 958: 178007.  
Impact factor (-): 8.0  
ENVIRONMENTAL SCIENCES (39/374)
9. Cassetta, M., De Bona, E., Sambugaro, A., Enrichi, F., Daldosso, N., Giannetta, B., **Zacccone, C.**, Biesuz, M., Sgavio, V., Almeev, R., Nodari, L., Giordano, D., Mariotto, G. (2025) Fe-dependent structural evolution of peralkaline soda aluminosilicate glasses: iron speciation vs. glass transition. *Chemical Geology*, 674: 122561.  
Impact factor (-): 3.6  
GEOCHEMISTRY & GEOPHYSICS (17/100)
10. Salini, A., Zuliani, L., Gonnelli, P.M., Orlando, M., Odoardo, A., Ragno, D., Aulitto, M., **Zacccone, C.**, Fusco, S. (2024) Plastic-degrading microbial consortia from a wastewater treatment plant. *International Journal of Molecular Sciences*, 25: 12747.  
Impact factor (2024): 4.9  
BIOCHEMISTRY & MOLECULAR BIOLOGY (72/319, Q1), CHEMISTRY, MULTIDISCIPLINARY (70/239, Q2)
11. Díaz-Martínez, P., Maestre, F.T., Moreno-Jiménez, E., Delgado-Baquerizo, M., Eldridge, D.J., Saiz, H., Gross, N., Le Bagousse-Pinguet, Y., Gozalo, B., Ochoa, V., Guirado, E., García-Gómez, M., Valencia, E., Asensio, S., Berdugo, M., Martínez-Valderrama, J., Mendoza, B.J., García-Gil, J.C., **Zacccone, C.**, [...], Plaza, C. (2024) Vulnerability of mineral-associated soil organic carbon to climate across global drylands. *Nature Climate Change*, 14: 976-982.  
Impact factor (2024): 27.1  
ENVIRONMENTAL SCIENCES (3/374, Q1), METEOROLOGY & ATMOSPHERIC SCIENCES (1/111, Q1)
12. Galluzzi, G., Plaza, C., Priori, S., Giannetta, B., **Zacccone, C.\*** (2024) Soil organic matter dynamics and stability: climate vs. time. *Sciences of the Total Environment*, 929: 172441.  
Impact factor (2024): 8.0  
ENVIRONMENTAL SCIENCES (39/374, Q1)
13. Chen, M., Neupane, B., Zhan, X., Liu, T., Lin, Z., Gao, C., **Zacccone, C.\***, Bao, K. (2024) Three thousand years of Hg pollution recorded in mangrove wetland sediments from South China. *Environmental Research*, 252: 118866.

Impact factor (2024): 7.7  
ENVIRONMENTAL SCIENCES (41/374, Q1), PUBLIC, ENVIRONMENTAL & OCCUPATIONAL HEALTH (18/419, Q1)

14. Cid-Rodríguez, M., Cantonati, M., Spitale, D., Galluzzi, G., **Zacccone, C.** (2024) Using diatoms and physical and chemical parameters to monitor cow-pasture impact in peat cores from mountain mires. *Science of the Total Environment*, 926: 171779.

Impact factor (2024): 8.0  
ENVIRONMENTAL SCIENCES (39/374, Q1)

15. Sinatra, M., Giannetta, B., Plaza, C., Galluzzi, G., Squartini, A., **Zacccone, C.\*** (2024) Anaerobic digestate influences the carbon distribution in soil organic matter pools after six months from its application. *Soil and Tillage Research*, 239: 106049.

Impact factor (2024): 6.8  
SOIL SCIENCE (5/48, Q1)

16. Sofia, G., **Zacccone, C.**, Tarolli, P. (2024) Agricultural drought severity in NE Italy: variability, bias, and future scenarios. *International Soil and Water Conservation Research*, 12: 403-418.

Impact factor (2024): 7.3  
ENVIRONMENTAL SCIENCES (46/374, Q1), SOIL SCIENCE (3/48, Q1), WATER RESOURCES (8/131, Q1)

17. Liu, T., Bao, K., Chen, M., Neupane, B., Gao, C., **Zacccone, C.\*** (2024) Human activity has increasingly affected recent carbon accumulation in Zhanjiang mangrove wetland, South China. *iScience*, 27: 109038.

Impact factor (2024): 4.1  
MULTIDISCIPLINARY SCIENCES (22/135, Q1)

18. Bombardi, L., Salini, A., Aulitto, M., Zuliani, L., Andreolli, M., Bordoli, P., Coltro, A., Vitulo, N., **Zacccone, C.**, Lampis, S., Fusco, S. (2024) Lignocellulolytic potential of microbial consortia isolated from a local biogas plant: the case of thermostable xylanases secreted by mesophilic bacteria. *International Journal of Molecular Sciences*, 25: 1090.

Impact factor (2024): 4.9  
BIOCHEMISTRY & MOLECULAR BIOLOGY (72/319, Q1), CHEMISTRY, MULTIDISCIPLINARY (70/239, Q2)

19. Fracasso, I., **Zacccone, C.**, Oskolkov, N., Da Ros, L., Dinella, A., Belelli Marchesini, L., Buzzini, P., Sannino, C., Turchetti, B., Cesco, S., Le Roux, G., Tonon, G., Vernesi, C., Mimmo, T., Ventura, M., Borruso, L. (2024) Exploring different methodological approaches to unlock paleobiodiversity in peat profiles using ancient DNA. *Science of the Total Environment*, 908: 168159.

Impact factor (2024): 8.0  
ENVIRONMENTAL SCIENCES (39/374, Q1)

20. Giannetta, B., Plaza, C., Galluzzi, G., Benavente-Ferraces, I., García-Gil, J.C., Panettieri, M., Gascó, G., **Zacccone, C.** (2024) Distribution of soil organic carbon between particulate and mineral-associated fractions as affected by biochar and its co-application with other amendments. *Agriculture, Ecosystems and Environment*, 360: 108777.

Impact factor (2024): 6.4  
AGRICULTURE, MULTIDISCIPLINARY (6/94, Q1), ECOLOGY (14/200, Q1), ENVIRONMENTAL SCIENCES (58/374, Q1)

21. Zhang, Y., Shotyk, W., Pelletier, R., **Zacccone, C.**, Noernberg, T., Mullan-Boudreau, G., Martin, J.W. (2023) Sources, Spatial-Distributions and Fluxes of PAH-Contaminated Dusts in the Athabasca Oil Sands Region. *Environment International*, 182: 108335.

Impact factor (2023): 10.3  
ENVIRONMENTAL SCIENCES (21/358, Q1)

22. Giannetta, B., Caporale, A.G., Olivera de Souza, D., Adamo, P., **Zacccone, C.\*** (2023) Evidence of potential organo-mineral interactions during the first stage of Mars terraforming. *Soil Systems*, 7: 92.

Impact factor (2023): 2.9  
SOIL SCIENCES (20/49, Q2)

23. Santoro, V., Della Lucia, M.C., Franciosi, O., Stevanato, P., Bertoldo, G., Borella, M., Ferrari, E., **Zacccone, C.\***, Schiavon, M., Pizzeghelli, D., Nardi, S. (2023) Phosphorus acquisition efficiency and transcriptomic changes in maize plants treated with two lignohumates. *Plants*, 12: 3291.

Impact factor (2023): 4.0  
PLANT SCIENCES (46/265, Q1)

24. Giannetta, B., Plaza, C., Cassetta, M., Mariotto, G., Benavente-Ferraces, I., García-Gil, J.C., Panettieri, M., **Zacccone, C.\*** (2023) The effects of biochar on soil organic matter pools are not influenced by climate change. *Journal of Environmental Management*, 341: 118092.  
 Impact factor (2023): 8.0  
 ENVIRONMENTAL SCIENCES (34/358, Q1)

25. Fontana, M., Johannes, A., **Zacccone, C.**, Weisskopf, P., Guillaume, T., Bragazza, L., Elfouki, S., Charles, R., Sinaj, S. (2023) Improving crop nutrition, soil carbon storage and soil physical fertility using ramial wood chips. *Environmental Technology & Innovation*, 31: 103143.  
 Impact factor (2023): 6.7  
 BIOTECHNOLOGY & APPLIED MICROBIOLOGY (18/174, Q1), ENGINEERING, ENVIRONMENTAL (17/81, Q1), ENVIRONMENTAL SCIENCES (44/358, Q1)

26. Sim, T.G., Swindles, G.T., Morris, P.J., Baird, A.J., Gallego-Sala, A.V., [...], **Zacccone, C.**, Zhang, H. (2023) Regional variability in peatland burning at mid- to high-latitudes during the Holocene. *Quaternary Science Reviews*, 305: 108020  
 Impact factor (2023): 3.2  
 GEOGRAPHY, PHYSICAL (16/65, Q1), GEOSCIENCES, MULTIDISCIPLINARY (71/253, Q2)

27. Cassetta, M., Giannetta, B., Enrichi, F., **Zacccone, C.**, Mariotto, G., Giarola, M., Nodari, L., Zanatta, M., Daldosso, N. (2023) Effect of the alkali vs. iron ratio on glass transition temperature and vibrational properties of synthetic basalt-like glasses. *Spectrochimica Acta Part A*, 293: 122430.  
 Impact factor (2023): 4.3  
 SPECTROSCOPY (5/44, Q1)

28. Bona, D., Bertoldi, D., Borgonovo, G., Mazzini, S., Ravasi, S., Silvestri, S., **Zacccone, C.**, Giannetta, B., Tambone, F. (2023) Evaluating the potential of hydrochar as a soil amendment. *Waste Management*, 159: 75-83.  
 Impact factor (2023): 7.1  
 ENGINEERING, ENVIRONMENTAL (14/81, Q1), ENVIRONMENTAL SCIENCES (41/358, Q1)

