

Valentina Costa



Born in Palermo (Italy) on 04/06/1983

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Current Position: ricercatore TI III° livello

Current Affiliation:

Integrative Marine Ecology Department,
Stazione Zoologica Anton Dohrn,
CRIMAC, Calabria Marine Centre, C.da Torre Spaccata 87071, Amendolara (CS), Italy

Education/Training/Experience

Institute and Location	Degree / Function	Year	Field of Study
University of Palermo, Italy	Bachelor (Laurea Triennale)	2002-2007	Biology
University of Palermo, Italy	Master (Laurea Specialistica)	2007-2009	Marine Biological Resources
University of Parma, Italy	PhD	2010-2013	Seagrass detritus dynamics in marine ecosystems
GEOMAR, Kiel, Germany	Postdoc	2013	Ocean acidification effects on seagrass decomposition
University of Palermo, Italy	Postdoc	2014-2016	Test growth of echinoderms
Archipelagos Institute of Marine Conservation, Samos Island, Greece	Scientific Supervisor	2017	Coordination of the Marine Conservation Team
Marbec laboratory, University of Montpellier, France	Postdoc	2018	<i>Zostera noltei</i> detritus as a Blue Carbon source
Universidade de Aveiro, CESAM, Portugal	Postdoc	2018-2020	Restoration of Ria de Aveiro seagrass ecosystem

Stazione Zoologica Anton Dohrn, Palermo-Messina, Italy	Postdoc	2021-2022	Adaptation of marine organisms in environmental stress conditions
Stazione Zoologica Anton Dohrn, Amendolara, Italy	Researcher	2022 - present	Biodiversity, ecology and Functioning of Marine Ecosystems

Appointments and awards

2018: Best Oral Presentation for the Communication “Development of an efficient and cost-effective tool for mapping *Posidonia oceanica* in the eastern Aegean” at the 12th Panhellenic Symposium of Oceanography & Fisheries, Corfù (Greece)

2017: Award “Luigi e Francesca Brusarosco” funded by Italian Society of Ecology S.It.E.

2012: Research Grant “International Training Fellowship” with a project “Analysis of the ocean acidification effects on the decomposition dynamic of seagrass detritus: a mesocosm experiment” funded by University of Palermo

2009: Degree Award “Banco di Sicilia” funded by University of Palermo

Other

Member of the British Ecological Society

Member of the International Association for Biological Oceanography

Review Editor in Marine Ecosystem Ecology, *Frontiers in Marine Ecology*

Editor in PeerJ Hub - The International Association for Biological Oceanography

Editor: Special Issue, *Diversity* (MDPI) “Marine Ecosystem Restoration: Challenges and Opportunities” (https://www.mdpi.com/journal/diversity/special_issues/P2858D86VR); Special Issue, PeerJ, “The State of Active Seagrass Conservation and Restoration” (<https://peerj.com/special-issues/126-seagrass>)

Review of Grant Applications: British Ecological Society (Review College)

Students’ Supervision

(co-supervisor) 2013, MSc in “Marine Ecology”, Thesis “Study of the epifauna associated with *Posidonia oceanica* foliar canopy in an area affected by CO₂ emissions” Lorenzo Evola, University of Palermo (Italy)

(external supervisor) 2017, Internship MSc in “Earth Sciences”, Report “Assessment of microplastics in shallow marine sediment in Samos, Greece” Vera De Ruijter, Utrecht University (The Netherlands)

Fellowship supervisor: Asia Paone (2023-2024)

Publications

Author of 17 publications on ISI-journals (h index: 10)

List of publications of the last 10 years:

Peer-reviewed publications:

Sciutteri V, **Costa V**, Malara D, Figurella F, Campbell I, Deery E, Romeo T, Andaloro F, Consoli P (2024) Citizen science through a recreational underwater diving project supports the collection of large-scale marine litter data: The Oceania case study. *Marine Pollution Bulletin*, DOI: 10.1016/j.marpolbul.2024.116133

Signa G, Sciutteri V, Tomasello A, **Costa V**, Casabianca S, Cilluffo G, Andolina C, Vizzini S (2023) Combined exposure to CO₂ and H₂S significantly reduces the performance of the Mediterranean seagrass *Posidonia oceanica*: evidence from a volcanic vent. *Limnology and Oceanography Letters*, DOI: 10.1002/lol2.10368

