

# H E Markus Meier

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

124  
papers

4,813  
citations

35  
h-index

66  
g-index

132  
ext. papers

5,685  
ext. citations

4.4  
avg, IF

5.78  
L-index

#	Paper	IF	Citations
124	Human impacts and their interactions in the Baltic Sea region. <i>Earth System Dynamics</i> , <b>2022</b> , 13, 1-80	4.8	4
123	Oceanographic regional climate projections for the Baltic Sea until 2100. <i>Earth System Dynamics</i> , <b>2022</b> , 13, 159-199	4.8	5
122	Salinity dynamics of the Baltic Sea. <i>Earth System Dynamics</i> , <b>2022</b> , 13, 373-392	4.8	3
121	Atmospheric rivers in CMIP5 climate ensembles downscaled with a high-resolution regional climate model. <i>Earth System Dynamics</i> , <b>2022</b> , 13, 613-631	4.8	0
120	Atlantic multidecadal variability and the implications for North European precipitation. <i>Environmental Research Letters</i> , <b>2022</b> , 17, 044040	6.2	0
119	Biogeochemical functioning of the Baltic Sea. <i>Earth System Dynamics</i> , <b>2022</b> , 13, 633-685	4.8	1
118	Climate change in the Baltic Sea region: a summary. <i>Earth System Dynamics</i> , <b>2022</b> , 13, 457-593	4.8	9
117	Modeling cyanobacteria life cycle dynamics and historical nitrogen fixation in the Baltic Proper. <i>Biogeosciences</i> , <b>2021</b> , 18, 6213-6227	4.6	1
116	Provision of aquatic ecosystem services as a consequence of societal changes: The case of the Baltic Sea. <i>Population Ecology</i> , <b>2021</b> , 63, 61-74	2.1	8
115	Is interactive air sea coupling relevant for simulating the future climate of Europe?. <i>Climate Dynamics</i> , <b>2021</b> , 56, 491-514	4.2	5
114	Sensitivity of the Baltic Sea Overturning Circulation to Long-Term Atmospheric and Hydrological Changes. <i>Journal of Geophysical Research: Oceans</i> , <b>2021</b> , 126, e2020JC016079	3.3	3
113	Natural variability is a large source of uncertainty in future projections of hypoxia in the Baltic Sea. <i>Communications Earth &amp; Environment</i> , <b>2021</b> , 2,	6.1	10
112	Coupled regional Earth system modeling in the Baltic Sea region. <i>Earth System Dynamics</i> , <b>2021</b> , 12, 939-978	4.8	6
111	Baltic Sea Operational Oceanography: A Stimulant for Regional Earth System Research. <i>Frontiers in Earth Science</i> , <b>2020</b> , 8,	3.5	5
110	Impacts of changing society and climate on nutrient loading to the Baltic Sea. <i>Science of the Total Environment</i> , <b>2020</b> , 731, 138935	10.2	13
109	Commentary: Lake or Sea? The Unknown Future of Central Baltic Sea Herring. <i>Frontiers in Ecology and Evolution</i> , <b>2020</b> , 8,	3.7	1
108	Investigating interdecadal salinity changes in the Baltic Sea in a 1850-2008 hindcast simulation. <i>Climate of the Past</i> , <b>2020</b> , 16, 1617-1642	3.9	5

