

Alessandro Cau, PhD

Assistant Professor of Marine Ecology c/o Department of Life and Environmental Sciences
University of Cagliari
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CURRENT POSITION

2021 – present **Assistant Professor of Ecology (RTDb)**, University of Cagliari, Italy

HIGHLIGHTS:

- Currently PI of a newly established research lab working on topics inherent marine ecology and the impact of microplastics in the environment
 - Internationally recognized member of the scientific community working on ecological features of vulnerable habitats such as benthic marine animal forests and the impacts of marine litter and microplastic in the marine environment
 - Regular publication of high-impact research and broad scientific connections with several EU and non-EU research institutes
 - Strong record of participation in National and International Research Projects
 - Strong record of outreach in national and international press releases and television (e.g., Forbes Science, GEO, TGLeonardo and others)
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EDUCATION & MORE:

- 2018 Italian National Academic Qualification as Associate Professor in Ecology (SSD BIO/07);
- 2015 PhD in Marine Ecology (*titulus* Doctor Eurpaeus), University of Cagliari (Cagliari, Italy), Thesis title: “Deep water coral forests from the island of Sardinia”. Advisor: Prof. Rita Cannas (UniCa), external advisors: Dr. Katell Guizien and Dr. Lorenzo Bramanti (Universitèe Pierre and Marie Curie, CNRS), Final grade: Excellent
- 2011 Master’s Degree (MSc) in Marine Biology University of Cagliari (Cagliari, Italy)
Final grade: 110/110 *summa cum laude*
- 2009 Bachelor Degree (BSc) in Applied Bio-Ecology University of Cagliari (Cagliari, Italy)
Final grade: 110/110 *summa cum laude*
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SELECTED RESEARCH PROJECTS & PROFESSIONAL EXPERIENCES

- 2018 - 2021 Assistant Professor of Ecology (RTDa), University of Cagliari, Italy
- 2020 - 2024 FAO Regional Research Program on Red Coral (Role: FAO Consultant)
- 2019 Project: Fishing for Litter and Abandoned Gears in Sardinia (FLAGS; Role: PI)
- 2017/2018 XXXII Italian Expedition to Antarctica (Progetto BEDROSE;2016/A3.02; Role: Participant)
- 2016/2017 XXXI Italian Expedition to Antarctica (Progetto CEFA; 2013/AZ1.06; Role: Participant)
- 2015-2018 Post-Doc researcher c/o Dip. di Architettura, Design e urbanistica, University of Sassari (Italy).
- 2014 Visiting PhD student c/o Laboratoire d’Ecogèochimie del Environnements Benthiques, CNRS/UPMS, Banyuls sur mer (France)
- 2011 Visiting MD student c/o ‘Levin Lab’ Scripps Institution of Oceanography, La Jolla, California, (USA)
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ADVISING & TEACHING

Supervisor of 1 international postdoctoral researcher, 4 UniCa MSc students, 4 Bachelor students and co-supervisor of 3 PhD candidates, all working on different impacts and pathways of microplastic contamination in the marine environment. AC was also selected as international supervisor for a MSc dissertation from University of Cape Town (South Africa) and member of the board for the defence of PhD dissertation at Universitat Autònoma de Barcelona (Spain).

INVITED LECTURES:

2022 Institute of Hydrobiology, of the Centre of the Czech Academy of Sciences in České Budějovice (Czech Republic)

SCIENTOMETRICS (updated: 26.06.24):

Year of first publication: 2011

Articles in Indexed Journals: 99 (Scopus)

Citations: 2619 (Scopus), 2865 (Google Scholar)

H-Index: 25 (Scopus), 28 (Google Scholar)

SELECTED PEER REVIEWED ARTICLES OF THE LAST 5 YEARS (2017-2024)

2024

Gorule Pankaj A., Šmejkal Marek, Tapkir Sandip, Stepanyshyna Yevdokiia, Stejskal Vlastimil, Follesa Maria Cristina, **Cau Alessandro**. Long-term sublethal exposure to polyethylene and tire wear particles: Effects on risk-taking behaviour in invasive and native fish. **SCIENCE OF THE TOTAL ENVIRONMENT**

Carreras-Colom Ester, Follesa Maria Cristina, Carugati Laura, Mulas Antonello, Bellodi Andrea, **Cau Alessandro**. Marine macro-litter mass outweighs biomass in trawl catches along abyssal seafloors of Sardinia channel (Italy). **ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH**

Cau Alessandro, Sbrana Alice, Franceschini Simone, Fiorentino Fabio, Follesa Maria Cristina, Galgani François, Garofalo Germana, Gerigny Olivia, Profeta Adriana, Rinelli Paola, Sbrana Mario, Russo Tommaso. What, where, and when: Spatial-temporal distribution of macro-litter on the seafloor of the western and central Mediterranean sea. **ENVIRONMENTAL POLLUTION**

2023

Cau Alessandro, Gorule Pankaj A., Bellodi Andrea, Carreras-Colom Ester, Moccia Davide, Pittura Lucia, Regoli Francesco, Follesa Maria Cristina. Comparative microplastic load in two decapod crustaceans *Palinurus elephas* (Fabricius, 1787) and *Nephrops norvegicus* (Linnaeus, 1758). **MARINE POLLUTION BULLETIN**

