

CV Prof. Antonio Pusceddu

Current Position: Full Professor of Ecology at the Department of Life and Environmental Sciences at the University of Cagliari

Currently President of the Italian Society of Ecology (2023-2024), Board Member of the International Association for Ecology (INTECOL), and Delegate of the University of Cagliari (UniCa) Rector in the Working Group "Climate Change" within the Network of the Italian Universities for the Sustainable Development, AP is Full Professor of Ecology at UniCa (since December 2017). Previously coordinator of the Biology School at UniCa (2018-2024), Representative of UniCa in the Directive Council of the Italian Interuniversity Consortium for Marine Sciences (2015-2023), Associate Professor of Ecology at UniCa (October 2015-December 2017), and at the Polytechnic University of Marche, Italy (2008-2015), Researcher in Ecology (Polytechnic University of Marche; 1998-2008), Vice-President (2012-2015) and President (2016-2019) of the Italian Association of Limnology and Oceanography (AIOL). AP is national coordinator of the projects "Ocean Acidification effects on Biodiversity and Ecosystem Functioning relationships across gradients of habitat complexity (OCABEF)" funded within the Italian Projects of National Interests program (PRIN 2022a) and is participating to the projects: i) Below-ground processes In Seagrass meadows: responses and adaptation to climate change (BORIS) funded within the Italian National Interests program PRIN 2022 PNRR; ii) eINS - Ecosystem of Innovation for Next Generation Sardinia funded within the Italian National Plan of Recovery and Resilience (PNRR). Since 1994, Antonio Pusceddu has been responsible for, coordinated or participated in several national research programs funded by local bodies, national institutions (ISPRA, PNRA, MUR, MINAMBIENTE) and in numerous international research projects funded by EU (FPIII, FPV, FPVI, FPVII). AP has carried out his research in several marine ecosystems, from transitional aquatic ecosystems to the oceans' hadal depths, with focus on the trophodynamics of the benthic realm and ascertaining how they vary in response to different typologies of anthropogenic or natural disturbance, including climate change. AP is author of 162 peer reviewed articles and currently scores a Hirsch factor of 48 and >7130 citations (SCOPUS, September 2024, is member of the Editorial Board of Marine Environmental Research (Elsevier), Chemistry and Ecology (Taylor & Francis, UK), Marine Ecology (Wiley), and served as a Reviewer for more than 40 scientific journals. AP currently teaches Marine Biology, Environmental Sustainability, Ecosystem Based Management at the University of Cagliari, and held over time the teachings of Ecology, Analysis of Ecological Systems, Conservation of Nature and its resources, Environmental Monitoring, Marine Ecology Laboratory and Operational Oceanography at the Polytechnic University of Marche (Ancona, Italy, 2000-2015). AP has been evaluator of national and international research projects, Commissioner for granting the title of PhD and Commissioner for places to Researchers, Associate or Full Professors of Ecology in more than 10 Italian Universities and several Public Research Institutions.

Selected publications (2014-2024)

Gambi C., **Pusceddu A.**, Benedetti Cecchi L., Danovaro R. (2014) Species richness, species turnover and functional diversity in nematodes of the deep Mediterranean Sea: searching for drivers at different spatial scales. *Global Ecology and Biogeography*, 23: 24–39. <https://doi.org/10.1111/geb.12094>

