

All (co-)authors (BSc, MSc and PhD-students, Postdocs) under my supervision as PI are given in italics below.

166. Pelsma, K.A.J., *N.A.G.M. van Helmond, W.K. Lenstra*, T. Rockmann, M.S.M. Jetten, C.P. Slomp, C.U. Welte. 2013. Anaerobic methanotrophy is stimulated by graphene oxide in a brackish urban canal sediment. *Environmental Microbiology*. Accepted.

165. *Lenstra, W.K., N.A.G.M. van Helmond, P. Dalcin Martins, A.J. Wallenius, M.S.M. Jetten, C.P. Slomp*. 2023. Gene-based modeling of methane oxidation in coastal sediments: constraints on the efficiency of the microbial methane filter. *Environmental Science and Technology*. Accepted.

164. Venetz, J., *O.M. Zygadłowska, W.K. Lenstra, N.A.G.M. van Helmond*, G.H.L. Nuijten, A.J. Wallenius, P. Dalcin Martins, C.P. Slomp, M.S.M. Jetten, A. Veraart. 2023. Versatile methanotrophs form an active methane biofilter in the oxycline of a seasonally stratified coastal basin. *Environmental Microbiology*. <http://doi.org/10.1111/1462-2920.16448>

163. *Haukelidsaeter, S., A.S. Boersman, L. Kirwan, A. Corbetta, I.D. Gorres, W.K. Lenstra, F.K. Schoonenberg, K. Borger, L. Vos, P.W.J.J. van der Wielen, M.A.H.J. van Kessel, S. Lucker, C.P. Slomp*. 2023. Influence of filter age on Fe, Mn and NH₄⁺ removal in dual media rapid sand filters used for drinking water production. *Water Research*. <https://doi.org/10.1016/j.watres.2023.120184>

162. Slomp, C.P. 2023. Vivianite blues. *Nature Geoscience* 16: 394. doi.org/10.1038/s41561-023-01174-7

161. Frieling, J., T.A. Mather, C. Marz, H.C. Jenkyns, R. Hennekam, G.-J. Reichart, C.P. Slomp, *N.A.G.M. van Helmond*. 2023. Effects of redox variability and early diagenesis on marine sedimentary Hg records. *Geochimica et Cosmochimica Acta* 351: 78-95. <https://doi.org/10.1016/j.gca.2023.04.015>

160. Lantink, M., *W.K. Lenstra, J.H.F.L. Davies, R. Hennekam, D. McB. Martin, P.R.D. Mason, G.-J. Reichart, C.P. Slomp, F.J. Hilgen*. 2023. Precessional pacing of early Proterozoic redox cycles. *Earth and Planetary Science Letters*. 610, 118117.

159. *Zygadłowska, O., J. Venetz, R. Klomp, W.K. Lenstra, N.A.G.M. van Helmond, T. Rockmann, A.J. Wallenius, P.D. Martins, A.J. Veraart, M.S.M. Jetten, C.P. Slomp* 2023. Pathways of methane removal in the sediment and water column of a seasonally anoxic eutrophic marine basin. *Frontiers in Marine Science*. 10:1085728. doi: 10.3389/fmars.2023.1085728

158. *Vollebregt, A., N.A.G.M. van Helmond, S. Pit, P. Kraal, C.P. Slomp* 2023. Trace metals as a redox proxy in Arabian Sea sediments in and below the oxygen minimum zone. *Chemical Geology*, 121300. <https://doi.org/10.1016/j.chemgeo.2022.121300>

157. Paul, K.M., *N.A.G.M. van Helmond, C.P. Slomp, S.A. Jokinen, J.J. Virtasalo, H.L. Filipsson, T. Jilbert*. 2022. Sedimentary molybdenum and uranium: improving proxies for deoxygenation in coastal depositional environments. *Chemical Geology* 615, 121203 <https://doi.org/10.1016/j.chemgeo.2022.121203>

