

Curriculum Vitae

Dr. Mehdi Ghodrati Shojaei

Marine Functional Ecology

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Education

- 2012 – 2016 **Ph.D. (Dr. rer. nat.)**, Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, Germany; Grade Magna cum laude.
Thesis: Developments in German Bight benthic ecology driven by climate change and anthropogenic utilization
- 2003 – 2005 **Student in Marine Biology**
M.Sc., Tarbiat Modares University, Tehran, Iran
- 1999 – 2003 Student in Biology
B.Sc., Shahid Beheshti University, Tehran, Iran

Academic & Research Experience

- Current (Started 2016) **Assistant Professor**
Faculty of Natural Resource and Marine Biology, Department of Marine Biology, Tarbiat Modares University
- 2012 – 2016 **PhD student**
Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, Germany
University of Bremen, Germany, with Prof. Thomas Brey (defense at 26.07.2016)
- June 2015 – Aug. 2015 **Research Fellow (summer school)**
International Institute for Applied System Analysis (IIASA), Vienna, Austria
"Trait-based community dynamics: a new framework for understanding benthic ecosystem."

- Sep. 2010 – **Visiting scholar**
Dec. 2010 Japan International Cooperation Agency (JICA) Kansai - Kobe Center
Integrated Coastal Zone Management (ICZM)
- Jan. 2007 – **Research assistant**
Jan. 2012 Persian Gulf and Oman Sea Ecology Research Center

Peer-Review Publications

1. **Shojaei, M. G.**, Gutow, L., Dannheim, J., Schröder, A., & Brey, T. (2020). Long-term changes in ecological functioning of temperate shelf sea benthic communities. *Estuarine, Coastal and Shelf Science*, 107097.
2. **Shojaei, M. G.**, Gutow, L., Dannheim, J., Pehlke, H., & Brey, T. (2015). Functional diversity and traits assembly patterns of benthic macrofaunal communities in the Southern North Sea. In *Towards an Interdisciplinary Approach in Earth System Science* (pp. 183-195). Springer International Publishing.
3. **Shojaei, M. G.**, Gutow, L., Dannheim, J., Rachor, E., Schröder, A., & Brey, T. (2016). Common trends in German Bight benthic macrofaunal communities: Assessing temporal variability and the relative importance of environmental variables. *Journal of Sea Research*, 107, 25-33.
4. Delfan, N., **Shojaei, M. G.**, & Naderloo, R. (2021). Patterns of structural and functional diversity of macrofaunal communities in a subtropical mangrove ecosystem. *Estuarine, Coastal and Shelf Science*, 252, 107288.
5. **Shojaei, M. G.**, Farahani, M. M., Abtahi, B., Delfan, N., Naderloo, R., & Kourandeh, M. B. (2022). Sources partitioning in the diet of the mudskipper *Periophthalmus waltoni* in an arid mangrove system: Evidence from stable isotope analysis. *Food Webs*, 31, e00234.
6. Akbari Noghabi, N., **Shojaei, M. G.**, Farahani, M. M., & Weigt, M. (2022). Stable Isotopes Reveal the Food Sources of Benthic Macroinvertebrates in the Arid Mangrove Ecosystem of the Persian Gulf. *Estuaries and Coasts*, 1-13.
7. Hemmati, M. R., **Shojaei, M. G.**, Taheri, A., Mashhadi Farahani, M., & Weigt, M. (2021). Food sources for camptandriid crabs in an arid mangrove ecosystem of the Persian Gulf: a stable isotope approach. *Isotopes in Environmental and Health Studies*, 1-13.
8. Hajjalizadeh, P., Safaie, M., Naderloo, R., **Shojaei, M. G.**, Gammal, J., Villnäs, A., & Norkko, A. (2020). Species Composition and Functional Traits of Macrofauna in Different Mangrove Habitats in the Persian Gulf. *Frontiers in Marine Science*, 7, 809.
9. Hajjalizadeh, P., Safaie, M., Naderloo, R., & **Shojaei, M. G.** (2022). Spatial and Temporal Distribution of Brachyuran Crabs in Mangroves of the Persian Gulf. *Wetlands*, 42(8), 1-13.