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- Sanchez-Vidal A., Veres O., Langone L., Ferré B., Calafat A., Canals M., Durrieu de Madron X., Heussner S., Mienert J., Grimalt J.O., **Pusceddu A.**, Danovaro R. (2015) Particle sources and downward fluxes in the eastern Fram strait under the influence of the west Spitsbergen current. *Deep-Sea Research I*, 103: 49-63. <https://doi.org/10.1016/j.dsr.2015.06.002>
- Bastari A., Micheli F., Ferretti F., **Pusceddu A.**, Cerrano C. (2015) Large marine protected areas (LMPAs) in the Mediterranean Sea: the opportunity of the Adriatic Sea. *Marine Policy*, 68: 165-177. <https://doi.org/10.1016/j.marpol.2016.03.010>
- Bianchelli S., **Pusceddu A.**, Buschi E., Danovaro R. (2015) Trophic status and meiofauna biodiversity in the Northern Adriatic Sea: Insights for the assessment of good environmental status. *Marine Environmental Research*, 113: 18-30. <https://doi.org/10.1016/j.marenvres.2015.10.010>
- Zeppilli D., **Pusceddu A.**, Trincardi F., Danovaro R. (2016) Seafloor heterogeneity influences the biodiversity–ecosystem functioning relationships in the deep sea. *Scientific Reports*, 6: 26352. <https://doi.org/doi:10.1038/srep26352>
- Pusceddu A.**, Fraschetti S., Scopa M., Rizzo L., Danovaro R. (2016) Meiofauna communities, nematode diversity and C degradation rates in seagrass (*Posidonia oceanica* L.) and unvegetated sediments invaded by the algae *Caulerpa cylindracea* (Sonder). *Marine Environmental Research*, 119: 88-99. <https://doi.org/10.1016/j.marenvres.2016.05.015>
- Danovaro R., Gambi C., Dell'Anno A., Corinaldesi C., **Pusceddu A.**, Neves R.C., Kristensen R.M. (2016) The challenge of proving the existence of metazoan life in permanently anoxic deep-sea sediments. *BMC Biology*, 14: 43. <https://doi.org/10.1186/s12915-016-0263-4>
- Bianchelli S., Buschi E., Danovaro R., **Pusceddu A.** (2016) Biodiversity loss and turnover in alternative states in the Mediterranean Sea: a case study on meiofauna. *Scientific Reports*, 6: 34544. <https://doi.org/10.1038/srep34544>
- Pusceddu A.**, Carugati L., Gambi C., Mienert J., Petani B., Sanchez-Vidal A., Canals M., Heussner S., Danovaro R. (2016) Organic matter pools, C turnover and meiofaunal biodiversity in the sediments of the western Spitsbergen deep continental margin, Svalbard Archipelago. *Deep-Sea Research I*, 107: 48-58. <https://doi.org/10.1016/j.dsr.2015.11.004>
- Gambi C., Corinaldesi C., Dell'Anno A., **Pusceddu A.**, D'Onghia G., Covazzi-Harriague A., Danovaro R. (2017) Functional response to food limitation can reduce the impact of global change in the deep-sea benthos. *Global Ecology and Biogeography*, 26: 1008-1021 <https://doi.org/10.1111/geb.12608>
- Rizzo L., **Pusceddu A.**, Stabili L., Alifano P., Fraschetti S. (2017) Potential effects of an invasive seaweed (*Caulerpa cylindracea*, Sonder) on sedimentary organic matter and microbial metabolic activities. *Scientific Reports* 7:12113. <https://doi.org/10.1038/s41598-017-12556-4>

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- Bianchelli S., Buschi E., Danovaro R., **Pusceddu A.** (2018) Nematode biodiversity and benthic trophic state are simple tools for the assessment of the environmental quality in coastal marine ecosystems. *Ecological Indicators* 95:270-287; <https://doi.org/10.1016/j.ecolind.2018.07.032>
- Cau A., Avio G.C., Dessì C., Follesa M.C., Regoli F., **Pusceddu A.** 2019. Microplastics in the crustaceans *Nephrops norvegicus* and *Aristeus antennatus*: Flagship species for deep-sea environments? *Environmental Pollution*, 255(1), article 113107, <https://doi.org/10.1016/j.envpol.2019.113107>
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- Tiano J., De Borger E., Paradis S., Bradshaw C., Morys C., **Pusceddu A.**, Ennas C., Soetaert K., Puig P., Masqué P., Sciberras M. (2024) Global meta-analysis of demersal fishing impacts on organic carbon and associated biogeochemistry. *Fish and Fisheries*, in press <https://doi.org/10.1111/faf.12855>
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