156. Cramwinckel, M.J., R. van der Ploeg, *N.A.G.M. van Helmond, N. Waarlo, C. Agnini, P.K. Bijl, A. van der Boon, H. Brinkhuis, J. Frieling, W. Krijgsman, T.A. Maher, J.J. Middelburg, F. Peterse, C.P. Slomp, A. Sluijs*. 2022. Deoxygenation and organic carbon

sequestration in the Tethyan realm associated with the middle Eocene climatic optimum. GSA Bulletin. <https://doi.org/10.1130/B36280.1>

155. Krijgsman, W., I. Vasiliev, A. Beniest, T. Lyons, J. Lofi, G. Tari, C.P. Slomp, N. Cagatay, M. Triantaphyllou, R. Flecker, D. Palcu, C. McHugh, H. Arz, P. Henry, K. Lloyd, G. Cifci, O., Sipahiofglu, D. Sakellariou and the Black Gate Participants. 2022. Mediteranean-Black Sea Gateway Exchange: Scientific Drilling Workshop on the Black Gate Project. Scientific Drilling 31, 93-110. <https://doi.org/10.5194/sd-31-93-2022>

154. *Papadomanolaki, N.M., W.K. Lenstra, M. Wolthers, M., C.P. Slomp.* 2022. Enhanced phosphorus recycling during past oceanic anoxia amplified by low rates of apatite authigenesis. Science Advances 8, eabn 2370.

153. Richter, J., A. Guihenauf, A. Mouret, Schweizer, M., C.P. Slomp, F.J. Jorissen. 2022. A historical record of benthic foraminifera in seasonally anoxic Lake Grevelingen, the Netherlands. Paleogeography, Palaeoclimatology, Palaeoecology 599, 111057.

152. Kuliński, K., Rehder, G., Asmala, E., Bartosova, A., Carstensen, J., Gustafsson, B., Hall, P. O. J., Humborg, C., Jilbert, T., Jürgens, K., Meier, H. E. M., Müller-Karulis, B., Naumann, M., Olesen, J. E., Savchuk, O., Schramm, A., Slomp, C. P., Sofiev, M., Sobek, A., Szymczycha, B., and Undeman, E. 2022. Biogeochemical functioning of the Baltic Sea, Earth Syst. Dynam., 13, 633–685, <https://doi.org/10.5194/esd-13-633-2022>.

151. *Lenstra, W.K., N.A.G.M van Helmond, O.M. Żygadłowska, R. Van Zummeren, R. Witbaard, C.P. Slomp.* 2022. Sediments as a source of iron, manganese, cobalt and nickel to continental shelf waters (Louisiana, Gulf of Mexico). Frontiers in Marine Science. Front. Mar. Sci. 9:811953. doi: 10.3389/fmars.2022.811953

150. *Papadomanolaki, N.M., A. Sluijs, C.P. Slomp.* 2022. Eutrophication and deoxygenation forcing of marginal marine organic carbon burial during the PETM. Paleoclimatology and Paleoclimatology. 37, e2021PA004232.

149. *Papadomanolaki, N.M., van Helmond, N.A.G.M., Pälke, H., Sluijs, A., and Slomp, C.P.* 2022. Quantifying volcanism and organic carbon burial across Oceanic Anoxic Event 2. Geology. 50, 511-515.

148. Grégoire, M., V. Garçon, H. Garcia, D. Breitburg, ... C.P. Slomp, ...M. Yasuhara. 2021. A Global Ocean Oxygen Database and Atlas for Assessing and Predicting Deoxygenation and Ocean Health in the Open and Coastal Ocean Frontiers in Marine Science 8, Art. Nr. 724913 <http://dx.doi.org/10.3389/fmars.2021.724913>

147. Jilbert, T., B.G. Gustafsson, *S. Veldhuijzen, D.C. Reed, N.A.G.M. van Helmond, M. Hermans* and C.P. Slomp. 2021. Iron phosphorus feedbacks drive multidecadal oscillations in Baltic Sea hypoxia. Geophysical Research Letters, e2021GL095908.

