

Maria Cristina Mangano



Born in Italy (Catania) on 25/10/1981

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Current Position: ricercatore III° livello, Scientist

Current Affiliation:

Section Integrated Marine Ecology, Stazione Zoologica Anton Dohrn, Napoli (Italy)

Education/Training/Experience

Institute and Location	Degree / Function	Year	Field of Study
Biologia ed Ecologia Marina, Università di Messina, Messina (Italy)	BSc (Laurea Triennale)	2004-2007	Marine Biology and Ecology
Biologia ed Ecologia dell'Ambiente Marino Costiero, Università di Messina, Messina (Italy)	MSc (Laurea Specialistica)	2007-2009	Marine Biology and Ecology
Scuola di dottorato in Scienze Ambientali: Ambiente Marino e Risorse XXV ciclo, University of Messina, Messina (Italy)	Ph.D.	2010-2013	Fishery ecology and management, benthic communities, biodiversity
Laboratory of Ecology, Dipartimento di Scienze della Terra e del Mare, University of Palermo (Italy)	Postdoc	2014-2019	Disturbance ecology, climate change, sustainability
Fisheries & Conservation Science Group, School of Ocean Sciences, Bangor University,	Fisheries Research Officer	2018-2019	Evidence-based management, socio-ecological systems

Wales, UK, Bangor (United Kingdom)			
Stazione Zoologica Anton Dohrn, Napoli, Italy	3° Ricercatore	2019 - present	Conservation ecology, fisheries management

Appointments and awards

03/11/2021 – Present. Horizon Europe (HORIZON) - Expert evaluator of project proposals. Appointed by the Research Executive Agency – REA

03/09/2020 to 03/09/2022 Marie Skłodowska-Curie Action - Individual fellow at Universitat de les Illes Balears - UIB presso Mediterranean Institute for Advanced Studies – IMEDEA. MSCA IF EU 2020 "MIRROR - Through the lookingglass: investigating the effectiveness of fish condition in mirroring trawling disturbance". <https://cordis.europa.eu/project/id/835589/it>

2021 – Present. Advisor Member at ICES "Stakeholder Engagement Strategy - WKSHOES" International Council for the Exploration of the Sea, Workshop "Stakeholder Engagement Strategy" <https://www.ices.dk/sites/pub/Publication Reports/Forms/DispForm.aspx?ID=37985>

2019 – Present. Advisor Member and Co-Chair at ICES WG COMEDA on Comparative Ecosystem-based Analyses of Atlantic and Mediterranean marine systems. Term of Reference leader ToR Socio-Ecological Systems (and Invited Expert Member since 2014).

2020 – Present. Member ICES WG "Strategic Initiative on the Human Dimension - SIHD" <https://www.ices.dk/community/groups/Pages/Members.aspx?Acronym=SIHD>

2020 – Present. Member of the Mediterranean observatory for fisheries “Osservatorio della Pesca del Mediterraneo”.

2019 – Present. Invited Expert Member at ICES WG SOCIAL on Social Indicators.

2018 – 2019 Invited Expert Member at GFCM WG on Vulnerable Marine Ecosystems and Marine Protected Areas.

2008 – Present: Invited Expert Member at ICES WG FBIT on Fisheries Benthic Impact and Trade-offs.

2008 – Present: Member of scientific surveys on board both research and commercial vessels (longer than 6 days at sea, 6 in the Atlantic Sea, 1 in Baltic Sea, and more than 30 in the Mediterranean Sea).

2018 – Present: Review Editor in Marine Fisheries, Aquaculture and Living Resources at Frontiers in Marine Science.

2018 – Winner of CA COST Action CA15121 - Short Term Scientific Missions (STSM) Fellowship. Proposal Acronym “PerceptCons” in the framework of MARCONS Cost Action WG2 “Present challenges and limitations in marine conservation”.

2018 – Winner of Santander Universities Research and Mobility Awards panel “Environment”. Project aim: develop Towed Underwater Vehicle to explore Vulnerable Marine Ecosystems in collaboration with Dr. Hilmar Hinz, University of Balearic Island.

2017 – Winner of NRN-LCEE Proposal Writing Fellowship Award R39GO1/CC8004/PWF008 in the framework of Sêr Cymru National Research Network for Low Carbon, Energy and Environment Proposal Writing Fellowship Scheme.

2017 – Invited speaker at the “EUROMARINE European Marine Research” Workshop entitled “Network Forecasting and responding to ecological, social and economic impacts of environmental effects on European species”.