29. Cassetta, M., Vetere, F., Zanatta, M., Perugini, D., Alvaro, M., Giannetta, B., **Zacccone, C.**, Daldosso, N. (2023) Micro-Raman spectroscopy for a comprehensive understanding of the structural evolution of Basaltic-Andesite and Trachybasalt multiphase systems. *Chemical Geology*, 616: 121241.  
 Impact factor (2023): 3.6  
 GEOCHEMISTRY & GEOPHYSICS (16/101, Q1)

30. Andreolli, M., Scerbacov, V., Frison, N., **Zacccone, C.**, Lampis, S. (2022) Thauera sp. Sel9, a new bacterial strain for polyhydroxyalkanoates production from volatile fatty acids. *New Biotechnology*, 72: 71-79.  
 Impact factor (2022): 5.4  
 BIOCHEMICAL RESEARCH METHODS (10/77, Q1), BIOTECHNOLOGY & APPLIED MICROBIOLOGY (29/156, Q1)

31. Cavalli, E., Nardon, C., Willis, O.G., Zinna, F., Di Bari, L., Mizzoni, S., Ruggieri, S., Gaglio, S.C., Perduca, M., **Zacccone, C.**, Romeo, A., Piccinelli, F. (2022) Near Infrared Circularly Polarized Luminescence from water stable organic nanoparticles containing a chiral Yb(III) complex. *Chemistry-A European Journal*, 28: e202200574.  
 Impact factor (2022): 4.3  
 CHEMISTRY, MULTIDISCIPLINARY (66/178, Q2)

32. Giannetta, B., Plaza, C., Thompson, A., Plante, A.F., **Zacccone, C.** (2022) Iron speciation in soil size fractions under different land uses. *Geoderma*, 418: 115842.  
 Impact factor (2022): 6.1  
 SOIL SCIENCE (8/37, Q1)

33. Giannetta, B., Cassetta, M., Oliveira de Souza, D., Mariotto, G., Aquilanti, G., **Zacccone, C.\*** (2022) Coupling X-ray absorption and Raman spectroscopies to characterize iron species in a karst pedosedimentary record. *Soil Systems*, 6: 24.  
 Impact factor (2022): 3.5  
 SOIL SCIENCES (N/A)

34. Puglisi, E., Squartini, A., Terribile, F., **Zacccone, C.** (2022) Pedosedimentary and microbial investigation of a karst sequence record. *Science of the Total Environment*, 810: 151297.

Impact factor (2022): 9.8  
ENVIRONMENTAL SCIENCES (26/274, Q1)

35. Schillaci, C., Saia, S., Lipani, A., Perego, A., **Zacccone, C.**, Acutis, M. (2021) Validating the regional estimates of changes in soil organic carbon by using the data from paired-sites: the case study of Mediterranean arable lands. *Carbon Balance and Management*, 16: 19.

Impact factor (2021): 4.356  
ENVIRONMENTAL SCIENCES (113/279, Q2)

36. Marangi, M., Airoldi, S., Beneduce, L., **Zacccone, C.** (2021) Wild whale faecal samples as a proxy of anthropogenic impact. *Scientific Reports*, 11: 5822.

Impact factor (2021): 4.996  
MULTIDISCIPLINARY SCIENCES (19/73, Q1)

37. Bao, K., Zhang, Y., **Zacccone, C.**, Meadows, M.E. (2021) Human impact on C/N/P accumulation in lake sediments from northeast China during the last 150 years. *Environmental Pollution*, 271: 116345.

Impact factor (2021): 9.988  
ENVIRONMENTAL SCIENCES (28/279, Q1)

38. van Bellen, S., Shotyk, W., Magnan, G., Davies, L., Nason, T., Mullan-Boudreau, G., Garneau, M., Noernberg, T., Bragazza, L., **Zacccone, C.** (2020) Carbon and nitrogen accumulation rates in ombrotrophic peatlands of central and northern Alberta, Canada, during the last millennium. *Biogeochemistry*, 151: 251-272.

Impact factor (2020): 4.825  
ENVIRONMENTAL SCIENCES (77/274, Q2), GEOSCIENCES, MULTIDISCIPLINARY (28/199, Q1)

39. **Zacccone, C.\***, Schiavon, M., Celletti, S., Miano, T. (2020) Selected Plant-Related Papers from the First Joint Meeting on Soil and Plant System Sciences (SPSS 2019)–“Natural and Human-Induced Impacts on the Critical Zone and Food Production”. *Plants*, 9: 1132 [Guest Editorial].

Impact factor (2020): 3.935  
PLANT SCIENCES (47/235, Q1)

40. Giannetta, B., Balint, R., Said-Pullicino, D., Plaza, C., Martin, M., **Zacccone, C.** (2020) Fe(II)-catalyzed transformation of Fe (oxyhydr)oxides across organic matter fractions in organically amended soils. *Science of the Total Environment*, 748: 141125.

Impact factor (2020): 7.963  
ENVIRONMENTAL SCIENCES (25/274, Q1)

41. De Vleeschouwer, F., Baron, S., Cloy, J.M., Enrico, M., Ettler, V., Fagel, N., Kempter, H., Kylander, M., Li, C., Longman, J., Martinez-Cortizas, A., Marx, S., Mattielli, N., Mighall, T., Nieminen, T.M., Piotrowska, N., Pontevedra Pombal, X., Pratte, S., Renson, V., Shotyk, W., Shuttleworth, E., Sikorski, J., Stromsoe, N., Talbot, J., von Scheffer, C., Weiss, D., **Zacccone, C.**, Le Roux, G. (2020) Comment on: “A novel approach to peatlands as archives of total cumulative spatial pollution loads from atmospheric deposition of airborne elements complementary to EMEP data: Priority pollutants (Pb, Cd, Hg)” by Miszcza et al. *Science of the Total Environment*, 737: 138699.

Impact factor (2020): 7.963  
ENVIRONMENTAL SCIENCES (25/274, Q1)

42. Giannetta, B., Plaza, C., Siebecker, M.G., Aquilanti, G., Vischetti, C., Plaisier, J.R., Juanco, M., Sparks, D.L., **Zacccone, C.\*** (2020) Iron speciation in organic matter fractions isolated from soils amended with biochar and organic fertilizers. *Environmental Science & Technology*, 54: 5093-5101.

Impact factor (2020): 9.028  
ENGINEERING, ENVIRONMENTAL (7/54, Q1), ENVIRONMENTAL SCIENCES (20/274, Q1)

43. Vinci, G., Mazzei, P., Drosos, M., **Zacccone, C.**, Piccolo, A. (2020) Molecular characterization of ombrotrophic peats by humomics. *Chemical and Biological Technologies in Agriculture*, 7: 18.

Impact factor (2020): 2.792  
AGRICULTURE, MULTIDISCIPLINARY (14/58, Q1)

44. Giannetta, B., Siebecker, M.G., **Zacccone, C.\***, Plaza, C., Rovira, P., Vischetti, C., Sparks, D.L. (2020) Iron(III) fate after complexation with soil organic matter in fine silt and clay fractions: an EXAFS spectroscopic approach. *Soil & Tillage Research*, 200: 104617.

Impact factor (2020): 5.374  
SOIL SCIENCE (6/37, Q1)

45. Bletsa, E., **Zacccone, C.\***, Miano, T., Terzano, R., Deligiannakis, Y. (2020) Natural Mn-todorikite as an efficient and green azo dye-degradation catalyst. *Environmental Science and Pollution Research*, 27: 9835–9842.  
Impact factor (2020): 4.223  
ENVIRONMENTAL SCIENCES (91/274, Q2)

46. Bao, K., **Zacccone, C.**, Tao, Y., Wang, J., Shen, J., Zhang, Y. (2020) Source apportionment of priority PAHs in 11 lake sediment cores from Songnen Plain, Northeast China. *Water Research*, 168: 115158.  
Impact factor (2020): 11.236  
ENGINEERING, ENVIRONMENTAL (3/54, Q1), ENVIRONMENTAL SCIENCES (6/274, Q1), WATER RESOURCES (2/98, Q1)

47. Segnana, M., Oeggl, K., Poto, L., Gabrieli, J., Festi, D., Kofler, W., Cesco Frare, P., **Zacccone, C.**, Barbante, C. (2020) Holocene vegetation history and human impact in the eastern Italian Alps: a multi-proxy study on the Coltrondo peat bog, Comelico Superiore, Italy. *Vegetation History and Archaeobotany*, 29: 407-426.  
Impact factor (2020): 2.375  
PLANT SCIENCES (100/235, Q2), PALEONTOLOGY (8/54, Q1)

48. Giannetta, B., Plaza, C., **Zacccone, C.\***, Vischetti, C., Rovira, P. (2019) Ecosystem type effects on the stabilization of organic matter in soils: combining size fractionation with sequential chemical extractions. *Geoderma*, 353: 423-434.  
Impact factor (2019): 4.848  
SOIL SCIENCE (3/38, Q1)

49. Plaza, C., Giannetta, B., Benavente, I., Vischetti, C., **Zacccone, C.\*** (2019) Density-based fractionation of soil organic matter: effects of heavy liquid and heavy fraction washing. *Scientific Reports*, 9: 10146.  
Impact factor (2019): 3.998  
MULTIDISCIPLINARY SCIENCES (17/71, Q1)