146. *Lenstra, W.K., R. Klomp, F. Molema, T. Behrends, C.P. Slomp.* 2021. A sequential extraction procedure for particulate manganese and its application to coastal marine sediments. Chemical Geology 584: 120538. <https://doi.org/10.1016/j.chemgeo.2021.120538>

145. Lippmann, T.J.R., M.H. in 't Zandt, N.N.L. van der Putten, F.S. Busshers, M.P. Hijma, P. van der Velden, T. de Groot, Z. van Aalderen, O.H. Meisel, C.P. Slomp, H. Niemann, M.S.M. Jetten, H.A.J. Dolman, C.U. Welte. 2021. Microbial activity, methane production and carbon storage in Early Holocene North Sea peats. Biogeosciences 18: 5491-5511. <https://doi.org/10.5194/bg-18-5491-2021>

144. *Hermans, M., M. Astudillo Pascual, T. Behrends, W.K. Lenstra, D. J. Conley, C.P. Slomp.* 2021. Coupled dynamics of iron, manganese and phosphorus in brackish coastal sediments populated by cable bacteria. *Limnology and Oceanography* 66: 2611-2631. <https://doi.org/10.1002/lno.11776>
143. *Kubeneck, L., J., W.K. Lenstra, S.Y. Malkin, D.J. Conley and C.P. Slomp,* 2021 Phosphorus burial in vivianite-type minerals in methane-rich coastal sediments, *Marine Chemistry* 231: 103948 <https://doi.org/10.1016/j.marchem.2021.103948>
142. *Dalcin Martins, P., A. de Jong, W.K. Lenstra, N.A.G.M. van Helmond, C.P. Slomp, M.S.M. Jetten, C.U. Welte and O. Rasigraf,* 2021 Enrichment of novel Verrucomicrobia, Bacteroidetes and Krumholzibacteria in an oxygen-limited, methane- and iron-fed bioreactor inoculated with Bothnian Sea sediments, *Microbiology Open* doi: 10.1002/mbo3.1175
141. *Wallenius AJ, Dalcin Martins P, Slomp CP and Jetten MSM.* 2021. Anthropogenic and Environmental Constraints on the Microbial Methane Cycle in Coastal Sediments. *Front. Microbiol.* 12:631621. doi: 10.3389/fmicb.2021.631621
140. *Houben, A.J.P., Goldberg, T., Slomp, C.P.* 2021. Biogeochemical evolution and organic carbon deposition on the Northwestern European shelf during the Toarcian Oceanic Anoxic Event. *Paleoceanography, Paleoclimatology, Palaeoecology* 565: 110191 <https://doi.org/10.1016/j.palaeo.2020.110191>
139. *Hermans, M., Risgaard-Petersen, N., Meysman, F.J.R., Slomp, C.P.* 2020. Biogeochemical impact of cable bacteria on Black Sea sediment *Biogeosciences*. 17, 5919–5938. <https://bg.copernicus.org/articles/17/5919/2020/>
138. *Van Helmond, N.A.G.M., Robertson, E.K., Conley, D.J., Hermans, M., Humborg, C. Kubeneck, J., Lenstra, W.K., Slomp, C.P.* 2020. Removal of phosphorus and nitrogen in sediments of the eutrophic Stockholm archipelago, Baltic Sea. *Biogeosciences* 17, 2745–2766.
137. *Van Helmond, N.A.G.M., Lougheed, B.C., Vollebregt, A., Peterse, F., Fonterbe, G., Conley, D.J., Slomp, C.P.* 2020. Recovery from multi-millennial natural coastal hypoxia in the Stockholm Archipelago, Baltic Sea, terminated by modern human activity. *Limnology and Oceanography* 65: 3085-3097.
136. *Richert, J., Riedel, B., Mouret, A., Schweizer, M., Langlet, D., Seitaj, D., Meysman, F.J.R., Slomp, C.P., Jorissen, F.J.* 2020. Foraminiferal community response to seasonal anoxia in Lake Grevelingen (the Netherlands) *Biogeosciences*, 17: 1415–1435, 2020 <https://doi.org/10.5194/bg-17-1415-2020>
135. *Lenstra, W.K., Hermans, M., Seguret, M.J.M., Witbaard R., Severmann, S., Behrends, T. Slomp, C.P.* (2020) Coastal hypoxia and eutrophication as key controls on benthic release and water column dynamics of iron and manganese. *Limnology and Oceanography*. doi: 10.1002/lno.11644
134. *Ehrnsten E, Sun X, Humborg C, Norkko A, Savchuk OP, Slomp CP, Timmermann K and Gustafsson BG* (2020) Understanding Environmental Changes in Temperate Coastal Seas: Linking Models of Benthic Fauna to Carbon and Nutrient Fluxes. *Frontiers in Marine Science* 7:450. doi: 10.3389/fmars.2020.00450.
133. *Lenstra, W.K., Seguret, M., Behrends, T., Groeneveld, R.K., Hermans, M., Witbaard, R., Slomp, C.P.* 2020. Controls on the shuttling of manganese over the northwestern Black Sea