Other

2022 – Present. Integrated network for the monitoring and production of a regional management model of resources and marine ecosystems in the Gulfs of Castellammare, Patti and Catania “Rete 3 Golfi - 3G”.

2021 – Present. National Project "MAC-Isola" Fondi MiTE - Ministero della Transizione Ecologica. "Misure di conservazione e gli indirizzi di gestione al Sito di Interesse Comunitario ITA 020047 - Fondali di Isola delle Femmine - Capo Gallo i cui confini combaciano con quelli dell'Area Marina Protetta di Capo Gallo - Isola delle Femmine".

2020 – Present. SenHAR Project (Founded by INTERREG Italy-Malta Operational Program call n. 02/2019) “Campagne di sensibilizzazione per una armonizzazione Italo-Maltese per un buono stato dell’ambiente”.

03/10/2020 – Present. Lecturer of “Management of Aquatic Resources: Fisheries course” at Marine Sciences course, University of Milano Bicocca (IT).

2019 – Present. Progetto Internazionale "BLEU-ADAPT - Invasion biologique marine et pêche: étude, atténuation des dommages et adaptation dans le contexte du changement climatique" INTERREG Italy-Tunisia 2014-2020 Priorité 3.1 - Actions conjointes pour la protection de l’environnement (14-20 CTE).

2018 – 2019 PUKFI Project UK Fishery Improvement funded by the European Maritime Fisheries Funds - EMFF. WP Co-Leader and Task’s leader.

2018 – Present. HARMONY Project (Founded by INTERREG Italy-Malta Operational Program 2014-2020 Project grant n. C1-3.1-31, Led by the University of Palermo). Project associate and WP Co-Leader and Task’s leader (Working Package 4 - Ecosystem integrity and functioning monitoring and analysis).

Students’ Supervision

PhD supervisor of three Ph.D. students (external supervisor)

MSc supervisor of six master students

Publications

Author of 44 publications on ISI-journals (h index: 14)

List of publications of the last 10 years):

Peer-reviewed publications:

Sánchez-Jerez, P., Babarro, J. M., Padin, X. A., Portabales, A. L., Martinez-Llorens, S., Ballester-Berman, J. D., ... & Mangano, M. C. (2022). Cumulative climatic stressors strangles marine aquaculture: Ancillary effects of COVID 19 on Spanish mariculture. *Aquaculture*, 549, 737749.

Mangano, M. C., Berlino, M., Corbari, L., Milisenda, G., Lucchese, M., Terzo, S., ... & Sarà, G. (2022). The aquaculture supply chain in the time of covid-19 pandemic: Vulnerability, resilience, solutions and priorities at the global scale. *Environmental science & policy*, 127, 98-110.

Sarà, G., Mangano, M. C., Berlino, M., Corbari, L., Lucchese, M., Milisenda, G., ... & Helmuth, B. (2022). The synergistic impacts of anthropogenic stressors and COVID-19 on aquaculture: A current global perspective. *Reviews in Fisheries Science & Aquaculture*, 1-13.

Sarà, G., Milisenda, G., Mangano, M. C., & Bosch-Belmar, M. (2021). The buffer effect of canopy-forming algae on vermetid reefs' functioning: A multiple stressor case study. *Marine Pollution Bulletin*, 171, 112713.

Berlino, M., Mangano, M. C., De Vittor, C., & Sarà, G. (2021). Effects of microplastics on the functional traits of aquatic benthic organisms: A global-scale meta-analysis. *Environmental Pollution*, 117174.

Salerno, M., Berlino, M., Mangano, M. C., & Sarà, G. (2021). Microplastics and the functional traits of fishes: A global meta-analysis. *Global Change Biology*, 27(12), 2645-2655.

Sarà, G., Giommi, C., Giacoletti, A., Conti, E., Mulder, C., & Mangano, M. C. (2021). Multiple climate-driven cascading ecosystem effects after the loss of a foundation species. *Science of The Total Environment*, 770, 144749.

Giacoletti, A., Lucido, G. D., Mangano, M. C., & Sarà, G. (2021). Functional trait-based layers-an aquaculture siting tool for the Mediterranean Sea. *Aquaculture*, 532, 736081.

Bevilacqua, S., Airoidi, L., Ballesteros, E., Benedetti-Cecchi, L., Boero, F., Bulleri, F., ... Mangano, M.C.... & Terlizzi, A. (2021). Mediterranean rocky reefs in the Anthropocene: Present status and future concerns. *Advances in marine biology*, 89, 1-51.