50. Giannetta, B., **Zacccone, C.\***, Plaza, C., Siebecker, M.G., Rovira, P., Vischetti, C., Sparks, D.L. (2019) The role of Fe(III) in soil organic matter stabilization in two size fractions having opposite features. *Science of the Total Environment*, 653: 667-674.  
Impact factor (2019): 6.551  
ENVIRONMENTAL SCIENCES (22/265, Q1)

51. Plaza, C., **Zacccone, C.**, Sawicka, K., Méndez, A.M., Tarquis, A., Gascó, G., Heuvelink, G.B.M., Schuur, E.A.G., Maestre, F.T. (2018) Soil resources and element stocks in drylands to face global issues. *Scientific Reports*, 8: 13788.  
Impact factor (2018): 4.011  
MULTIDISCIPLINARY SCIENCES (15/69, Q1)

52. **Zacccone, C.\***, Beneduce, L., Lotti, C., Martino, G., Plaza, C. (2018) DNA occurrence in organic matter fractions isolated from amended, agricultural soils. *Applied Soil Ecology*, 130: 134-142.  
Impact factor (2018): 3.445  
SOIL SCIENCE (8/35, Q1)

53. **Zacccone, C.\***, Plaza, C., Ciavatta, C., Miano, T.M., Shotyk, W. (2018) Advances in the determination of humification degree in peat since Achard (1786): applications in geochemical and paleoenvironmental studies. *Earth-Science Reviews*, 185: 163-178 [with cover].  
Impact factor (2018): 9.530  
GEOSCIENCES, MULTIDISCIPLINARY (3/196, Q1)

54. Giannetta, B., Plaza, C., Vischetti, C., Cotrufo, M.F., **Zacccone, C.\*** (2018) Distribution and thermal stability of physically and chemically protected organic matter fractions in soils across different ecosystems. *Biology and Fertility of Soils*, 54: 671-681.  
Impact factor (2018): 4.829  
SOIL SCIENCE (2/35, Q1)

55. Provenzano, M.R., Cavallo, O., Malerba, A.D., Fabbri, C., **Zacccone, C.** (2018) Unravelling (maize silage) digestate features throughout a full-scale plant: a spectroscopic and thermal approach. *Journal of Cleaner Production*, 193: 372-378.  
Impact factor (2018): 6.395  
ENGINEERING, ENVIRONMENTAL (8/52, Q1), ENVIRONMENTAL SCIENCES (18/250, Q1), GREEN & SUSTAINABLE SCIENCE AND TECHNOLOGY (6/35, Q1)

56. Davies, L.J., Appleby, P., Jensen, B.J.L., Magnan, G., Mullan-Boudreau, G., Noernberg, T., Shannon, B., Shotyk, W., van Bellen, S., **Zaccone, C.**, Froese, D.G. (2018) High-resolution age modelling of peat bogs from northern Alberta, Canada, using pre- and post-bomb  $^{14}\text{C}$ ,  $^{210}\text{Pb}$  and historical cryptotephra. *Quaternary Geochronology*, 47: 138-162.  
 Impact factor (2018): 3.962  
 GEOGRAPHY, PHYSICAL (11/50, Q1), GEOSCIENCES, MULTIDISCIPLINARY (28/196, Q1)

57. Brusetti, L., Ciccazzo, S., Borruso, L., Belluci, M., **Zaccone, C.**, Beneduce, L. (2018) Metataxonomy and functionality of wood-tar degrading microbial consortia. *Journal of Hazardous Materials*, 353: 108-117.  
 Impact factor (2018): 7.650  
 ENGINEERING, ENVIRONMENTAL (4/52, Q1), ENVIRONMENTAL SCIENCES (12/250, Q1)

58. van Bellen, S., Magnan, G., Davies, L., Froese, D., Mullan-Boudreau, G., **Zaccone, C.**, Garneau, M., Shotyk, W. (2018) Testate amoeba records indicate regional 20<sup>th</sup>-century lowering of water tables in ombrotrophic peatlands in central-northern Alberta, Canada. *Global Change Biology*, 24: 2758-2774.  
 Impact factor (2018): 8.880  
 BIODIVERSITY CONSERVATION (1/58, Q1), ENVIRONMENTAL SCIENCES (5/250, Q1), ECOLOGY (6/164, Q1)

59. Magnan, G., van Bellen, S., Davies, L., Froese, D., Garneau, M., Mullan-Boudreau, G., **Zaccone, C.**, Shotyk, W. (2018) Impact of the Little Ice Age cooling and 20th century climate change on peatland vegetation dynamics in central and northern Alberta using a multi-proxy approach and high-resolution peat chronologies. *Quaternary Science Reviews*, 185: 230-243.  
 Impact factor (2018): 4.641  
 GEOGRAPHY, PHYSICAL (5/50, Q1), GEOSCIENCES, MULTIDISCIPLINARY (13/196, Q1)

60. Knicker, H., Rosario-Ortiz, F.L., **Zaccone, C.** (2018) Natural organic matter: chemistry, function and fate in the environment. Preface - Special issue in memory of Frank J. Stevenson. *Journal of Soils and Sediments*, 18: 1209-1211 [Guest Editorial].  
 Impact factor (2018): 2.669  
 ENVIRONMENTAL SCIENCES (100/250, Q2), SOIL SCIENCE (13/35, Q2)

61. **Zaccone, C.**\*, Lobianco, D., Raber, G., D'Orazio, V., Shotyk, W., Miano, T.M., Francesconi, K. (2018) Methylated arsenic species throughout a 4-m deep core from a free-floating peat island. *Science of the Total Environment*, 621: 67-74.  
 Impact factor (2018): 5.589  
 ENVIRONMENTAL SCIENCES (27/250, Q1)

62. Kempfer, H., Krachler, M., Shotyk, W., **Zaccone, C.** (2017) Validating modelled data on major and trace element deposition in southern Germany using Sphagnum moss. *Atmospheric Environment*, 167: 656-664.  
 Impact factor (2017): 3.708  
 ENVIRONMENTAL SCIENCES (54/241, Q1)

63. Bragazza, L., Buttler, A., Robroek, B.J.M., Albrecht, R., **Zaccone, C.**, Jassey, V.E.J., Signarbieux, C. (2017) Response to Editor to the comment by Delarue (2016) to our paper entitled "Persistent high temperature and low precipitation reduce peat carbon accumulation". *Global Change Biology*, 23: e7-e8.  
 Impact factor (2017): 8.997  
 BIODIVERSITY CONSERVATION (1/55, Q1), ENVIRONMENTAL SCIENCES (3/241, Q1), ECOLOGY (5/158, Q1)

64. Concheri, G., Stevanato, P., **Zaccone, C.**, Shotyk, W., D'Orazio, V., Miano, T., Piffanelli, P., Rizzi, V., Ferrandi, C., Squartini, A. (2017) Rapid peat accumulation favours the occurrence of both fen and bog microbial communities within a Mediterranean, free-floating peat island. *Scientific Reports*, 7: 8511.  
 Impact factor (2017): 4.122  
 MULTIDISCIPLINARY SCIENCES (12/64, Q1)

65. Kempfer, H., Krachler, M., Shotyk, W., **Zaccone, C.** (2017) Major and trace metals in Sphagnum moss from four southern German bogs, and comparison with available moss monitoring data. *Ecological Indicators*, 78: 19-25.  
 Impact factor (2017): 3.983  
 ENVIRONMENTAL SCIENCES (48/241, Q1)

66. Shotyk, W., Appleby, P.G., Bicalho, B., Davies, L.J., Froese, D., Grant-Weaver, I., Magnan, G., Mullan-Boudreau, G., Noernberg, T., Pelletier, R., Shannon, R., van Bellen, S., **Zaccone, C.** (2017) Peat bogs document decades of declining atmospheric contamination by trace metals in the Athabasca Bituminous Sands region. *Environmental Science & Technology*, 51: 6237-6249.

Impact factor (2017): 6.653  
 ENGINEERING, ENVIRONMENTAL (4/50, Q1), ENVIRONMENTAL SCIENCES (11/241, Q1)

67. **Zaccone, C.\***, Lobianco, D., Shotyk, W., Ciavatta, C., Appleby, P.G., Brugia paglia, E., Casella, L., Miano, T.M., D'Orazio, V. (2017) Highly anomalous accumulation rates of C and N recorded by a relic, free-floating peatland in Central Italy. *Scientific Reports*, 7: 43040.

Impact factor (2017): 4.122  
 MULTIDISCIPLINARY SCIENCES (12/64, Q1)

68. Shotyk, W., Bicalho, B., Cuss, C.W., Donner, M.W., Grant-Weaver, I., Haas-Neill, S., Javed, M.B., Krachler, M., Noernberg, T., Pelletier, R., **Zaccone, C.** (2017) Trace metals in the dissolved fraction (<0.45  $\mu$ m) of the lower Athabasca River: analytical challenges and environmental implications. *Science of the Total Environment*, 580: 660-669.

Impact factor (2017): 4.610  
 ENVIRONMENTAL SCIENCES (27/241, Q1)

69. Bragazza, L., Buttler, A., Robroek, B.J.M., Albrecht, R., **Zaccone, C.**, Jassey, V.E.J., Signarbieux, C. (2016) Persistent high temperature and low precipitation reduce peat carbon accumulation. *Global Change Biology*, 22(12): 4114-4123.