Joyce Haleigh, Nash Róisín, Frias João, White Jonathan, **Cau Alessandro**, Carreras-Colom Ester, Kavanagh Fiona. Monitoring microplastic pollution: The potential and limitations of *Nephrops norvegicus*. **ECOLOGICAL INDICATORS**

2022

Cau Alessandro, Franceschini Simone, Moccia Davide, Gorule Pankaj A., Agus Blondine, Bellodi Andrea, Cannas Rita, Carugati Laura, Cuccu Danila, Dessi Claudia, Marongiu Maria Francesca, Melis Riccardo, Mulas Antonello, Porceddu Riccardo, Porcu Cristina, Russo Tommaso, Follesa Maria C. (2022). Scattered accumulation hotspots of macro-litter on the seafloor: Insights for mitigation actions. **ENVIRONMENTAL POLLUTION**.

2021

Cau Alessandro, Ennas Claudia, Moccia Davide, Mangoni Olga, Bolinesi Francesco, Saggiomo Maria, Granata Antonia, Guglielmo Letterio, Swadling Kerrie M, Pusceddu Antonio. Particulate organic matter release below melting sea ice (Terra Nova Bay, Ross Sea, Antarctica): Possible relationships with zooplankton. **JOURNAL OF MARINE SYSTEMS**.

Canals Miquel, Pham Christopher K., Bergmann Melanie, Gutow Lars, Hanke Georg, van Sebille Erik, Angiolillo Michela, **Cau Alessandro**, Ioakeimidis Christos, Kammann Ulrike, Lundsten Lonny, Papatheodorou George, Purser Autun, Sanchez-Vidal Anna, Schulz Marcus, Vinci Matteo, Chiba Sanae, Galgani Francois, Lagenkamper Daniel, Moller Tiia, Nattkemper Tim W., Ruiz Marta, Suikkanen Sanna, Woodall Lucy, Fakiris Elias, Molina Maria Eugenia Jack, Giorgetti Alessandra (2021). The Quest for Seafloor Macrolitter: A Critical Review of Background Knowledge, Current Methods and Future Prospects.

ENVIRONMENTAL RESEARCH LETTERS.

2020

Cau Alessandro, Avio Carlo Giacomo, Dessi Claudia, Moccia Davide, Regoli Francesco, Pusceddu Antonio, Cannas Rita, Follesa Maria Cristina (2020). Benthic crustacean digestion can modulate environmental fate of microplastic in the deep sea.

ENVIRONMENTAL SCIENCE & TECHNOLOGY.

2019

Cau Alessandro, Avio Carlo Giacomo, Dessi Claudia, Follesa Maria Cristina, Moccia Davide, Regoli Francesco, Pusceddu Antonio. Microplastic in the crustaceans *Nephrops norvegicus* and *Aristeus antennatus*: flagship species for deep-sea environments? **ENVIRONMENTAL POLLUTION**.

Cau Alessandro, Bellodi Andrea, Cannas Rita, Fois Maurizio, Guidetti Paolo, Moccia Davide, Porcu Cristina, Pusceddu, Antonio, Follesa Maria Cristina (2019). European spiny lobster recovery from overfishing enhanced through active restocking in Fully Protected Areas. **SCIENTIFIC REPORTS**.

Cau Alessandro, Bellodi Andrea, Moccia Davide, Mulas Antonello, Porcu Cristina, Pusceddu Antonio, Follesa Maria Cristina (2019). Shelf-life and labels: a cheap dating tool for seafloor macro litter? Insights from MEDITS surveys in

Sardinian sea. **MARINE POLLUTION BULLETIN.**

2018

Cau Alessandro, Bellodi Andrea, Moccia Davide, Mulas Antonello, Pesci Paola, Cannas Rita, Pusceddu Antonio, Follesa Maria Cristina (2018). Dumping to the abyss: single-use marine litter invading bathyal plains of the Sardinian margin (Tyrrhenian sea). **MARINE POLLUTION BULLETIN.**

2017

Cau Alessandro, Follesa Maria Cristina, Moccia Davide, Bellodi Andrea, Mulas Antonello, Bo Marzia, Canese Simonepietro, Angiolillo Michela, Cannas Rita (2017). *Leiopathes glaberrima* millennial forest from SW Sardinia as nursery ground for the small spotted catshark *Scyliorhinus canicula*. **AQUATIC CONSERVATION: MARINE AND FRESHWATER ECOSYSTEMS.**

Cau Alessandro, Moccia Davide, Follesa Maria Cristina, Alvito Andrea, Bo Marzia, Angiolillo Michela, Canese Simonepietro, Cuccu Danila, Cannas Rita (2017). Coral forests diversity in the lower shelf of the south Sardinian continental margin. **DEEP SEA RESEARCH PART I: OCEANOGRAPHIC RESEARCH PAPER.**

Cau Alessandro, Alvito Andrea, Moccia Davide, Canese Simonepietro, Pusceddu Antonio, Cannas Rita, Angiolillo Michela, Follesa Maria Cristina (2017). Submarine canyons along the upper Sardinian slope (Central Western Mediterranean) as repositories for derelict fishing gears. **MARINE POLLUTION BULLETIN**