

Bibliometric summary:

In total 992 citations of which 547 are since 2021

H-index is 15 in total and 14 since 2021

Source: Google Scholar 2026-08-12

Publications in international peer reviewed journals

21. Pemberton, P., **Wåhlström, I.**, and Fredriksson, S. T. (2026). Impact of mesoscale eddy parameterization on Arctic Atlantic Water circulation and heat transport in the eddy-permitting grey zone, *Ocean Sci.*, 22, 2375–2404, <https://doi.org/10.5194/os-22-2375-2026>
20. **Wåhlström, I.**, Perry, D., Bergman, S., Dahl, M., Granberg, M.E., Gullström, M., Hammar Perry, L., Magnusson, K., Thor, P., (2025). Incorporating ecosystem component interactions and indirect effects in cumulative impact assessment models. *Journal of Environmental Management*, 381. <https://doi.org/10.1016/j.jenvman.2025.125268>
19. **Wåhlström, I.**, Almroth-Rosell, E., Edman, M., Olofsson, M., Eilola, K., Fleming V., Gröger, M., Arneborg, L., Meier, H.E.M., (2024). Increased nutrient retention and cyanobacterial blooms in a future coastal zone. *Estuarine, Coastal and Shelf Science*, Volume 301, 108728. <https://doi.org/10.1016/j.ecss.2024.108728>
18. **Wåhlström, I.**, Hammar, L., Hume, D., Pålsson, J., Almroth-Rosell, E., Dieterich, C., Arneborg, L., Gröger, M., Mattsson, M., Zillén Snowball, L., Kågesten, G., Törnqvist, O., Breviere, E., Brunnabend, S.-E., & Jonsson, P. R., (2022). Projected climate change impact on a coastal sea—As significant as all current pressures combined. *Global Change Biology*, 28, 5310–5319. <https://doi.org/10.1111/gcb.16312>
17. Clement Kinney, J., Assmann, K. M., Maslowski, W., Björk, G., Jakobsson, M., Jutterström, S., Lee, Y. J., Osinski, R., Semiletov, I., Ulfso, A., **Wåhlström, I.**, Anderson, L.G., (2022). On the circulation, water mass distribution, and nutrient concentrations of the western Chukchi Sea. *Ocean Sci.*, 18, 29–49. <https://doi.org/10.5194/os-18-29-2022>
16. Almroth-Rosell, E., **Wåhlström, I.**, Hansson, M., Väli, G., Eilola, K., Andersson, P., Viktorsson, L., Hieronymus, M., Arneborg, L., (2021). A Regime Shift Toward a More Anoxic Environment in a Eutrophic Sea in Northern Europe. *Front. Mar. Sci.* 8:799936. <https://doi.org/10.3389/fmars.2021.799936>
15. Jonsson P.R., Hammar, L., **Wåhlström I.**, Pålsson, J., Hume, D., Almroth-Rosell, E., Mattsson M., (2021). Combining seascape connectivity with cumulative impact assessment in support of ecosystem-based marine spatial planning. *J Appl Ecol.*, 58: 576–586. <https://doi.org/10.1111/1365-2664.13813>
14. Bossier, S., Nielsen, J.R., Almroth-Rosell, E., Höglund, A., Bastardie, F., Neuenfeldt, S., **Wåhlström, I.**, Christensen, A., (2021). Integrated ecosystem impacts of climate change and eutrophication on main Baltic fishery resources. *Ecological Modelling*, Volume 453. <https://doi.org/10.1016/j.ecolmodel.2021.109609>
13. **Wåhlström, I.**, Höglund, A., Almroth-Rosell, E., MacKenzie, B.R., Gröger, M., Eilola, K., Plikshs, M., Andersson, H.C., (2020). Combined climate change and nutrient load impacts on