Impact factor (2016): 8.502  
 BIODIVERSITY CONSERVATION (1/53, Q1), ENVIRONMENTAL SCIENCES (5/229, Q1), ECOLOGY (6/153, Q1)

70. Shotyk, W., Appleby, P.G., Bicalho, B., Davies, L., Froese, D., Grant-Weaver, I., Krachler, M., Magnan, G., Mullan-Boudreau, G., Noernberg, T., Pelletier, R., Shannon, B., van Bellen, S., **Zaccone, C.** (2016) Peat bogs in northern Alberta, Canada reveal decades of declining atmospheric Pb contamination. *Geophysical Research Letters*, 43: 9964-9974.

Impact factor (2016): 4.253  
 GEOSCIENCES, MULTIDISCIPLINARY (14/188, Q1)

71. Shotyk, W., Bicalho, B., Cuss, C.W., Duke, M.J.M., Noernberg, T., Pelletier, R., Steinnes, E., **Zaccone, C.** (2016) Dust is the dominant source of "heavy metals" to peat moss (*Sphagnum fuscum*) in the bogs of the Athabasca Bituminous Sands region of northern Alberta. *Environment International*, 92-93: 494-506.

Impact factor (2016): 7.088  
 ENVIRONMENTAL SCIENCES (7/229, Q1)

72. Plaza, C., Giannetta, B., Fernández, J.M., López-de-Sá, E.G., Polo, A., Gascó, G., Méndez, A., **Zaccone, C.** (2016) Response of different soil organic matter pools to biochar and organic fertilizers. *Agriculture, Ecosystems and Environment*, 225: 150-159.

Impact factor (2016): 4.099  
 AGRICULTURE, MULTIDISCIPLINARY (1/56, Q1), ENVIRONMENTAL SCIENCES (35/229, Q1), ECOLOGY (30/153, Q1)

73. Zhang, Y., Shotyk, W., **Zaccone, C.**, Noernberg, T., Pelletier, R., Bicalho, B., Froese, D.G., Davies, L., Martin, J.W. (2016) Airborne Petcoke Dust is a Major Source of Polycyclic Aromatic Hydrocarbons in the Athabasca Oil Sands Region. *Environmental Science & Technology*, 50(4): 1711-1720.

Impact factor (2016): 6.198  
 ENGINEERING, ENVIRONMENTAL (4/49, Q1), ENVIRONMENTAL SCIENCES (12/229, Q1)

74. Shotyk, W., Kempter, H., Krachler, M., **Zaccone, C.** (2015) Stable ( $^{206}\text{Pb}$ ,  $^{207}\text{Pb}$ ,  $^{208}\text{Pb}$ ) and radioactive ( $^{210}\text{Pb}$ ) lead isotopes in 1 year of growth of *Sphagnum* moss from four ombrotrophic bogs in southern Germany: geochemical significance and environmental implications. *Geochimica et Cosmochimica Acta*, 163: 101-125.

Impact factor (2015): 4.315  
 GEOCHEMISTRY & GEOPHYSICS (8/81, Q1)

75. Shotyk, W., Belland, R., Duke, J., Kempter, H., Krachler, M., Noernberg, T., Pelletier, R., Vile, M.A., Wieder, K., **Zaccone, C.**, Zhang, S. (2015) Response to Comment on "Sphagnum mosses from 21 ombrotrophic bogs in the Athabasca Bituminous Sands region show no significant atmospheric contamination of 'heavy metals'". *Environmental Science & Technology*, 49: 6354-6357.

Impact factor (2015): 5.393  
 ENGINEERING, ENVIRONMENTAL (3/49, Q1), ENVIRONMENTAL SCIENCES (14/225, Q1)

76. Kluiving, S., van Mourik, J.M., **Zaccone, C.** (2015) Man versus Nature: natural and anthropogenic footprints recorded in the soil archives. *Catena*, 132: 69-71 [Guest Editorial].

Impact factor (2015): 2.612

GEOSCIENCES, MULTIDISCIPLINARY (42/184, Q1), SOIL SCIENCE (9/34, Q2)

77. Abdeldaym, E.A., Erriquens, F., Sasanelli, N., Ceglie, F.G., **Zacccone, C.**, Miano, T., Cocozza, C. (2014) Effects of several amendments on organic melon growth and production, *Meloidogyne incognita* population and soil properties. *Scientia Horticulturae*, 180: 156-160.  
Impact factor (2014): 1.365  
HORTICULTURE (9/33, Q2)

78. Shotyk, W., Belland, R., Duke, J., Kempter, H., Krachler, M., Noernberg, T., Pelletier, R., Vile, M.A., Wieder, K., **Zacccone, C.**, Zhang, S. (2014) *Sphagnum* mosses from 21 ombrotrophic bogs in the Athabasca Bituminous Sands region show no significant atmospheric contamination of "heavy metals". *Environmental Science & Technology*, 48: 12603-12611.  
Impact factor (2014): 5.330  
ENGINEERING, ENVIRONMENTAL (3/47, Q1), ENVIRONMENTAL SCIENCES (10/221, Q1)

79. **Zacccone, C.\***, Cavoski, I., Costi, R., Sarais, G., Caboni, P., Traversa, A., Miano, T.M. (2014) Ptaquiloside in *Pteridium aquilinum* subsp. *aquilinum* and corresponding soils from the South of Italy: influence of physical and chemical features of soils on its occurrence. *Science of the Total Environment*, 496: 365-372.  
Impact factor (2014): 4.099  
ENVIRONMENTAL SCIENCES (18/221, Q1)

80. **Zacccone, C.\***, Rein, G., D'Orazio, V., Hadden, R.M., Belcher, C.M., Miano, T.M. (2014) Smouldering fire signatures in peat and their implications for palaeoenvironmental reconstructions. *Geochimica et Cosmochimica Acta*, 137: 134-146.  
Impact factor (2014): 4.331  
GEOCHEMISTRY & GEOPHYSICS (9/79, Q1)

81. **Zacccone, C.\***, Quideau, S., Sauer, D. (2014) Soils and paleosols as archives of natural and anthropogenic environmental changes. *European Journal of Soil Science*, 65: 403-405 [Guest Editorial].  
Impact factor (2014): 2.649  
SOIL SCIENCE (7/34, Q1)

82. Puglisi, E., **Zacccone, C.**, Cappa, F., Cocconcelli, P.S., Shotyk, W., Trevisan, M., Miano, T.M. (2014) Changes in bacterial and archaeal community assemblages along an ombrotrophic peat bog profile. *Biology and Fertility of Soils*, 50: 815-826.  
Impact factor (2014): 3.398  
SOIL SCIENCE (2/34, Q1)

83. Senesi, G.S., Dell'Aglio, M., De Giacomo, A., De Pascale, O., Al Chami, Z., Miano, T.M., **Zacccone, C.** (2014) Elemental composition analysis of plants and composts used for soil remediation by Laser-Induced Breakdown Spectroscopy. *Clean - Soil, Air, Water*, 42: 791-798.  
Impact factor (2014): 1.945  
ENVIRONMENTAL SCIENCES (100/221, Q2)

84. Kooch, Y., **Zacccone, C.\***, Lamersdorf, N.P., Tonon, G. (2014) Pit and mound influence on soil features in an Oriental Beech (*Fagus orientalis* Lipsky) forest. *European Journal of Forest Research*, 133: 347-354.  
Impact factor (2014): 2.095  
FORESTRY (9/65, Q1)

85. **Zacccone, C.\***, Pabst, S., Senesi, G.S., Shotyk, W., Miano, T.M. (2013) Comparative evaluation of the mineralogical composition of *Sphagnum* peat and their corresponding humic acids, and implications for understanding past dust depositions. *Quaternary International*, 306: 80-87.  
Impact factor (2013): 2.128  
GEOGRAPHY, PHYSICAL (23/46, Q2), GEOSCIENCES, MULTIDISCIPLINARY (58/173, Q2)

86. Poto, L., Gabrieli, J., Crowhurst, S.J., Appleby, P.G., Ferretti, P., Surian, N., Cozzi, G., **Zacccone, C.**, Turetta, C., Pini, R., Kehrwald, N., Barbante, C. (2013) The first continuous Late Glacial - Holocene peat bog multi-proxy record from the Dolomites (NE Italian Alps). *Quaternary International*, 306: 71-79.  
Impact factor (2013): 2.128  
GEOGRAPHY, PHYSICAL (23/46, Q2), GEOSCIENCES, MULTIDISCIPLINARY (58/173, Q2)

87. Kluiving, S.J., van Mourik, J.M., Barbante, C., **Zacccone, C.\*** (2013) Soils as a Record of the Past. *Quaternary International*, 306: 1-2 [Guest Editorial].  
Impact factor (2013): 2.128

GEOGRAPHY, PHYSICAL (23/46, Q2), GEOSCIENCES, MULTIDISCIPLINARY (58/173, Q2)

88. Kooch, Y., Hosseini, S.M., **Zacccone, C.\***, Jalilvand, H., Hojjati, S.M. (2012) Soil organic carbon sequestration as affected by afforestation: the Darab Kola forest (North of Iran) case study. *Journal of Environmental Monitoring*, 14: 2438-2446.  
Impact factor (2012): 2.085  
CHEMISTRY, ANALYTICAL (34/75, Q2), ENVIRONMENTAL SCIENCES (84/209, Q2)

89. **Zacccone, C.\***, Miano, T.M., Shotyk, W. (2012) Interpreting the ash trend within ombrotrophic bog profiles: atmospheric dust depositions vs. mineralization processes. The Etang de la Gruère case study. *Plant & Soil*, 353: 1-9.  
Impact factor (2012): 2.638  
AGRONOMY (9/78, Q1), PLANT SCIENCES (45/195, Q1), SOIL SCIENCE (4/34, Q1)