107	The Atlantic Multidecadal Oscillation controls the impact of the North Atlantic Oscillation on North European climate. <i>Environmental Research Letters</i> , <b>2020</b> , 15, 104025	6.2	8
106	Revisiting the Role of Convective Deep Water Formation in Northern Baltic Sea Bottom Water Renewal. <i>Journal of Geophysical Research: Oceans</i> , <b>2020</b> , 125, e2020JC016114	3.3	1
105	Is Deep-water formation in the Baltic Sea a key to understanding seabed dynamics and ventilation changes over the past 7,000 years?. <i>Quaternary International</i> , <b>2020</b> , 550, 55-65	2	10
104	Summer hydrographic changes in the Baltic Sea, Kattegat and Skagerrak projected in an ensemble of climate scenarios downscaled with a coupled regional ocean-sea ice-atmosphere model. <i>Climate Dynamics</i> , <b>2019</b> , 53, 5945-5966	4.2	22
103	Future projections of record-breaking sea surface temperature and cyanobacteria bloom events in the Baltic Sea. <i>Ambio</i> , <b>2019</b> , 48, 1362-1376	6.5	17
102	Shared socio-economic pathways extended for the Baltic Sea: exploring long-term environmental problems. <i>Regional Environmental Change</i> , <b>2019</b> , 19, 1073-1086	4.3	30
101	Surface Heat Budget over the North Sea in Climate Change Simulations. <i>Atmosphere</i> , <b>2019</b> , 10, 272	2.7	18
100	Temperature Variability of the Baltic Sea Since 1850 and Attribution to Atmospheric Forcing Variables. <i>Journal of Geophysical Research: Oceans</i> , <b>2019</b> , 124, 4168-4187	3.3	23
99	Assessment of Uncertainties in Scenario Simulations of Biogeochemical Cycles in the Baltic Sea. <i>Frontiers in Marine Science</i> , <b>2019</b> , 6,	4.5	21
98	Disentangling the impact of nutrient load and climate changes on Baltic Sea hypoxia and eutrophication since 1850. <i>Climate Dynamics</i> , <b>2019</b> , 53, 1145-1166	4.2	41
97	Changing Salinity Gradients in the Baltic Sea As a Consequence of Altered Freshwater Budgets. <i>Geophysical Research Letters</i> , <b>2019</b> , 46, 9739-9747	4.9	17
96	Food web and fisheries in the future Baltic Sea. <i>Ambio</i> , <b>2019</b> , 48, 1337-1349	6.5	15
95	Uncertainties in Projections of the Baltic Sea Ecosystem Driven by an Ensemble of Global Climate Models. <i>Frontiers in Earth Science</i> , <b>2019</b> , 6,	3.5	31
94	Baltic Sea ecosystem response to various nutrient load scenarios in present and future climates. <i>Climate Dynamics</i> , <b>2019</b> , 52, 3369-3387	4.2	33
93	Reducing eutrophication increases spatial extent of communities supporting commercial fisheries: a model case study. <i>ICES Journal of Marine Science</i> , <b>2018</b> , 75, 1306-1317	2.7	22
92	Recently Accelerated Oxygen Consumption Rates Amplify Deoxygenation in the Baltic Sea. <i>Journal of Geophysical Research: Oceans</i> , <b>2018</b> , 123, 3227-3240	3.3	25
91	Uncertainties in projections of the Baltic Sea ecosystem driven by an ensemble of global climate models <b>2018</b> ,		4
90	Causes of simulated long-term changes in phytoplankton biomass in the Baltic proper: a wavelet analysis. <i>Biogeosciences</i> , <b>2018</b> , 15, 5113-5129	4.6	6

89	Nutrient Retention in the Swedish Coastal Zone. <i>Frontiers in Marine Science</i> , <b>2018</b> , 5,	4.5	17
88	Assessment of Eutrophication Abatement Scenarios for the Baltic Sea by Multi-Model Ensemble Simulations. <i>Frontiers in Marine Science</i> , <b>2018</b> , 5,	4.5	27
87	Impact of the Atlantic Multidecadal Oscillation on Baltic Sea Variability. <i>Geophysical Research Letters</i> , <b>2018</b> , 45, 9880-9888	4.9	16
86	Long-Term Mean Circulation of the Baltic Sea as Represented by Various Ocean Circulation Models. <i>Frontiers in Marine Science</i> , <b>2018</b> , 5,	4.5	22
85	Effects of air-sea coupling over the North Sea and the Baltic Sea on simulated summer precipitation over Central Europe. <i>Climate Dynamics</i> , <b>2017</b> , 49, 3851-3876	4.2	13
84	Impact of accelerated future global mean sea level rise on hypoxia in the Baltic Sea. <i>Climate Dynamics</i> , <b>2017</b> , 49, 163-172	4.2	26
83	Nutrient transports in the Baltic Sea [results from a 30-year physicalBiogeochemical reanalysis. <i>Biogeosciences</i> , <b>2017</b> , 14, 2113-2131	4.6	14
82	Spatio-temporal dynamics of a fish predator: Density-dependent and hydrographic effects on Baltic Sea cod population. <i>PLoS ONE</i> , <b>2017</b> , 12, e0172004	3.7	18
81	Impacts of changing climate on the non-indigenous invertebrates in the northern Baltic Sea by end of the twenty-first century. <i>Biological Invasions</i> , <b>2016</b> , 18, 3015-3032	2.7	31
80	Tracing terrestrial DOC in the Baltic SeaA 3-D model study. <i>Global Biogeochemical Cycles</i> , <b>2016</b> , 30, 134-148	5.9	11
79	Impact of increasing inflow of warm Atlantic water on the sea-air exchange of carbon dioxide and methane in the Laptev Sea. <i>Journal of Geophysical Research G: Biogeosciences</i> , <b>2016</b> , 121, 1867-1883	3.7	4
78	Projected ChangeNorth Sea. <i>Regional Climate Studies</i> , <b>2016</b> , 175-217		24
77	Modelling nutrient retention in the coastal zone of an eutrophic sea. <i>Biogeosciences</i> , <b>2016</b> , 13, 5753-5762	4.6	23
76	Decadal-to-Centennial Variability of Salinity in the Baltic Sea. <i>Journal of Climate</i> , <b>2016</b> , 29, 7173-7188	4.4	16
75	Development and evaluation of a new regional coupled atmosphereOcean model in the North Sea and Baltic Sea. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , <b>2015</b> , 67, 24284	2	34
74	Projected future climate change and Baltic Sea ecosystem management. <i>Ambio</i> , <b>2015</b> , 44 Suppl 3, 345-365	6.5	96
73	Arctic Ocean Water Mass Transformation in SII Coordinates. <i>Journal of Physical Oceanography</i> , <b>2015</b> , 45, 1025-1050	2.4	16
72	A new approach to model oxygen dependent benthic phosphate fluxes in the Baltic Sea. <i>Journal of Marine Systems</i> , <b>2015</b> , 144, 127-141	2.7	28