- future habitats and eutrophication indicators in a eutrophic coastal sea. *Limnol Oceanogr*, 65: 2170-2187. <https://doi.org/10.1002/lno.11446>
12. Gogina, M., Zettler, M. L., **Wåhlström, I.**, Andersson, H., Radtke, H., Kuznetsov, I., MacKenzie, B. R., (2020). A combination of species distribution and ocean-biogeochemical models suggests that climate change overrides eutrophication as the driver of future distributions of a key benthic crustacean in the estuarine ecosystem of the Baltic Sea. *ICES Journal of Marine Science*, 77:6, 2089–2105. <https://doi.org/10.1093/icesjms/fsaa107>
 11. Meier, H.E.M., Dieterich, C., Eilola, K., Gröger, M., Höglund, A., Radtke, H., Saraiva, S., **Wåhlström, I.**, (2019). Future projections of record-breaking sea surface temperature and cyanobacteria bloom events in the Baltic Sea. *Ambio* 48, 1362–1376. <https://doi.org/10.1007/s13280-019-01235-5>
 10. Edman, M., Eilola, K., Almroth-Rosell, E., Meier, H.E.M., **Wåhlström, I.**, Arneborg, L., (2018). Nutrient Retention in the Swedish Coastal Zone. *Front. Mar. Sci.* 5:415. <https://doi.org/10.3389/fmars.2018.00415>
 9. **Wåhlström, I.**, Dieterich, C., Pemberton, P., Meier H.E.M., (2016). Impact of increasing inflow of warm Atlantic water on the sea-air exchange of carbon dioxide and methane in the Laptev Sea. *J. Geophys. Res. Biogeosci.*, 121, 1867–1883. <https://doi.org/10.1002/2015JG003307>
 8. **Wåhlström, I.**, Meier H.E.M., (2014). A model sensitivity study for the sea-air exchange of methane in the Laptev Sea, Arctic Ocean. *Tellus B*, 66, 24174. <http://dx.doi.org/10.3402/tellusb.v66.24174>
 7. Anderson, L.G., Andersson, P.S., Björk, G., Jones, E.P., Jutterström, S., and **Wåhlström, I.**, (2013). Source and formation of the upper halocline of the Arctic Ocean. *J. Geophys. Res. Oceans*, 118, 410–421. <https://doi.org/10.1029/2012JC008291>
 6. **Wåhlström, I.**, Omstedt, A., Björk, G., Anderson, L.G., (2013). Modelling the CO₂ dynamics in the Laptev Sea, Arctic Ocean: Part II Sensitivity of fluxes to changes in the forcing. *J. Mar. Syst.*, 111-112, 1-10. <https://doi.org/10.1016/j.jmarsys.2012.09.001>
 5. **Wåhlström, I.**, Omstedt, A., Björk, G., Anderson, L.G., (2012). Modelling the CO₂ dynamics in the Laptev Sea, Arctic Ocean: Part I. *J. Mar. Syst.*, 102-104, 29-38. <https://doi.org/10.1016/j.jmarsys.2012.05.001>
 4. Anderson, L.G., Björk, G., Jutterström, S., Pipko, I., Shakhova, N., Semiletov, I.P., **Wåhlström, I.**, (2011). East Siberian Sea, an Arctic region of very high biogeochemical activity. *Biogeosciences*, 8, 1745–1754. <https://doi.org/10.5194/bg-8-1745-2011>
 3. Pipko, I.I., Semiletov, I.P., Pugach, S.P., **Wåhlström, I.**, Anderson, L.G., (2011). Interannual variability of air-sea CO₂ fluxes and carbonate system parameters in the East Siberian Sea. *Biogeosciences*, 8, 1987-2007. <https://doi.org/10.5194/bg-8-1987-2011>
 2. Anderson L.G., Tanhua, T., Björk, G., Hjalmarsson, S., Jones, E.P., Jutterström, S., Rudels, B., Swift, J.H., **Wåhlström, I.**, (2010). Arctic Ocean shelf – basin interaction, an active continental shelf CO₂ pump and its impact on the degree of calcium carbonate dissolution. *Deep Sea Research Part I: Oceanographic Research Papers*, 57:7, 869-879. <https://doi.org/10.1016/j.dsr.2010.03.012>