shelf and its fate in the euxinic deep basin. *Geochimica et Cosmochimica Acta* 273:177–204
<https://doi.org/10.1016/j.gca.2020.01.031>

132. *Ruvacaba-Baroni, I., Palastanga, V., Slomp, C.P., 2020. Enhanced organic carbon burial in sediments of oxygen minimum zones upon ocean deoxygenation. Frontiers in Marine Sciences* 6:839. doi: 10.3389/fmars.2019.00839

131. Slotznik, S. P., Sperling, E.A., Tosca, N.J., Miller, A.J., Clayton, K., van Helmond, N.A.G.M., Slomp, C.P., Swanson-Hysell, N.L. 2020. Unraveling the mineralogical complexity of sediment iron speciation using sequential extractions. *Geochemistry, Geophysics, Geosystems* <https://doi.org/10.1029/2019GC008666>

130. *Hermans, M., Lenstra, W.K., Hidalgo-Martinez, van Helmond, N.A.G.M., Witbaard, R., F.J.R. Meysman, Gonzalez, S., Slomp, C.P., 2019. Abundance and biogeochemical impact of cable bacteria in Baltic Sea sediments. Environmental Science & Technology* 53: 7494-7503.

129. Rasigraf, O., van Helmond, N.A.G.M., Frank, J., Lenstra, W.K., Egger, M., Slomp, C.P., Jetten, M.S.M., 2019. Microbial community composition and functional potential in Bothnian Sea sediments is linked to Fe and S dynamics and the quality of organic matter. *Limnology and Oceanography*. doi: 10.1002/lno.11371

128. Carstensen, J., Conley, D.J., Almroth-Rosell, E., Asmala E., Bonsdorff E., Fleming-Lehtinen V., Gustafsson B.G., Gustafsson C., Heiskanen A.S., Janas U., Norkko A., Slomp C., Villnäs A., Voss M., Zilius M. Factors regulating the coastal nutrient filter in the Baltic Sea. *Ambio* (2019). <https://doi.org/10.1007/s13280-019-01282-y>

127. Petersen, J., Barras, C., Bézou, A., La, C., Slomp, C.P., Meysman, F.J.R., Mouret, A., Jorissen, F.J., 2019. Mn/Ca ratios of *Ammonia tepida* as a proxy for seasonal coastal hypoxia. *Chemical Geology* 518: 55-66.

126. Ash, J.L., Egger, M., Treude, T., Kohl, I., Cragg, B., Parkes, R.J., Slomp, C.P., Sherwood Lollar, B., Young, E.D. 2019. Exchange catalysis during anaerobic methanotrophy revealed by ¹²CH₂D₂ and ¹³CH₃D in methane *Geochem. Persp. Let.* (2019) 10, 26–30 | doi: 10.7185/geochemlet.1910 |

125. Gustafsson, E., *Hagens, M., Sun, X., Reed, D.C., Humborg, C., Slomp, C.P., Gustafsson, B.G.* 2019. Sedimentary alkalinity generation and long-term alkalinity development in the Baltic Sea. *Biogeosciences*, 16, 437-456, <https://doi.org/10.5194/bg-16-437-2019>.