71	A method for assessing the coastline recession due to the sea level rise by assuming stationary wind-wave climate. <i>Oceanological and Hydrobiological Studies</i> , <b>2015</b> , 44, 362-380	0.8	11
70	Scenario simulations of future salinity and ecological consequences in the Baltic Sea and adjacent North Sea areas-implications for environmental monitoring. <i>Ecological Indicators</i> , <b>2015</b> , 50, 196-205	5.8	85
69	Projected Change Marine Physics. <i>Regional Climate Studies</i> , <b>2015</b> , 243-252		13
68	Eutrophication status of the North Sea, Skagerrak, Kattegat and the Baltic Sea in present and future climates: A model study. <i>Journal of Marine Systems</i> , <b>2014</b> , 132, 174-184	2.7	35
67	Impact of saltwater inflows on phosphorus cycling and eutrophication in the Baltic Sea: a 3D model study. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , <b>2014</b> , 66, 23985	2	17
66	Arctic Ocean freshwater composition, pathways and transformations from a passive tracer simulation. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , <b>2014</b> , 66, 23988	2	11
65	Improving the multiannual, high-resolution modelling of biogeochemical cycles in the Baltic Sea by using data assimilation. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , <b>2014</b> , 66, 24908	2	6
64	A model sensitivity study for the sea-air exchange of methane in the Laptev Sea, Arctic Ocean. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , <b>2014</b> , 66, 24174	3.3	7
63	An Earth System Science Program for the Baltic Sea Region. <i>Eos</i> , <b>2014</b> , 95, 109-110	1.5	13
62	The potential of current- and wind-driven transport for environmental management of the Baltic Sea. <i>Ambio</i> , <b>2014</b> , 43, 94-104	6.5	26
61	Echoes from the past: a healthy Baltic Sea requires more effort. <i>Ambio</i> , <b>2014</b> , 43, 60-8	6.5	20
60	Ensemble modeling of the Baltic Sea ecosystem to provide scenarios for management. <i>Ambio</i> , <b>2014</b> , 43, 37-48	6.5	38
59	Ensemble Modeling of the Baltic Sea Ecosystem to Provide Scenarios for Management <b>2014</b> , 43, 37		1
58	Projected climate change impact on Baltic Sea cyanobacteria. <i>Climatic Change</i> , <b>2013</b> , 119, 391-406	4.5	35
57	Combined effects of global climate change and regional ecosystem drivers on an exploited marine food web. <i>Global Change Biology</i> , <b>2013</b> , 19, 3327-42	11.4	66
56	Modeling the impact of reduced sea ice cover in future climate on the Baltic Sea biogeochemistry. <i>Geophysical Research Letters</i> , <b>2013</b> , 40, 149-154	4.9	28
55	Reanalyzing temperature and salinity on decadal time scales using the ensemble optimal interpolation data assimilation method and a 3D ocean circulation model of the Baltic Sea. <i>Journal of Geophysical Research: Oceans</i> , <b>2013</b> , 118, 5536-5554	3.3	17
54	Simulated halocline variability in the Baltic Sea and its impact on hypoxia during 1961-2007. <i>Journal of Geophysical Research: Oceans</i> , <b>2013</b> , 118, 6982-7000	3.3	46