90. **Zacccone, C.\***, Casiello, G., Longobardi, F., Bragazza, L., Sacco, A., Miano, T.M. (2011) Evaluating the 'conservative' behaviour of stable isotopic ratios ( $\delta^{13}\text{C}$ ,  $\delta^{15}\text{N}$ , and  $\delta^{18}\text{O}$ ) in humic acids and their reliability as paleoenvironmental proxies along a peat sequence. *Chemical Geology*, 285: 124-132.  
Impact factor (2011): 3.518  
GEOCHEMISTRY & GEOPHYSICS (7/76, Q1)

91. Dell'Aglio, M., Gaudioso, R., Senesi, G.S., De Giacomo, A., **Zacccone, C.\***, Miano, T.M., De Pascale, O. (2011) Monitoring of Cr, Cu, Pb, V and Zn in polluted soils by laser induced breakdown spectroscopy (LIBS). *Journal of Environmental Monitoring*, 13: 1422-1426.  
Impact factor (2011): 1.991  
CHEMISTRY, ANALYTICAL (34/73, Q2), ENVIRONMENTAL SCIENCES (79/205, Q2)

92. **Zacccone, C.\***, Sanei, H., Outridge, P.M., Miano, T.M. (2011) Studying the humification degree and evolution of peat down a Holocene bog profile (Inuvik, NW Canada): A petrological and chemical perspective. *Organic Geochemistry*, 42: 399-408.  
Impact factor (2011): 2.785  
GEOCHEMISTRY & GEOPHYSICS (17/76, Q1)

93. Cocozza, C., Parente, A., **Zacccone, C.**, Mininni, C., Santamaria, P., Miano, T. (2011) Chemical, physical and spectroscopic characterization of *Posidonia oceanica* (L.) Del. residues and their possible recycle. *Biomass & Bioenergy*, 35: 799-807.  
Impact factor (2011): 3.646  
AGRICULTURAL ENGINEERING (2/12, Q1), ENERGY & FUELS (13/81, Q1)

94. Cocozza, C., Parente, A., **Zacccone, C.**, Mininni, C., Santamaria, P., Miano, T. (2011) Comparative management of offshore posidonia residues: Composting vs. energy recovery. *Waste Management*, 31: 78-84.  
Impact factor (2011): 2.482  
ENGINEERING, ENVIRONMENTAL (12/45, Q2), ENVIRONMENTAL SCIENCES (57/205, Q2)

95. **Zacccone, C.**, Di Caterina, R., Rotunno, T., Quinto, M. (2010) Soil-farming system-food-health: effect of conventional and organic fertilizers on heavy metal (Cd, Cr, Cu, Ni, Pb, Zn) content in semolina samples. *Soil & Tillage Research*, 107: 97-105.  
Impact factor (2010): 2.100  
SOIL SCIENCE (8/32, Q1)

96. **Zacccone, C.\***, D'Orazio, V., Shotyk, W., Miano, T.M. (2009) Chemical and spectroscopic investigation of porewater and aqueous extracts of corresponding peat samples throughout a bog core (Jura Mountains, Switzerland). *Journal of Soils and Sediments*, 9: 443-456.  
Impact factor (2009): 2.613  
SOIL SCIENCE (3/31, Q1)

97. **Zacccone, C.\***, Soler-Rovira, P., Plaza, C., Cocozza, C., Miano, T.M. (2009) Variability in As, Ca, Cr, K, Mn, Sr, and Ti concentrations among humic acids isolated from peat using NaOH, Na<sub>4</sub>P<sub>2</sub>O<sub>7</sub> and NaOH+Na<sub>4</sub>P<sub>2</sub>O<sub>7</sub> solutions. *Journal of Hazardous Materials*, 167: 987-994.  
Impact factor (2009): 4.144  
ENGINEERING, ENVIRONMENTAL (4/42, Q1), ENVIRONMENTAL SCIENCES (10/180, Q1)

98. Senesi, G.S., Dell'Aglio, M., Gaudioso, R., De Giacomo, A., **Zacccone, C.**, De Pascale, O., Miano, T.M., Capitelli, M. (2009) Heavy metal concentrations in soils as determined by laser induced breakdown spectroscopy (LIBS), with special emphasis on chromium. *Environmental Research*, 109: 413-420.

Impact factor (2009): 3.237  
 ENVIRONMENTAL SCIENCES (23/180, Q1), PUBLIC, ENVIRONMENTAL & OCCUPATIONAL HEALTH (19/122, Q1)

99. **Zacccone, C.\***, Gallipoli, A., Cocozza, C., Trevisan, M., Miano, T.M. (2009) Distribution patterns of selected PAHs in bulk peat and corresponding humic acids from a Swiss ombrotrophic bog profile. *Plant and Soil*, 315: 35-45.

Impact factor (2009): 2.517  
 AGRONOMY (9/61, Q1), PLANT SCIENCES (31/162, Q1), SOIL SCIENCE (4/31, Q1)

100. **Zacccone, C.\***, Santoro, A., Cocozza, C., Terzano, R., Shotyk, W., Miano, T.M. (2009) Comparison of Hg concentrations in ombrotrophic peat and corresponding humic acids, and implications for the use of bogs as archives of atmospheric Hg deposition. *Geoderma*, 148: 399-404.

Impact factor (2009): 2.461  
 SOIL SCIENCE (5/31, Q1)

101. **Zacccone, C.\***, Cocozza, C., Shotyk, W., Miano, T.M. (2008) Humic acids role in Br accumulation along two ombrotrophic peat bog profiles. *Geoderma*, 146: 26-31.

Impact factor (2008): 2.068  
 SOIL SCIENCE (6/31, Q1)

102. **Zacccone, C.\***, Said-Pullicino, D., Gigliotti, G., Miano, T.M. (2008) Diagenetic trends in the phenolic constituents of *Sphagnum*-dominated peat and its corresponding humic acid fraction. *Organic Geochemistry* 39: 830-838.

Impact factor (2008): 2.364  
 GEOCHEMISTRY & GEOPHYSICS (14/64, Q1)

103. **Zacccone, C.\***, Cocozza, C., Cheburkin, A.K., Shotyk, W., Miano, T.M. (2008) Distribution of As, Cr, Ni, Rb, Ti and Zr between peat and its humic fraction along an undisturbed ombrotrophic bog profile (NW Switzerland). *Applied Geochemistry*, 23: 25-33.

Impact factor (2008): 1.857  
 GEOCHEMISTRY & GEOPHYSICS (24/64, Q2)

104. **Zacccone, C.\***, Cocozza, C., Cheburkin, A.K., Shotyk, W., Miano, T.M. (2007) Highly Organic Soils as "Witnesses" of Anthropogenic Pb, Cu, Zn, and <sup>137</sup>Cs Inputs During Centuries. *Water, Air, & Soil Pollution*, 186: 263-271.

Impact factor (2007): 1.224  
 ENVIRONMENTAL SCIENCES (88/160, Q3)

105. **Zacccone, C.\***, Cocozza, C., D'Orazio, V., Plaza, C., Cheburkin, A., Miano, T.M. (2007) Influence of extractant on quality and trace elements content of peat humic acids. *Talanta*, 73: 820-830.

Impact factor (2007): 3.374  
 CHEMISTRY, ANALYTICAL (8/70, Q1)

106. **Zacccone, C.**, Cocozza, C., Cheburkin, A.K., Shotyk, W., Miano, T.M. (2007) Enrichment and depletion of major and trace elements, and radionuclides in ombrotrophic raw peat and corresponding humic acids. *Geoderma*, 141: 235-246.

Impact factor (2007): 1.898  
 SOIL SCIENCE (5/30, Q1)

107. **Zacccone, C.\***, Miano, T.M., Shotyk, W. (2007) Qualitative comparison between raw peat and related humic acids in an ombrotrophic bog profile. *Organic Geochemistry*, 38: 151-160.

Impact factor (2007): 2.114  
 GEOCHEMISTRY & GEOPHYSICS (15/63, Q1)

Papers under review (n = 6)

1. Rovira, P., Giannetta, B., Kaal, J., Merino, A., Plaza, C., **Zacccone, C.\*** The ultimate fraction – Chemical characterization of humins from forest vs grassland soils. *Soil Biology and Biochemistry*.
2. Phan Le, Q.N., Evangelou, N., Halsall, C., Quinton, J.N., Surridge, B.W.J., Ashton, L., Eckhardt, S., Ruggiero, L., Sciarra, A., Florindo, F., **Zacccone, C.**, Materić, D. First evidence of nanoplastics in Antarctica soil. *Scientific Reports*.

3. Tondello, A., Sinatra, M., Giannetta, B., Galluzzi, G., Stevanato, P., Squartini, A., **Zacccone, C.** Quantitative PCR unravels major differences between solid and liquid anaerobic digestate amendments on soil nitrogen cycle bacterial genes abundance. *Soil & Tillage Reserach*.
4. Ruggiero, L., Sciarra, A., Mazzini, A., Florindo, F., Wilson, G., Mazzoli, C., Tuccimei, P., Galli, G., Tositti, L., Zappi, A., Anderson, J., Davidson, L., Benà, E., Olivetti, V., Tartarello, M.C., Mattia, M., Giagnoni, F., **Zacccone, C.**, Bigi, S., Sassi, R., Ciotoli, G.  $^{222}\text{Rn}$  and  $^{220}\text{Rn}$  as climate-sensitive tracers of Antarctic permafrost dynamics in a McMurdo Dry Valley. *Environmental Research*.
5. Torresani, M., Darissa, O., Hanania, M., **Zacccone, C.**, Bouaicha, O., Russo, A., Insam, H., Montagnani, L., Fracasso, I., Tiziani, R., Tognetti, R., Cesco, S., Zehetner, F., Fusi, M., Rocchini, D., Sannino, C., Turchetti, B., Buzzini, P., Mugnai, G., Capozzi, V., Cirella, G., Esperón-Rodríguez, M., Gamalero, E., Mimmo, T., Neilson, R., Borruso, L. Soil Health in a Conflict-Affected Area: An Open-Source Google Earth Engine Framework to Map Degradation in Gaza. *Progress in Physical Geography*.
6. Wang, Z., Shibata, M., Lyu, H., Dahlgren, R.A., Kuzyakov, Y., Watanabe, T., **Zacccone, C.**, Chisambi, C., Funakawa, S. Depth effects of organic matter stabilization 1 in temperate acidic forest soils. *Catena*.