124. *Kraal, P., Yücel, M., Slomp, C.P.* 2019. Turbidite deposition and diagenesis in the southwestern Black Sea: Implications for biogeochemical cycling in an anoxic basin *Marine Chemistry* <https://doi.org/10.1016/j.marchem.2019.01.001>.

123. *Hermans, M, W.K. Lenstra, N.A.G.M. van Helmond, T. Behrends, M. Egger, M.J.M. Seguret, E. Gustafsson, B.G. Gustafsson, C.P. Slomp.* 2019. Impact of natural re-oxygenation on the sediment dynamics of manganese, iron and phosphorus in a euxinic Baltic Sea basin. *Geochimica et Cosmochimica Acta* 246: 174–196

122. *Lenstra, W.K., M. Egger, N.A.G.M. van Helmond, E. Kritzberg, D.J. Conley, C.P. Slomp.* 2018. Large variations in iron input to an oligotrophic Baltic Sea estuary: impact on sedimentary phosphorus burial. *Biogeosciences* 15: 6979-6996, <https://doi.org/10.5194/bg-15-6979-2018>.

121. *Lenstra, W.K., Hermans, M., Seguret, M.J.M., Witbaard, R., Behrends, T., Dijkstra, N., van Helmond, N.A.G.M., Kraal, P., Laan, P., M.J.A. Rijkenberg, Severmann, S. Teaca, A.,*

- Slomp, C.P. 2018. The shelf-to-basin iron shuttle in the Black Sea revisited. *Chemical Geology* <https://doi.org/10.1016/j.chemgeo.2018.10.024>
120. *Van Helmond, N.A.G.M., Jilbert, T. & Slomp, C.P.* 2018. Hypoxia in the Holocene Baltic Sea - Comparing modern versus past intervals using sedimentary trace metals. *Chemical Geology* 493: 478-490.
119. *Ruvalcaba Baroni, I., Pohl, A., van Helmond, N.A.G.M., Papadomanolaki, N.M., Coe, A.L., Cohen, A.S., Van de Schootbrugge, B., Donnadieu, Y. & Slomp, C.P.* 2018. Ocean circulation in the Toarcian (Early Jurassic) - A key control on deoxygenation and carbon burial on the European Shelf. *Paleoceanography and Paleoclimatology* <https://doi.org/10.1016/j.chemgeo.2018.10.024>
118. Vellekoop, J., Woelders, L., *van Helmond, N.A.G.M., Galeotti, S., Smit, J., Slomp, C.P., Brinkhuis, H., Claeys, P., Speijer, R.P.* 2018. Shelf hypoxia in response to global warming after the Cretaceous-Paleogene boundary impact *Geology* 46: 683-686.
117. In 't Zand, M., De Jong, A., Slomp, C.P., Jetten, M. 2018. The hunt for the most wanted chemolithoautotrophic spookmicrobes. *FEMS Microbiology Ecology* 94 (6) fiy064.
116. Ning, W., Nielsen, A.B., Norback Ivarsson, L., Jilbert, T., Akesson, C.M., Slomp, C.P., Andren, E., Bormstrom, A., Filipsson, H.L. 2018. Anthropogenic and climatic impacts on a coastal environment over the last 1000 years. *Anthropocene*. 21: 66-79.
115. Dean, J., Middelburg, J., Rockmann, T., Aerts, A., Blauw, L.G., *Egger, M., Jetten, M.S.M., de Jong, A.E.E., Meisel, O.H., Rasigraf, O., Slomp, C.P., in 't Zandt, M.H., Dolman, A.J.* 2018. Methane feedbacks to the global climate system in a warmer world. *Reviews of Geophysics*. doi. 10.1002/2017RG000559.
114. *Dijkstra, N., Hagens, M., Egger, M., Slomp, C.P.* 2018 Post-depositional formation of vivianite-type minerals alters sediment phosphorus records *Biogeosciences* 15: 861-883.
113. *Dijkstra, N., P. Kraal, Seguret, M.J.M., Flores, M.R, Gonzalez, S., M.J.A. Rijkenberg, Slomp, C.P.* 2018. Phosphorus dynamics in and below the redoxcline in the Black Sea and implications for phosphorus burial. *Geochimica et Cosmochimica Acta* 222: 685-703.
112. Petersen, J., Barras, C., Bezos, A., La, C., de Nooijer, L.J., Meysman, F.J.R., Mouret, A., Slomp, C.P., Jorissen, F.J. 2018. Mn/Ca intra-test variability in the benthic foraminifer *Ammonia tepida* *Biogeosciences* 15: 331-348.
111. *Papadomanolaki, N., Dijkstra, N., Van Helmond, N.A.G.M., Hagens, M., Bauersachs, T., Kotthoff, U., Sangiorgi, F., Slomp, C.P.* 2018. Controls on the onset and termination of past hypoxia in the Baltic Sea. *Palaeogeography, Palaeoclimatology, Palaeoecology*. 490: 347-354.
110. *Sulu-Gambari, F., Hagens, M., Behrends, T., Seitaj, D., Meysman, F.J.R, Middelburg, J., Slomp, C.P.* 2018. Phosphorus cycling and burial in sediments of a seasonally hypoxic marine basin. *Estuaries and Coasts* 41: 921-939.
- 109 *Dijkstra, N., Quintana Krupinski, N.B., Yamane, M. Obrochta, S.P., Miyairi, Y., Yokoyama, Y, Slomp, C.P.* 2018. Holocene refreshing and reoxygenation of a Bothnian Sea estuary led to enhanced phosphorus burial. *Estuaries and Coasts* 41: 139-157.
108. Kotthoff, U., Groeneveld, J., Ash, J.L., Fanget, A.S., Quintana Krupinski, N., Peyron, O., Stepanova, A., Warnock, J., *van Helmond, N.A.G.M., Passey, B.H., Clausen, O.R.,*