Montalto, V., Rinaldi, A., Ape, F., Mangano, M. C., Gristina, M., Sarà, G., Mirto S., (2020). Functional role of biofouling linked to aquaculture facilities in mediterranean enclosed locations *Aquaculture Environment Interactions* DOI: <https://doi.org/10.3354/aei00339>.

Corbari, L., Maltese, A., Capodici, F., Mangano, M. C., Sarà, G., & Ciruolo, G. (2020). Indoor spectroradiometric characterization of plastic litters commonly polluting the Mediterranean Sea: toward the application of multispectral imagery. *Scientific Reports*, 10(1), 1-12.

Falcini, F., Corrado, R., Torri, M., Mangano, M. C., Zarrad, R., Di Cintio, A., ... & Lacorata, G. (2020). Seascape connectivity of European anchovy in the Central Mediterranean Sea revealed by weighted Lagrangian backtracking and bio-energetic modelling. *Scientific reports*, 10(1), 1-13.

Tempesti, J., Mangano, M. C., Langeneck, J., Lardicci, C., Maltagliati, F., & Castelli, A. (2020). Non-indigenous species in Mediterranean ports: A knowledge baseline. *Marine Environmental Research*, 105056.

Mangano, M. C., Mieszkowska, N., Helmuth, B., Domingos, T., Sousa, T., Baiamonte, G., ... & Sarà, G. (2020). Moving toward a strategy for addressing climate displacement of marine resources: a proof-of-concept. *Frontiers in Marine Science*, 7, 408.

Sinopoli, M., Allegra, A., Andaloro, F., Consoli, P., Esposito, V., Falautano, M., Mangano M. C., ... & Castriota, L. (2020). Assessing the effect of the alien seaweed *Caulerpa cylindracea* on infralittoral rocky benthic invertebrate community: Evidence from a Mediterranean Marine Protected Area. *Regional Studies in Marine Science*, 38, 101372.

Russo, E., Monti, M. A., Mangano, M. C., Raffaeta, A., Sara, G., Silvestri, C., & Pranovi, F. (2020). Temporal and spatial patterns of trawl fishing activities in the Adriatic Sea (Central Mediterranean Sea, GSA17). *Ocean & Coastal Management*, 192, 105231.

Bellino, A., Mangano, M. C., Baldantoni, D., Russell, B. D., Mannino, A. M., Mazzola, A., ... & Sarà, G. (2019). Seasonal patterns of biodiversity in Mediterranean coastal lagoons. *Diversity and Distributions*, 25(10), 1512-1526.

Mangano, M. C., Ape, F., & Mirto, S. (2019). The role of two non-indigenous serpulid tube worms in shaping artificial hard substrata communities: case study of a fish farm in the central Mediterranean Sea. *Aquaculture Environment Interactions*, 11, 41-51.

Mangano, M. C., Giacoletti, A., & Sarà, G. (2019). Dynamic Energy Budget provides mechanistic derived quantities to implement the ecosystem based management approach. *Journal of sea research*, 143, 272-279.

Mieszkowska, N., Benedetti-Cecchi, L., Burrows, M. T., Mangano, M. C., Queirós, A., Seuront, L., & Sarà, G. (2019). Multinational, integrated approaches to forecasting and managing the impacts of climate change on intertidal species. *Marine Ecology Progress Series*, 613, 247-252.

Giacoletti, A., Cappello, S., Mancini, G., Mangano, M. C., & Sarà, G. (2018). Predicting the effectiveness of oil recovery strategies in the marine polluted environment. *Journal of environmental management*, 223, 749-757.

Sarà, G., Gouhier, T. C., Brigolin, D., Porporato, E. M., Mangano, M. C., Mirto, S., ... & Pastres, R. (2018). Predicting shifting sustainability trade-offs in marine finfish aquaculture under climate change. *Global change biology*, 24(8), 3654-3665.

Capodici, F., Ciraolo, G., Cosoli, S., Maltese, A., Mangano, M. C., & Sarà, G. (2018). Downscaling hydrodynamics features to depict causes of major productivity of Sicilian-Maltese area and implications for resource management. *Science of the Total Environment*, 628, 815-825.

Sarà, G., Porporato, E. M., Mangano, M. C., & Mieszkowska, N. (2018). Multiple stressors facilitate the spread of a non-indigenous bivalve in the Mediterranean Sea. *Journal of biogeography*, 45(5), 1090-1103.

Martinez, M., Mangano, M. C., Maricchiolo, G., Genovese, L., Mazzola, A., & Sarà, G. (2018). Measuring the effects of temperature rise on Mediterranean shellfish aquaculture. *Ecological indicators*, 88, 71-78.