53	Studying the Baltic Sea Circulation with Eulerian Tracers <b>2013</b> , 101-129		2
52	Environmentally safe areas and routes in the Baltic proper using Eulerian tracers. <i>Marine Pollution Bulletin</i> , <b>2012</b> , 64, 1375-85	6.7	15
51	Modeling the combined impact of changing climate and changing nutrient loads on the Baltic Sea environment in an ensemble of transient simulations for 1961-2099. <i>Climate Dynamics</i> , <b>2012</b> , 39, 2421-2447	4.7	143
50	ECOSUPPORT: a pilot study on decision support for Baltic sea environmental management. <i>Ambio</i> , <b>2012</b> , 41, 529-33	6.5	8
49	Reconstructing the development of Baltic sea eutrophication 1850-2006. <i>Ambio</i> , <b>2012</b> , 41, 534-48	6.5	230
48	Impact of climate change on ecological quality indicators and biogeochemical fluxes in the Baltic sea: a multi-model ensemble study. <i>Ambio</i> , <b>2012</b> , 41, 558-73	6.5	97
47	Extremes of temperature, oxygen and blooms in the Baltic sea in a changing climate. <i>Ambio</i> , <b>2012</b> , 41, 574-85	6.5	73
46	Modeling nutrient transports and exchanges of nutrients between shallow regions and the open Baltic sea in present and future climate. <i>Ambio</i> , <b>2012</b> , 41, 586-99	6.5	20
45	Impact of climate change on fish population dynamics in the Baltic sea: a dynamical downscaling investigation. <i>Ambio</i> , <b>2012</b> , 41, 626-36	6.5	39
44	Ridged sea ice characteristics in the Arctic from a coupled multicategory sea ice model. <i>Journal of Geophysical Research</i> , <b>2012</b> , 117, n/a-n/a		24
43	Effect of climate change on the thermal stratification of the baltic sea: a sensitivity experiment. <i>Climate Dynamics</i> , <b>2012</b> , 38, 1703-1713	4.2	32
42	Comparing reconstructed past variations and future projections of the Baltic Sea ecosystem first results from multi-model ensemble simulations. <i>Environmental Research Letters</i> , <b>2012</b> , 7, 034005	6.2	98
41	The climate in the Baltic Sea region during the last millennium simulated with a regional climate model. <i>Climate of the Past</i> , <b>2012</b> , 8, 1419-1433	3.9	36
40	Hypoxia in future climates: A model ensemble study for the Baltic Sea. <i>Geophysical Research Letters</i> , <b>2011</b> , 38, n/a-n/a	4.9	113
39	Quality assessment of atmospheric surface fields over the Baltic Sea from an ensemble of regional climate model simulations with respect to ocean dynamics**The work presented in this study was jointly funded by the Swedish Environmental Protection Agency (SEPA), the Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (FORMAS), and the European	2.2	59
38	Transport of fresh and resuspended particulate organic material in the Baltic Sea in a model study. <i>Journal of Marine Systems</i> , <b>2011</b> , 87, 1-12ki. <i>Oceanologia</i> , <b>2011</b> , 53, 193-227	2.7	51
37	Evaluation of biogeochemical cycles in an ensemble of three state-of-the-art numerical models of the Baltic Sea. <i>Journal of Marine Systems</i> , <b>2011</b> , 88, 267-284	2.7	101
36	The influence of increasing water turbidity on the sea surface temperature in the Baltic Sea: A model sensitivity study. <i>Journal of Marine Systems</i> , <b>2011</b> , 88, 323-331	2.7	26