#### B) Book Chapters (n = 20)

1. **Zacccone, C.**, Adamo, A., Barberis, E., Celi, L., Ciavatta, C., Miano, T. (2024) *Chapter 37. The Italian Society of Agricultural Chemistry*. In: Dazzi, C., Benedetti, A., Corti, G., Costantini, E.A.C. (Eds). *Soil Science in Italy*. Springer, pp. 667-672 (ISBN: 978-3-031-52743-2; doi: 10.1007/978-3-031-52744-9\_37).
2. Vinci, I., Obber, S., Ragazzi, F., Bini, C., Concheri, G., Garlato, A., Vitturi, A., **Zacccone, C.**, Giandon, P. (2024) *Chapter 27. The Development of Soil Science in Veneto*. In: Dazzi, C., Benedetti, A., Corti, G., Costantini, E.A.C. (Eds). *Soil Science in Italy*. Springer, pp. 505-546 (ISBN: 978-3-031-52743-2; doi: 10.1007/978-3-031-52744-9\_27).
3. Mastorilli, M., Loffredo, E., Lopez, R., Stellacci, A.M., **Zacccone, C.** (2024) *Chapter 20. The Development of Soil Science in Apulia*. In: Dazzi, C., Benedetti, A., Corti, G., Costantini, E.A.C. (Eds). *Soil Science in Italy*. Springer, pp. 369-381 (ISBN: 978-3-031-52743-2; doi: 10.1007/978-3-031-52744-9\_20).
4. Corti, G., Altobelli, F., Chiti, T., Buscaroli, A., Colombo, C., Freppaz, M., Giannetta, B., Laudicina, V.A., Lo Papa, G., Marinari, M., Mocali, S., Rao, M.A., **Zacccone, C.** (2023) *Capitolo 3. Un'agricoltura "amica del suolo" contro la desertificazione*. In: Il suolo italiano al tempo della crisi climatica - Rapporto 2023. Re Soil Foundation, pp. 137-142 (ISBN: 979-12-210-4738-7) (in Italian).
5. Said-Pullicino, D., Spaccini, R., **Zacccone, C.** (2022) *Capitolo 16. Aspetti di C sequestration*. In: Ciavatta, C., Gigliotti, G., Miano, T., Tambone, F., Zacccone, C. (a cura di). *Biomasse in agricoltura. Caratterizzazione ed utilizzo sostenibile*. Pàtron editore, pp. 321-332 (ISBN: 9788855535649) (in Italian).
6. **Zacccone, C.**, Ciavatta, C., Gigliotti, G., Miano, T., Tambone, F. (2022) *Riciclo delle biomasse, Green Deal e sviluppo sostenibile*. In: Ciavatta, C., Gigliotti, G., Miano, T., Tambone, F., Zacccone, C. (a cura di). *Biomasse in agricoltura. Caratterizzazione ed utilizzo sostenibile*. Pàtron editore, pp. 13-21 (ISBN: 9788855535649) (in Italian).
7. Ciavatta, C., Centemero, M., Toselli, M., **Zacccone, C.**, Senesi, N. (2022) *Compost Production, Analysis and Applications in Agriculture*. In: Yang, Y., Keilweit, M., Senesi, N., Xing, B. (Eds). *Multi-scale Biogeochemical Processes in Soil Ecosystems: Critical Reactions and Resilience to Climate Changes*. Wiley-IUPAC Series on Biophysico-Chemical Processes in Environmental Systems. pp. 297-321 (ISBN: 9781119480341; doi: 10.1002/9781119480419.ch13) (listed in Scopus).
8. Caporale, A.G., **Zacccone, C.** (2020) *Chapter 2. Basilicata*. In: Adamo, P., Capra, G.F., Vacca, A., Vianello, G. (Eds). *Proverbi del suolo/Soil Proverbs, Geoparemiologia*, Edizioni dell'Orso, pp. 35-44 (ISSN: 2704-9183; ISBN: 978-88-3613-032-0).
9. Plaza, C., Gascó, G., Méndez, A., **Zacccone, C.**, Maestre, F.T. (2018) *Chapter 2. Soil organic matter in dryland ecosystems*. In: García, C., Nannipieri, P., Hernández, T. (Eds.). *The Future of Soil Carbon: Its conservation and formation*, Elsevier, pp. 39-70 (ISBN: 978-0-12-811687-6; doi: 10.1016/B978-0-12-811687-6.00002-X) (listed in Scopus and WoS).
10. **Zacccone, C.**, Castellano, C., Miano, T., Balena, P., Bonifazi, A. (2017) *Capitolo 3.1. Governo del territorio e "soil conservation": fattori di rischio di perdita di sostanza organica del suolo in Puglia*. In: Torre, C.M., Bonifazi, A., Arcidiacono, A., Ronchi, S., Salata, S. (a cura di). *Il consumo di suolo in Puglia - 2017. Rapporti regionali*, INU Edizioni, pp. 279-290 (ISBN: 978-88-7603-160-1) (in Italian).

11. Badalucco, L., Laudicina, V.A., **Zacccone, C.** (2017) *Capitolo 12. Suoli particolari*. In: Sequi P., Ciavatta C., Miano T. (Coord.). Fondamenti di Chimica del suolo, Pàtron editore, pp. 235-256 (ISBN: 978-88-555-3362-1) (in Italian).
12. **Zacccone, C.**, Sequi, P. (2017) *Capitolo 1. Suolo e ambiente*. In: Sequi P., Ciavatta C., Miano T. (Coord.). Fondamenti di Chimica del suolo, pp. 235-256, pp. 15-25 (ISBN: 978-88-555-3362-1) (in Italian).
13. **Zacccone, C.**, Martin, M., Freppaz, M., Said-Pullicino, D., Celi, L. (2015) *Peatlands and organic soils*. In: Romeo, Vita, Manuelli, Zanini, Freppaz, Stanchi (Eds). Understanding Mountain Soils: A contribution from mountain areas to the International Year of Soils 2015. FAO, Rome, Italy, pp. 67-69 (ISBN: 978-92-5-108804-3).
14. Miano, T., D'Orazio, V., **Zacccone, C.** (2014) *Chapter 9. Trace elements and food safety*. In: Bini, C., Bech, J. (Eds.). PHEs, Environment and Human Health. Potentially harmful elements in the environment and the impact on human health, Springer, pp. 339-370 (print ISBN 978-94-017-8964-6; on-line ISBN: 978-94-017-8965-3) (doi: 10.1007/978-94-017-8965-3\_9) (listed in Scopus).
15. **Zacccone, C.**, Pabst, S., Miano, T.M., Shotyk, W. (2013) *The fate of mineral particles in bulk peat and corresponding humic acids throughout an ombrotrophic bog profile: atmospheric dust depositions vs. mineralization processes*. In: Xu, J., Wu, J., He, Y. (Eds.). Functions of Natural Organic Matter in Changing Environment, Springer, Vol. I, pp. 61-65 (print ISBN: 978-94-007-5633-5; on-line ISBN: 978-94-007-5634-2) (doi: 10.1007/978-94-007-5634-2\_11) (listed in Scopus).
16. **Zacccone, C.**, Cocozza, C., Miano, T.M. (2011) *Chapter 9. Phenolic Compounds in Soils*. In: Narwal, S.S., Szajdak, L., Sampietro, D.A. (Eds.). Research Methods in Plant Science, Vol. 1. Soil Allelochemicals, Studium Press LLC, pp. 199-222 (ISBN: 1-933699-65-5; ISBN: 978-19-336-9965-3) (listed in WoS).
17. Cocozza, C., Mininni, C., **Zacccone, C.**, Miano, T., Santamaria, P., Parente, A. (2009) *Il processo di compostaggio applicato ai residui di Posidonia spiaggiata*. In: Levante Editore. Il caso dei residui spiaggiati di Posidonia oceanica: da rifiuto a risorsa, pp. 121-139 (ISBN: 978-88-7949-521-9) (in Italian).
18. Parente, A., Cocozza, C., Mininni, C., **Zacccone, C.**, Santamaria, P., Miano, T. (2009) *Utilizzazione dei residui spiaggiati di Posidonia oceanica (L.) Delile tal quali e per la produzione di compost*. In: La Posidonia oceanica: Protezione, Ripopolazione di praterie e Utilizzazione dei Residui in Agricoltura, pp. 41-61 (ISBN: 978-960-86583-5-6) (in Italian).
19. Contento, F., **Zacccone, C.**, Buono, F., Ladisa, G., Grittani, A. (2008) *Handbook of Indicators*. In: Lacirignola, C., Notarangelo, B. (Eds.). Management Criteria: a handbook for the sustainable management of protected areas in the Adriatic euro-region. IAM Bari, Italy, pp. 109 + Cd-rom (ISBN: 2-85352-402-7).
20. Gentile, F., **Zacccone, C.**, Forte, L., Mantino, F., Puglisi, S. (2006) Impiego di briglie filtranti in un torrente della Basilicata e aspetti della rinaturazione indotti dal tipo di intervento. In: Nuova Editoriale Bios. Le sistemazioni idraulico-forestali per la difesa del territorio. *Quaderni di Idronomia Montana*, 26: 413-423 (ISBN: 88-6093-009-X) (in Italian).