Sarà, G., Mangano, M. C., Johnson, M., & Mazzola, A. (2018). Integrating multiple stressors in aquaculture to build the blue growth in a changing sea. *Hydrobiologia*, 809(1), 5-17.

Consoli, P., Mangano, M. C., Sarà, G., Romeo, T., Andaloro, F. (2018). The influence of habitat complexity on fish assemblages associated with extractive platforms in the central Mediterranean Sea. *Advances in Oceanography and Limnology*, 9(2), 59-67.

Mangano, M. C., Bottari, T., Caridi, F., Porporato, E. M. D., Rinelli, P., Spanò, N., ... & Sarà, G. (2017). The effectiveness of fish feeding behaviour in mirroring trawling-induced patterns. *Marine environmental research*, 131, 195-204.

- Mangano, M. C., & Sara, G. (2017). The author's reply to NR Haddaway. *Journal of environmental management*, 197, 114-116.
- Mangano, M. C., & Sarà, G. (2017). Collating science-based evidence to inform public opinion on the environmental effects of marine drilling platforms in the Mediterranean Sea. *Journal of environmental management*, 188, 195-202.
- Mangano, M. C., Sarà, G., & Corsolini, S. (2017). Monitoring of persistent organic pollutants in the polar regions: knowledge gaps & gluts through evidence mapping. *Chemosphere*, 172, 37-45.
- Bottari, T., Rinelli, P., Garofalo, G., Spano, N., Mangano, M. C., Porporato, E., ... & Fiorentino, F. (2016). Epidemiology of gnathiid isopods on red mullet (*Mullus barbatus barbatus*) along the Tyrrhenian Sicilian coast (Mediterranean Sea). *Cah. Biol. Mar.*, 57(3).
- D'Alessandro, M., Esposito, V., Giacobbe, S., Renzi, M., Mangano, M. C., Vivona, P., ... & Romeo, T. (2016). Ecological assessment of a heavily human-stressed area in the Gulf of Milazzo, Central Mediterranean Sea: an integrated study of biological, physical and chemical indicators. *Marine pollution bulletin*, 106(1-2), 260-273.
- Mangano, M. C., O'Leary, B. C., Mirto, S., Mazzola, A., & Sarà, G. (2015). The comparative biological effects of spatial management measures in protecting marine biodiversity: a systematic review protocol. *Environmental Evidence*, 4(1), 21.
- Mangano, M. C., Kaiser, M. J., Porporato, E. M. D., Lambert, G. I., & Spanò, N. (2015). Trawling disturbance effects on the trophic ecology of two co-generic Astropectinid species. *Mediterranean Marine Science*, 16(3), 538-549.
- Mangano, M. C., Kaiser, M. J., Porporato, E. M., Lambert, G. I., Rinelli, P., & Spanò, N. (2014). Infaunal community responses to a gradient of trawling disturbance and a long-term Fishery Exclusion Zone in the Southern Tyrrhenian Sea. *Continental Shelf Research*, 76, 25-35.
- Porporato, E. M., Mangano, M. C., De Domenico, F., Giacobbe, S., & Spanò, N. (2014). First observation of *Pteroeides spinosum* (Anthozoa: Octocorallia) fields in a Sicilian coastal zone (Central Mediterranean Sea). *Marine Biodiversity*, 44(4), 589-592.
- Mangano, M. C., Kaiser, M. J., Porporato, E. M., & Spanò, N. (2013). Evidence of trawl disturbance on mega-epibenthic communities in the Southern Tyrrhenian Sea. *Marine Ecology Progress Series*, 475, 101-117.
- Porporato, E. M., De Domenico, F., Mangano, M. C., Rinelli, P., & Spanò, N. (2012). *Ebalia nux* (Decapoda, Brachyura) found among the leaves of *Pteroeides spinosum* (Anthozoa, Octocorallia). *Crustaceana*, 85(1), 125.
- Porporato, E. M., De Domenico, F., Mangano, M. C., & Spano, N. (2011). *Macropodia longirostris* and *Latreillia elegans* (Decapoda, Brachyura) climbing on Mediterranean Pennatulidae (Anthozoa, Octocorallia): a preliminary note. *Crustaceana*, 84(14), 1777-1780.
- De Domenico, F., Mangano, M. C., Porporato, E. M., & Spanò, N. (2010). Young specimens of *Munida intermedia* (Decapoda, Anomura) living on *Antedon mediterranea* (Echinodermata, Crinoidea). *Crustaceana*, 215-221.