Galasso C, Ruocco N, Mutalipassi M, Barra L, **Costa V**, Giommi C, Dinoi A, Genovese M, Pica D, Romano C, Greco S, Pennesi C (2023) Marine polysaccharides, proteins, lipids, and silica for drug delivery systems: a review. *International Journal of Biological Macromolecules*, DOI: 10.1016/j.ijbiomac.2023.127145

Costa V, Sciutteri V, Consoli P, Manea E, Menini E, Andaloro F, Romeo T, Danovaro R (2023) Volcanic-associated ecosystems of the Mediterranean Sea: a Systematic Map and an Interactive Tool to support their conservation. *PeerJ*, DOI: 10.7717/peerj.15162

Pietroluongo G, Martin-Montalvo BQ, Antichi S, Miliou A, **Costa V** (2022) First assessment of micro-litter ingested by dolphins, sea turtles and monk seals found stranded along the coasts of Samos Island, Greece. *Animals*, DOI: 10.3390/ani12243499

Costa V, Flindt MR, Lopes M, Coelho PJ, Costa AF, Lillebø AI, Sousa AI (2022) Enhancing the resilience of *Zostera noltei* seagrass meadows against *Arenicola* spp. bio-invasion: A decision-making approach. *Journal of Environmental Management*, DOI: 10.1016/j.jenvman.2021.113969

Costa V, Chemello R, Iacofano D, Lo Brutto S, Rossi F (2021) Small-scale patches of detritus as habitat for invertebrates within a *Zostera noltei* meadow. *Marine Environmental Research*, DOI: 10.1016/j.marenvres.2021.105474

Costa V, Serôdio J, Lillebø AI, Sousa AI (2021) Use of hyperspectral reflectance to non-destructively estimate seagrass *Zostera noltei* biomass. *Ecological Indicators*, DOI: 10.1016/j.ecolind.2020.107018

Costa V, Mazzola A, Rossi F, Vizzini S (2019) Decomposition rate and invertebrate colonization of seagrass detritus along a hydrodynamic gradient in a Mediterranean coastal basin: the Stagnone di Marsala (Italy) case study. *Marine Ecology*, DOI: 10.1111/maec.12570

de Ruijter NV, Miliou A, **Costa V** (2019) Assessment of microplastics distribution and stratification in the shallow marine sediments of Samos Island, Eastern Mediterranean Sea, Greece. *Mediterranean Marine Science*, Special Issue, DOI: 10.12681/mms.19131

- Visconti G, Gianguzza F, Butera E, **Costa V**, Vizzini S, Byrne M, Gianguzza P (2017) Morphological response of the larvae of *Arbacia lixula* to near-future ocean warming and acidification. ICES Journal of Marine Science, DOI: 10.1093/icesjms/fsx037
- Signa G, Mazzola A, **Costa V**, Vizzini S (2015) Bottom-up control of macrobenthic communities in a guanotrophic coastal system. Plos One, DOI: 10.1371/journal.pone.0117544
- Costa V**, Mazzola A, Vizzini S (2014) *Holothuria tubulosa* Gmelin 1791 (Holothuroidea, Echinodermata) enhances organic matter recycling in *Posidonia oceanica* meadows. Journal of Experimental Marine Biology and Ecology, DOI: 10.1016/j.jembe.2014.08.008
- Vizzini S, Di Leonardo R, **Costa V**, Tramati DC, Luzzu F, Mazzola A (2013) Trace element bias in the use of CO₂-vents as analogues for low-ph environments: implication for contamination levels in acidified oceans. Estuarine, Coastal and Shelf Science, DOI: 10.1016/j.ecss.2013.09.015
- Vizzini S, **Costa V**, Tramati DC, Gianguzza P, Mazzola A (2013) Trophic transfer of trace elements in an isotopically constructed food chain from a semi-enclosed marine coastal area (Stagnone di Marsala, Sicily, Mediterranean). Archives of Environmental Contamination and Toxicology, DOI: 10.1007/s00244-013-9933-1
- Colombo F, **Costa V**, Dubois SF, Gianguzza P, Mazzola A, Vizzini S (2013) Trophic structure of vermetid reef community: High trophic diversity at small spatial scales. Journal of Sea Research, DOI: 10.1016/j.seares.2012.10.005
- Vizzini S, Colombo F, **Costa V**, Mazzola A (2012) Contribution of planktonic and benthic food sources to the diet of the reef-forming vermetid gastropod *Dendropoma petraeum* in the western Mediterranean. Estuarine, Coastal and Shelf Science, DOI: 10.1016/j.ecss.2011.11.021