- Bennike, O., Andrén, E., Granoszewski, W., Andrén, T., Filipsson, H. L., Seidenkrantz, M., Slomp, C.P., Bauersachs, T. 2017. Reconstructing Holocene temperature and salinity variations in the western Baltic Sea region: A multi-proxy comparison from the Little Belt (IODP Expedition 347, Site M0059). *Biogeosciences* 14: 5607-5632.
107. *Sulu-Gambari, F., Roepert, A., Jilbert, T., Hagens, M., Meysman, F. J R & Slomp, C.P.* 2017. Molybdenum dynamics in sediments of a seasonally-hypoxic coastal marine basin. *Chemical Geology* 466: 627-640.
106. Asmala, E., Carstensen, J., Conley, D.J., Slomp, C.P., Stadmark, J., Voss, M. 2017. Efficiency of the coastal filter: nitrogen and phosphorus removal in the Baltic Sea. *Limnology and Oceanography* 62. S1.
105. Bhattarai, S., Cassarini, C., Gonzales-Gil, G., Egger, M., Slomp, C.P., Zhang, Y., Esposito, G. & Lens, Piet N. L. 2017. Anaerobic Methane-Oxidizing microbial community in a coastal marine sediment: anaerobic methanotrophy dominated by ANME-3. *Microbial Ecology* 74: 608-622.
104. *Van Helmond, N.A.G.M., Quintana Krupinski, N., Lougheed, B., Obrochta, S., Andrén, T., Slomp, C.P.* 2017. Seasonal hypoxia was a natural feature of the coastal zone in the Little Belt, Denmark, during the past 8 ka. *Marine Geology*, 387: 45-57.
103. *Kraal, P., Dijkstra, N., Behrends, T., Slomp, C.P.* 2017. Phosphorus burial in sediments of the sulfidic deep Black Sea - Key roles for adsorption by calcium carbonate and apatite authigenesis. *Geochimica et Cosmochimica Acta* 204:140-158.
102. *Egger, M.J., Hagens, M., Sapart, C.J., Dijkstra, N., Van Helmond, N.A.G.M., Mogollón, J.M., Risgaard-Petersen, N., van der Veen, C., Kasten, S., Riedinger, N., Böttcher, M.E., Röckmann, T., Barker Jorgensen, B. & Slomp, C.P.* 2017. Iron oxide reduction in methane-rich deep Baltic Sea sediments. *Geochimica et Cosmochimica Acta* 207: 256-276.
101. Seitaj, D., *Sulu-Gambari, F., Burdorf, L.D.W., Romero-Ramirez, A, Maire, O., Malkin, S.Y., Slomp, C.P., Meysman, F.* 2016. Sedimentary oxygen dynamics in a seasonally hypoxic basin. *Limnology and Oceanography* doi: 10.1002/lno.10434.
100. *Dijkstra, N., Slomp, C.P., Behrends, T. & Expedition 347 Science Party.* 2016. Vivianite is a key sink for phosphorus in sediments of the Landsort Deep, an intermittently anoxic deep basin in the Baltic Sea. *Chemical Geology*, 438: 58-72.
99. *Egger, M.J., Kraal, P., Jilbert, T.S., Sulu-Gambari, F.A., Sapart, C.J., Roeckmann, T. & Slomp, C.P.* 2016. Anaerobic oxidation of methane alters sediment records of sulfur, iron and phosphorus in the Black Sea. *Biogeosciences*, 13: 5333-5355.
98. *Egger, M.J., Lenstra, W.K., Jong, D., Meysman, F., Sapart, C.J., van der Veen, C., Röckmann, T., Gonzalez, S. & Slomp, C.P.* 2016. Rapid sediment accumulation results in high methane effluxes from coastal sediments. *PLoS ONE*, 11 (8).
97. *Sulu-Gambari, F.A., Seitaj, D., Behrends, T., Banerjee, D., Meysman, F. & Slomp, C.P.* 2016. Impact of cable bacteria on sedimentary iron and manganese dynamics in a seasonally-hypoxic marine basin. *Geochimica et Cosmochimica Acta*, 192: 49-69.
96. Ning, W., Ghosh, A., *Jilbert, T., Slomp, C.P., Khan, M., Nyberg, J., Conley, D.J. & Filipsson, H.L.* 2016. Evolving coastal character of a Baltic Sea inlet during the Holocene shoreline regression - impact on coastal zone hypoxia. *Journal of Palaeolimnology* 55: 319-338.