#### C) Contributions in Conference Proceedings or in Journals with ISSN or ISBN (n = 13)

1. Bonifacio, E., Celi, L., Dazzi, C., Vittori Antisari, L., **Zacccone, C.**, 2023 - *Il ruolo dei suoli nella bioeconomia*. I Quaderni di AISSA, 5: 63-69 (ISBN: 978-88-945925-4-2) (in Italian).
2. Sofia, G., **Zacccone, C.**, Tarolli, P., 2022 - *Tecnologie e strumenti digitali per migliorare la gestione idrica*. L'Informatore Agrario, 35: 86-88 (ISSN: 0020-0689) (in Italian).
3. **Zacccone, C.**, Plaza, C., Ciavatta, C., Miano, T.M., Shotyk, W., 2018 - *Determination of humification degree in peat profiles*. In: Book of Abstracts of the 19th Meeting of the International Humic Substances Society "Humic Substances and their contribution to the climate change mitigation", September 16-21, 2018, Albena Resort, Varna Region, Bulgaria, 53-54 (ISBN: 978-619-90189-3-4).
4. Cavallo, O., De la Rosa, J.M., González-Pérez, J.A., **Zacccone, C.**, Knicker, H., Pezzolla, D., Gigliotti, G., Provenzano, M.R., 2018 - *Effects of percolate recirculation frequency on the organic matter composition after solid-state anaerobic digestion of straw and pig slurry*. In: Book of Abstracts of the 19th Meeting of the International Humic Substances Society "Humic Substances and their contribution to the climate change mitigation", September 16-21, 2018, Albena Resort, Varna Region, Bulgaria, 285-286 (ISBN: 978-619-90189-3-4).
5. Pavan, C., Celi, L., D'Amico, M., Freppaz, M., Siniscalco, C., **Zacccone, C.**, 2016 - *Relazione tra specie vegetali e clima nella formazione di una torbiera alpina su serpentinite*. Nimbus, 75: 29-32 (ISSN: 1122-4339) (in Italian).
6. **Zacccone, C.**, Miano, T.M., 2011 - *La percezione del suolo come "memoria storica" dei cambiamenti ambientali*. In: Le Penseur (Ed). "La percezione del Suolo" - Atti del workshop. Giornata mondiale del Suolo, 2-3 December, 2010, Palermo, Italy, 203-206 (ISBN: 978-88-95315-11-9) (in Italian).

7. **Zacccone, C.**, Shotyk, W., Cocozza, C., Miano, T.M., 2010 - *Major and trace elements biogeochemistry and C sequestration in bog soils*. In: Gilkes RJ, Prakongkep N (Eds.). Proceedings of the 19<sup>th</sup> World Congress of Soil Science; Soil Solutions for a Changing World (ISBN: 978-0-646-53783-2); Published on DVD; <http://www.iuss.org>; Division Symposium 2.1; Wetland soils and global change; 2010 Aug 1-6. Brisbane, Australia: IUSS; 2010, pp. 33-36.
8. Bonifazi, A., Grittani, R., **Zacccone, C.**, Trisorio Liuzzi, G., 2008 - *INNOVA Protected Area "Management Practices Database"*. In: Pace and Di Terlizzi (Eds.) "Planning and Sustainable Management of Coastal Zones and High Environmental Value Areas". Final Networks' Meeting & Seminar Proceeding, 17-18 December 2007, Bari, Italy, 103-108 (ISBN: 2-85352-391-8).
9. Parente A., Cocozza, C., Spinelli, M., **Zacccone, C.**, Miano, T.M., Santamaria, P., 2007 - *I residui di Posidonia oceanica (L.) Del.: un rifiuto o una risorsa da valorizzare?* In: Maggioli (Ed.) "La cultura e le tecnologie ambientali in Italia ed in Europa". Atti dei seminari Ecomondo 2007, Rimini, Italy, vol. 317-1, pp. 79-83 (ISBN: 88-387-3979-X) (in Italian).
10. **Zacccone, C.**, Cocozza, C., Cheburkin, A.K., Shotyk, W., Miano, T.M., 2007 - *Il bromo nella torba e negli acidi umici - Possibili implicazioni nella ricostruzione del suo ciclo biogeochimico?* In: "Suolo Ambiente Paesaggio". Atti del Convegno Nazionale della Società Italiana della Scienza del Suolo (2006), Imola, Italy, 147-153 (ISBN: 88-902831-1-4) (in Italian).
11. **Zacccone, C.**, Miano, T., Shotyk, W., 2007 - *Evoluzione delle componenti organiche ed interazioni con gli elementi traccia in una torbiera ombrotrofica*. In: "Il suolo: sistema centrale nell'ambiente e nell'agricoltura". Atti del Convegno Nazionale della Scienza del Suolo (2005), Bari, Italy, 211-218 (ISBN: 978-88-902831-0-9) (in Italian).
12. **Zacccone, C.**, Miano, T., Shotyk, W., 2006 - *Bromine Behavior in Raw Peat and Humic Acids from an Ombrotrophic Bog*. In: F.H. Frimmel and G. Abbt-Braun (Eds.) "Humic Substances – Linking Structure to Functions". Proceedings of the 13<sup>th</sup> Meeting of the International Humic Substances Society, Karlsruhe, Germany. Vol. II, pp. 657-660 (ISSN: 1612-118x).
13. Gentile, F., Puglisi, S., **Zacccone, C.**, 2004 - *Un esempio di sistemazione a basso impatto ambientale di un'area in frana in Italia meridionale*. In: 10<sup>th</sup> Internationales Symposium "INTERPRAEVENT 2004", 24-28 maggio 2004, Riva/Trent, Italy. Vol. II, pp. 161-172 (ISBN: 3901164065) (in Italian).

**D) Contributions in National and International Congresses (n = 218)**

*[last 3 years]*

1. Capri, C., Galluzzi, G., Andreolli, M., Furlan, A., Lamastra, L., Lampis, S., **Zacccone, C.**, 2025 - *Gestione del suolo e riscaldamento globale in vigneto: impronta carbonica e valutazione socio-economica*. In: Book of Abstracts del 44<sup>o</sup> Congresso Nazionale SISS "La Ricerca sul Suolo per Supportare l'Implementazione delle Politiche", December 11-12, 2025, Portici, Italy, 134 (in Italian).
2. Sinatra, M., Galluzzi, G., Avesani, M., Zapparoli, G., Agostini, A., **Zacccone, C.**, 2025 - *Le torbiere degradate continuano a preservare parte dei cambiamenti ambientali avvenuti nei secoli: il caso della torbiera di Fiavè*. In: Book of Abstracts del 44<sup>o</sup> Congresso Nazionale SISS "La Ricerca sul Suolo per Supportare l'Implementazione delle Politiche", December 11-12, 2025, Portici, Italy, 116-117 (in Italian).
3. Giannetta, B., Galluzzi, G., **Zacccone, C.**, 2025 - *Digestato e stress climatici: effetti sulla dinamica del carbonio e sulla resa culturale nei suoli di risaia*. In: Book of Abstracts del 44<sup>o</sup> Congresso Nazionale SISS "La Ricerca sul Suolo per Supportare l'Implementazione delle Politiche", December 11-12, 2025, Portici, Italy, 80-81 (in Italian).
4. Abdelkefi, F., Galluzzi, G., Giannetta, B., Plaza, C., **Zacccone, C.**, 2025 - *Impatto del riscaldamento globale sui pool di carbonio organico del suolo e sulle rese colturali*. In: Book of Abstracts del 44<sup>o</sup> Congresso Nazionale SISS "La Ricerca sul Suolo per Supportare l'Implementazione delle Politiche", December 11-12, 2025, Portici, Italy, 39-40 (in Italian).
5. Sofia, G., **Zacccone, C.**, Dani, M., Fiume, A., 2025 - *Suolo e risorsa idrica: da una gestione del territorio reattiva ad una proattiva*. In: Book of Abstracts del 44<sup>o</sup> Congresso Nazionale SISS "La Ricerca sul Suolo per Supportare l'Implementazione delle Politiche", December 11-12, 2025, Portici, Italy, 34 (in Italian).
6. Bona, D., Bertoldi, D., **Zacccone, C.**, Golinelli, A., Mazzini, S., Borgonovo, G., Silvestri, S., Tambone, F., 2025 - *New amendment: agro-environmental properties of hydrochar and post-treated hydrochar*. In: RAMIRAN 2025 – Book of abstracts. October 15-17, 2025, Wageningen, The Netherlands, 52.
7. Picca, G., de Celis, M., de Sosa, L.L., González-Polo, N., Gómez-Ruano, C., Beneduce, L., **Zacccone, C.**, Panettieri, M., 2025 - *Turning waste into substrates enhance rooftop tomato production through microbial mediation*. In: Book of abstracts of the 13<sup>th</sup> International Conference "Soils of Urban, Industrial, Traffic,

Mining and Military Areas (SUITMA) from a One Health Perspective". October 5-9, 2025, Pisa, Italy, 155-156 (ISBN: 978-88-8080-723-0; doi: <https://doi.org/10.61008/SUITMA-2025>).