1. Anderson, L.G., Jutterström, S., Hjalmarsson, S., Wåhlström, I., and Semiletov, I.P., (2009). Out-gassing of CO₂ from Siberian Shelf seas by terrestrial organic matter decomposition. *Geophys. Res. Lett.*, 36, L20601. <https://doi.org/10.1029/2009GL040046>

Peer reviewed conference proceedings

2. Karlson, B., Eilola, K., Johansson, J., Linders, J., Mohlin, M., Willstrand Wranne, A., **Wåhlström, I.**, 2017. Distribution of cyanobacteria blooms in the Baltic Sea. In: Proença, L.A.O. and Hallegraeff, G.M. (eds). *Marine and Fresh-Water Harmful Algae. Proceedings of the 17th International Conference on Harmful Algae. International Society for the Study of Harmful Algae 2017*, 100-103. <https://issaha.org/wp-content/uploads/2018/05/ICHA-17-proceedings-2017.pdf>
1. Eilola, K., Almroth-Rosell, E., Gröger, M., Hieronymus, J., Karlson, K., Liu, Y., Saraiva, S., **Wåhlström, I.**, Hense, I., Meier, H.E.M., 2016. The role of the cyanobacteria life cycle on biogeochemistry of the Baltic Sea - a 3D high resolution coupled physical biogeochemical model study. In: Reckermann, M. and Köppen, S. (eds.). [Multiple drivers for Earth system changes in the Baltic Sea region](#). Proceedings of the 1st International Baltic Earth Secretariat Publication No. 9.

Other publications

1. Brévière E, Hammar L, **Wåhlström I**, Pålsson J, Arneborg L, Almroth-Rosell E and Jonsson P., (2023). Why We Must Think About Climate Change When Planning How to Use Our Seas. *Front. Young Minds* 11:1029011. [doi: 10.3389/frym.2023.1029011](https://doi.org/10.3389/frym.2023.1029011)

Published reports

5. Edman, M., **Wåhlström, I.**, Pliscovaz, S., Carlsson, D., (2025). Relative importance of internal phosphorous sources in the Swedish coastal zone. [SMHI Report Oceanografi, No. 79](#).
4. **Wåhlström, I.**, Pålsson J., Törnqvist, O., Jonsson, P., Gröger, M., Almroth-Rosell, E., (2020). Bringing climate change into ecosystembased management of the sea: Data and methods for the Symphony framework. [SMHI Rapport Oceanography, No 68](#)
3. Eilola, K., Lindqvist, S., Almroth-Rosell, E., Edman, M., **Wåhlström, I.**, Bartoli, M., Burska, D., Carstensen, J., Hellemann, D., Hietanen, S., Hulth, S., Janas, U., (2017). Linking process rates with modelling data and ecosystem characteristics. [SMHI Report Oceanography, No. 61](#)
2. **Wåhlström, I.**, Eilola, K., Edman, M., Almroth-Rosell, E., (2017). Evaluation of open sea boundary conditions for the coastal zone. A model study in the northern part of the Baltic Proper. [SMHI Report Oceanography, No. 55](#).
1. Wesslander, K., Eilola, K., **Wåhlström, I.**, (2015). Coastal eutrophication status assessment using HEAT 1.0 (WFD methodology) versus HEAT 3.0 (MSFD methodology) and Development of an oxygen consumption indicator. [SMHI Report Oceanography, No. 51](#)

Thesis

Wåhlström, I., (2012). Fluxes and transformation of carbon in the Siberian shelf seas under changing environment”. Ph.D. thesis, Dep. of chemistry and molecular biology, Faculty of Science, University of Gothenburg, Sweden. <http://hdl.handle.net/2077/28865>