95. *Sulu-Gambari, F., Seitaj, D., Meysman, F.J.R., Schauer, R., Polerecky, L. & Slomp, C.P.* 2016. Cable bacteria control iron-phosphorus dynamics in sediments of a coastal hypoxic basin. *Environmental Science and Technology*, 50: 1227-1233.
94. *Rooze, J., Egger, M., Tsandev, I. & Slomp, C.P.* 2016. Iron-dependent anaerobic oxidation of methane in coastal surface sediments: Potential controls and impact. *Limnol. Oceanogr.* doi:10.1002/lno.10275.
93. *Reed, D.C., Gustafsson, B.G. & Slomp, C.P.* 2016. Shelf-to-basin iron shuttling enhances vivianite formation in deep Baltic Sea sediments. *Earth and Planetary Science Letters*, 434: 241-251.
92. *Lenz, C., Jilbert, T., Conley, D.J., Slomp, C.P.* 2015. Hypoxia-driven variations in iron and manganese shuttling in the Baltic Sea over the past 8 kyrs. *Geochem. Geophys. Geosyst.*, 16, (pp. 3754-3766) (13 p.).
91. *Jilbert, T., Conley, D.J., Gustafsson, B.G., Funkey, C.P. & Slomp, C.P.* 2015. Glacio-isostatic control on hypoxia in a high-latitude shelf basin. *Geology*, 43 (5), (pp. 427-430) (4 p.).
90. *Seitaj, D., R. Schauer, F. Sulu-Gambari, S. Hidalgo-Martinez, S. Malkin, L.D.W. Burdorf, C.P. Slomp, F.J. Meysman.* 2015. Cable bacteria in the sediments of seasonally hypoxic basins: a microbial “firewall “against euxinia. 2015. *Proceedings of the National Academy of Sciences of the United States of America*, 112: 13278-13283.
89. *Hagens, M., Slomp, C.P., Meysman, F., Seitaj, D., Harlay, J., Borges, A. & Middelburg, J.* 2015. Biogeochemical processes and buffering capacity concurrently affect acidification in a seasonally hypoxic coastal marine basin. *Biogeosciences* 12: 1561-1583.
88. *Egger, M., Jilbert T., Behrends T., Rivard, C., Slomp C.P.* 2015. Vivianite is a major sink for phosphorus in methanogenic coastal surface sediments. *Geochimica et Cosmochimica Acta* 169: 217-235.
87. *Lenz, C., Jilbert, T., Conley, D. J., Wolthers, M. & Slomp, C. P.* 2015. Are recent changes in sediment manganese sequestration in the euxinic basins of the Baltic Sea linked to the expansion of hypoxia? *Biogeosciences*, 12: 4875-4894.
86. *Ruvalcaba, I., van Helmond, N.A.G.M., Tsandev, I., Middelburg, J. J. & Slomp, C.P.* 2015. The nitrogen isotope composition of sediments from the proto-North Atlantic during Oceanic Anoxic Event 2. *Paleoceanography*, 30: 923-937.
85. *Steenbergh, A.K., Bodelier, P.L.E., Hoogveld, H.L., Slomp, C.P. & Laanbroek, R.* 2015. Phylogenetic characterization of phosphatase-expressing bacterial communities in Baltic Sea sediments. *Microbes and Environments*, 30: 192-195.
84. *Egger, M., O. Rasigraf, C.J. Sapart, T. Jilbert, M.S.M. Jetten, T. Röckmann, C. van der Veen, N. Banda, B. Kartal, K.F. Ettwig, C.P..Slomp.* 2015. Iron-mediated anaerobic oxidation of methane in brackish coastal sediments. *Environmental Science & Technology*. DOI: 10.1021/es503663z.
83. *Kraal, P., B.C. Bostick, T. Behrends, G.J. Reichart, C.P.Slomp.* 2014. Characterization of phosphorus species in sediments from the Arabian Sea oxygen minimum zone: combining sequential extractions and X-ray spectroscopy. *Marine Chemistry* 168 (2015) 1–8.