35	BALTEX – an interdisciplinary research network for the Baltic Sea region. <i>Environmental Research Letters</i> , <b>2011</b> , 6, 045205	6.2	12
34	Freshwater fluxes in the Baltic Sea: A model study. <i>Journal of Geophysical Research</i> , <b>2010</b> , 115,		27
33	Quantifying Arctic contributions to climate predictability in a regional coupled ocean-ice-atmosphere model. <i>Climate Dynamics</i> , <b>2010</b> , 34, 1157-1176	4.2	60
32	On the dynamics of oxygen, phosphorus and cyanobacteria in the Baltic Sea; A model study. <i>Journal of Marine Systems</i> , <b>2009</b> , 75, 163-184	2.7	141
31	Hypoxia-related processes in the Baltic Sea. <i>Environmental Science &amp; Technology</i> , <b>2009</b> , 43, 3412-20	10.3	381
30	Observational and numerical modeling methods for quantifying coastal ocean turbulence and mixing. <i>Progress in Oceanography</i> , <b>2008</b> , 76, 399-442	3.8	84
29	Past and Current Climate Change <b>2008</b> , 35-131		16
28	Projections of Future Anthropogenic Climate Change <b>2008</b> , 133-219		7
27	Modeling the pathways and ages of inflowing salt- and freshwater in the Baltic Sea. <i>Estuarine, Coastal and Shelf Science</i> , <b>2007</b> , 74, 610-627	2.9	134
26	Estimating uncertainties of projected Baltic Sea salinity in the late 21st century. <i>Geophysical Research Letters</i> , <b>2006</b> , 33,	4.9	100
25	Baltic Sea climate in the late twenty-first century: a dynamical downscaling approach using two global models and two emission scenarios. <i>Climate Dynamics</i> , <b>2006</b> , 27, 39-68	4.2	190
24	Modeling the age of Baltic Seawater masses: Quantification and steady state sensitivity experiments. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110,		44
23	Atmospheric response to different sea surface temperatures in the Baltic Sea: coupled versus uncoupled regional climate model experiments <b>2005</b> , 36, 397-409		33
22	The Baltic Haline Conveyor Belt or The Overturning Circulation and Mixing in the Baltic. <i>Ambio</i> , <b>2004</b> , 33, 261-266	6.5	68
21	European climate in the late twenty-first century: regional simulations with two driving global models and two forcing scenarios. <i>Climate Dynamics</i> , <b>2004</b> , 22, 13-31	4.2	419
20	Simulated Distributions of Baltic Sea-ice in Warming Climate and Consequences for the Winter Habitat of the Baltic Ringed Seal. <i>Ambio</i> , <b>2004</b> , 33, 249-256	6.5	60
19	Simulated Sea Surface Temperature and Heat Fluxes in Different Climates of the Baltic Sea. <i>Ambio</i> , <b>2004</b> , 33, 242-248	6.5	26
18	Simulated sea level in past and future climates of the Baltic Sea. <i>Climate Research</i> , <b>2004</b> , 27, 59-75	1.6	78

17	Simulated distributions of Baltic Sea-ice in warming climate and consequences for the winter habitat of the Baltic ringed seal. <i>Ambio</i> , <b>2004</b> , 33, 249-56	6.5	10
16	The Baltic haline conveyor belt or the overturning circulation and mixing in the Baltic. <i>Ambio</i> , <b>2004</b> , 33, 261-6	6.5	5
15	Working toward improved small-scale sea ice-ocean modeling in the Arctic seas. <i>Eos</i> , <b>2003</b> , 84, 325	1.5	12
14	Modeling decadal variability of the Baltic Sea: 1. Reconstructing atmospheric surface data for the period 1902–1998. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		46
13	Modeling decadal variability of the Baltic Sea: 2. Role of freshwater inflow and large-scale atmospheric circulation for salinity. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		105
12	A multiprocessor coupled ice-ocean model for the Baltic Sea: Application to salt inflow. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		129
11	Performance Analysis of a Multiprocessor Coupled Ice-Ocean Model for the Baltic Sea. <i>Journal of Atmospheric and Oceanic Technology</i> , <b>2002</b> , 19, 114-124	2	6
10	On the parameterization of mixing in three-dimensional Baltic Sea models. <i>Journal of Geophysical Research</i> , <b>2001</b> , 106, 30997-31016		66
9	Numerical Investigations of Future Ice Conditions in the Baltic Sea. <i>Ambio</i> , <b>2001</b> , 30, 237-244	6.5	17
8	Understanding past and future sea surface temperature trends in the Baltic Sea. <i>Climate Dynamics</i> , <b>1</b>	4.2	5
7	The climate in the Baltic Sea region during the last millennium		1
6	Projected Oceanographical Changes in the Baltic Sea until 2100		4
5	Salinity dynamics of the Baltic Sea		4
4	Human impacts and their interactions in the Baltic Sea region		2
3	Climate Change in the Baltic Sea Region: A Summary		4
2	Supplementary material to ‘‘Atmospheric regional climate projections for the Baltic Sea Region until 2100’’;		4
1	Oceanographic regional climate projections for the Baltic Sea until 2100		2