8. Giannetta, G., Pellegrini, E., Moro, E., **Zaccione, C.**, 2025 - *Influence of warming, redox dynamics and the application of exogenous organic matter on iron plaque mineralogy*. In: Advancing Soil Knowledge for a Sustainable Future: Book of Abstracts of the VII EUROSOL Meeting, September 8-12, 2025, Sevilla, Spain, 290 (ISBN: 978-84-09-75471-7).
9. Danise, T., Menta, C., Nizzoli, D., Remelli, S., Cavallini, E., Goñi-Urtiaga, A., Plaza, C., **Zaccione, C.**, 2025 - *Soil and enzyme stoichiometry in the extreme environment of Mefite d'Ansanto (Southern Italy)*. In: Advancing Soil Knowledge for a Sustainable Future: Book of Abstracts of the VII EUROSOL Meeting, September 8-12, 2025, Sevilla, Spain, 216 (ISBN: 978-84-09-75471-7).
10. Galluzzi, G., Andreolli, M., Lampis, S., **Zaccione, C.**, 2025 - *Carbon sequestration potential and microbial diversity in vineyards under a climate change scenario – Preliminary results*. In: Programme and Abstracts of the XLIII SICA Congress "The Contribution of the Agricultural Chemistry to Healthy and Resilient Agroecosystems and to the One Health Vision", June 23-25, 2025, Padua, Italy, 67.
11. Giannetta, B., Galluzzi, G., **Zaccione, C.**, 2025 - *Influence of reduced water flooding and increased temperature on SOM dynamics and crop yield in amended paddy soils*. In: Programme and Abstracts of the XLIII SICA Congress "The Contribution of the Agricultural Chemistry to Healthy and Resilient Agroecosystems and to the One Health Vision", June 23-25, 2025, Padua, Italy, 102.
12. Galluzzi, G., Capri, C., Andreolli, M., Lampis, S., **Zaccione, C.**, 2025 - *Carbon sequestration in vineyard soils: biomass utilization in a climate change scenario—the SUSTAIN project*. In: IVES Conference Series, GreenWINE 2025, 87 (doi: 10.58233/greenwine2025).
13. Galluzzi, G., **Zaccione, C.**, 2025 - *Investigating the carbon sequestration potential in vineyard soils – The SUSTAIN project*. In: IVES Conference Series, GreenWINE 2025, 19 (doi: 10.58233/greenwine2025).
14. Fewster, R., Swindles, G., Clay, G., Shuttleworth, E., Galloway, J., Gallego-Sala, A., Kelly, T., McCarter, C., Purdy, E., Sloan, J. and the PIPES research group, 2025 - *Global stocks and release pathways of pollutants in peatlands*. EGUsphere, 296 (doi: 10.5194/egusphere-egu25-296).
15. Giannetta, B., Caporale, A.G., Oliveira De Souza, D., Adamo, P., **Zaccione, C.**, 2024 - *Formation of organo-Fe (oxyhydr)oxide interactions during the first stages of Martian regolith terraforming: a step forward*. In: Programme and Abstracts of the 22<sup>nd</sup> Meeting of the International Humic Substances Society "The role of NOM and HS in achieving Sustainable Development Goals", August 25-30, 2024, Rimini, Italy, 191.
16. Porfido, C., Squeo, G., Milićević, T., Marguí, E., **Zaccione, C.**, Terzano, R., Allegretta, I., 2024 - *Customized sample preparation for TXRF analysis of soil organic matter and amendments using a multivariate experimental design*. In: Programme and Abstracts of the 22<sup>nd</sup> Meeting of the International Humic Substances Society "The role of NOM and HS in achieving Sustainable Development Goals", August 25-30, 2024, Rimini, Italy, 184.
17. Galluzzi, G., Aleotti, G., **Zaccione, C.**, 2024 - *Carbon sequestration in vineyard: biomass utilization in a climate change scenario – The SUSTAIN project*. In: Programme and Abstracts of the 22<sup>nd</sup> Meeting of the International Humic Substances Society "The role of NOM and HS in achieving Sustainable Development Goals", August 25-30, 2024, Rimini, Italy, 161.
18. Giannetta, B., Galluzzi, G., **Zaccione, C.**, 2024 - *Influence of digestate application on rice yield and soil organic matter pools in a climate change scenario*. In: Programme and Abstracts of the 22<sup>nd</sup> Meeting of the International Humic Substances Society "The role of NOM and HS in achieving Sustainable Development Goals", August 25-30, 2024, Rimini, Italy, 151.
19. Galluzzi, G., Plaza, C., Giannetta, B., Priori, S., **Zaccione, C.**, 2024 - *Time and climate as driving factors of SOM pools dynamics*. In: Programme and Abstracts of the 22<sup>nd</sup> Meeting of the International Humic Substances Society "The role of NOM and HS in achieving Sustainable Development Goals", August 25-30, 2024, Rimini, Italy, 110.
20. Consoli, V., Ruggiero, L., Tondello, A., Plaza, C., Squartini, A., Sciarra, A., Florindo, F., **Zaccione, C.**, 2024 - *Is soil organic carbon always responsible for the anomalous greenhouse gases emissions recorded from the Antarctica permafrost?* In: Programme and Abstracts of the 22<sup>nd</sup> Meeting of the International Humic Substances Society "The role of NOM and HS in achieving Sustainable Development Goals", August 25-30, 2024, Rimini, Italy, 85.
21. Danise, T., Goldoni, S.E., Dainese, M., **Zaccione, C.**, 2024 - *Influence of land use on soil ecosystems services of mountain grasslands*. In: Programme and Abstracts of the 22<sup>nd</sup> Meeting of the International Humic Substances Society "The role of NOM and HS in achieving Sustainable Development Goals", August 25-30, 2024, Rimini, Italy, 74.
22. Abdelkefi, F., Giannetta, B., Galluzzi, G., **Zaccione, C.**, 2024 - *Assessing the influence of warming on soil organic matter pools and crop yields*. In: Programme and Abstracts of the 22<sup>nd</sup> Meeting of the International

Humic Substances Society “The role of NOM and HS in achieving Sustainable Development Goals”, August 25-30, 2024, Rimini, Italy, 69.

23. Sofia, G., Sinatra, M., **Zaccione, C.**, Fiume, A., 2024 - *Combining drone-based multispectral remote sensing with soil analysis for a resilient agriculture to climate change*. In: Programme and Abstracts of the 22<sup>nd</sup> Meeting of the International Humic Substances Society “The role of NOM and HS in achieving Sustainable Development Goals”, August 25-30, 2024, Rimini, Italy, 62.
24. Sinatra, M., Cantonati, M., Galluzzi, G., Avesani, M., Bezdíková, V., Zapparoli, G., Spitale, D., Agostini, A., **Zaccione, C.**, 2024 - *An attempt to reconstruct the history of the most ancient European farming community using peat cores from the Fiavè mire*. In: Abstract book of the Centennial Celebration and Congress of the International Union of Soil Sciences, May 19-21, 2024, Florence, Italy, 138058.
25. Abdelkefi, F., Giannetta, B., Galluzzi, G., **Zaccione, C.**, 2024 - *Increasing temperature influence on soil organic carbon pools and on sugar beet and soybean yields: preliminary results*. In: Abstract book of the Centennial Celebration and Congress of the International Union of Soil Sciences, May 19-21, 2024, Florence, Italy, 137839.
26. Galluzzi, G., Plaza, C., Giannetta, B., Priori, S., **Zaccione, C.**, 2024 - *Time and climate influence on the formation and stability of soil organic matter pools*. In: Abstract book of the Centennial Celebration and Congress of the International Union of Soil Sciences, May 19-21, 2024, Florence, Italy, 137834.
27. Danise, T., Goldoni, S.E., Dainese, M., **Zaccione, C.**, 2024 - *Influence of extensive mountain grassland management in a climate change scenario*. In: Abstract book of the Centennial Celebration and Congress of the International Union of Soil Sciences, May 19-21, 2024, Florence, Italy, 137738.
28. Bona, D., Bertoldi, D., **Zaccione, C.**, Borgonovo, G., Mazzini, S., Silvestri, S., Tambone, F., 2024 - *Some effects of hydrochar, compost, and their mix on soil organic carbon and nutrients*. In: Abstract book of the Centennial Celebration and Congress of the International Union of Soil Sciences, May 19-21, 2024, Florence, Italy, 137975.
29. Giannetta, B., Bol, R., Wu, B., Siebers, N., Cacerez, J.C., **Zaccione, C.**, 2024 - *Response of organic matter pools in paddy soils to digestate application, changes in flooding level and increased temperatures*. In: Abstract book of the Centennial Celebration and Congress of the International Union of Soil Sciences, May 19-21, 2024, Florence, Italy, 137752.

[...]

E) Other (n = 3)

1. Ciavatta, C., Gigliotti, G., Miano, T., Tambone, F., **Zaccione, C.** (a cura di), 2022. *Biomasse in agricoltura. Caratterizzazione ed utilizzo sostenibile*. Pàtron Editore, pp. 366 (ISBN: 9788855535649) (in Italian).
2. Contribution to the production of the *Italian map of Soil Organic Carbon* in the frame of the Global Soil Organic Carbon Map, Global Soil Partnership, FAO (<http://54.229.242.119/GSOCmap/>).
3. “*Relazione suolo-pianta e qualità delle produzioni*” (a cura di: V. Lattanzio, **C. Zaccione**). Atti del XXIX Convegno Nazionale della Società Italiana di Chimica Agraria, 21-23 September, 2011, Foggia, Italy. pp. 108 + xxii (in Italian).

**Seminars and invited lectures in National/International Congresses and Meetings (n = 78)**

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*Claudio Zaccione*