10. Mashhadi, H., Seyfabadi, J., Rezai Marnani, H., & **Shojaei, M. G** (2021). Bioerosion and its relationship with skeletal density of *Platygyra daedalea* and *Porites harrisoni* in Larak Island, Persian Gulf. *Marine Ecology*, e12686.
11. Fazli, H., Khoshghalb, M. R. B., Tavakoli, M., **Shojaei, M.G.**, Daryanabard, G. R., & Soleimani Roudi, A. (2021). Spatial distribution and diversity of commercial demersal fish species in the shelf waters of the Caspian Sea. *Journal of Applied Ichthyology*.
12. Degen, R., Aune, M., Bluhm, B.A., Cassidy, C., Kędra, M., Kraan, C., Vandepitte, L., Włodarska-Kowalczyk, M., Zhulay, I., Albano, P.G. and Bremner, J., Grebmeier, J.M., Link, H., Morata, N., Nordströmn, M.C., **Shojaei, M. G.**, Sutton, L., Zuchini, M. (2019). Trait-based approaches in rapidly changing ecosystems: A roadmap to the future polar oceans. *Ecological Indicators*, 91, pp.722-736.
13. **Shojaei, M. G.**, Gutow, L., Dannheim, J., Pehlke, H., & Brey, T. (2015). Functional diversity and traits assembly patterns of benthic macrofaunal communities in the Southern North Sea. In *Towards an Interdisciplinary Approach in Earth System Science* (pp. 183-195). Springer International Publishing.
14. **Shojaei, M. G.**, Gutow, L., Dannheim, J., Rachor, E., Schröder, A., & Brey, T. (2016). Common trends in German Bight benthic macrofaunal communities: Assessing temporal variability and the relative importance of environmental variables. *Journal of Sea Research*, 107, 25-33.
15. **Shojaei, M.G.**, Taheri, A. L. I., Mashhadi Farahani, M., Nastaran, D., & Weigt, M. (2019). The role of mangrove primary production in the diet of *Thryssa setirostris* in Hara Biosphere Reserve using carbon and nitrogen isotopes. *Fisheries Science and Technology*, 8(3), 175-181.
16. **Shojaei, M. G.**, Gutow, L., & Brey, T. 2012. Fuzzy coding of biological traits of macrobenthic species in the German Bight. doi:10.1594/PANGAEA.813419.
17. Taghavimotlagh, S. A., Vahabnezhad, A., & **Shojaei, M. G.** (2021). A trophic model of the coastal fisheries ecosystem of the northern Persian Gulf using a mass balance Ecopath model. *Regional Studies in Marine Science*, 101639.
18. Delfan, N., **Shojaei, M.G.**, Naderloo, R. (2020). Biodiversity and Structure of Macrozoobenthos Communities in the Hara Biosphere Reserve, Persian Gulf, Iran. *Journal of Animal Environment*, 12(2), 373-380.
19. Hakimelahi, M., Savari, A., Doustshenas, B., **Shojaei, M.G.** & Lewis, K. A. (2018). Food and feeding habits of Indian Mackerel (*Rastrelliger kanagurta*) in The Southern Part of Qeshm Island, Persian Gulf. *Iranian Journal of Fisheries Sciences*.
20. Mashhadi Farahani, M., **Shojaei, M.G.**, & Weigt, M. (2020). The contribution of different food sources to the diet of *Parasesarma persicum* Naderloo and Schubart 2010 in the mangrove ecosystem of Hara Biosphere Reserve; a stable isotope approach. *ISFJ*, 29 (5) :13-25

- Introduction to the interdisciplinary field of Earth System Science
- Several R courses
- Primer with Permanova and multivariate analysis (Tutor)
- Introduction to computational techniques and statistical analyses
- Time series analysis and interpretation in climate research
- Joint AWI-SAHFOS summer School (Time Series Analysis)
- Communication and presentation skills (Imperial College London)
- Academic writing block course and individual coaching sessions
- Research cruise aboard RVs Heincke, Üthorn and Grinna (Germany), Ferdows (Iran)

Field of Interest

Functional diversity, Planktons, Food web analysis, Blue carbon, Ecological modeling, Science communication and outreach.

Expert Skills

Data Science	Time-series analysis, Data visualization, Multivariate analysis
Marine Science	Functional ecology, Food webs, Ecological modeling, Numerical, statistical and analytical methods
IT Skills	Language R, Primer with Permanova, Adobe Creative Suite, SPSS

Contact information of a reference person

Prof. Dr. Thomas Brey (Ph.D Supervisor)
Functional Ecology, Section Head
Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research,
Bremerhaven, Germany
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