82. *Van Helmond, N., Ruvalcaba-Baroni, I., A. Sluijs, J. Sinnighe-Damste, C.P. Slomp, 2014. Spatial extent and degree of oxygen depletion in the deep proto-North Atlantic basin during Oceanic Anoxic Event 2. Geochem. Geophys. Geosyst.,15, doi:10.1002/2014GC005528.*
81. *Ruvalcaba-Baroni, I., I. Tsandev, C.P. Slomp. 2014. Enhanced N₂-fixation and NH₄⁺ recycling during Oceanic Anoxic Event 2 in the proto-North Atlantic. Geophys. Geosyst., 15, 4064–4078, doi:10.1002/2014GC005453.*
80. *Sluijs A., L. van Roij, G.J. Harrington, S. Schouten, J.A. Sessa, L.J. LeVay, G.-J. Reichart and C.P. Slomp. 2014. Warming, euxinia and sea level rise during the Paleocene–Eocene Thermal Maximum on the Gulf Coastal Plain: implications for ocean oxygenation and nutrient cycling. Climate of the Past 10, 1421–1439. doi:10.5194/cp-10-1421-2014*
79. *Steenbergh A.K., P.L.E. Bodelier, C.P. Slomp and H.J. Laanbroek. 2014. Effect of redox conditions on bacterial community structure in Baltic Sea sediments with contrasting Phosphorus fluxes. PLoS ONE 9(3), e92401. doi:10.1371/journal.pone.0092401*
78. *Dijkstra N., P. Kraal, M.M.M. Kuypers, B. Schmetger and C.P. Slomp. 2014. Are Iron-Phosphate Minerals a Sink for Phosphorus in Anoxic Black Sea Sediments? PLoS ONE 9(7), e101139, doi:10.1371/journal.pone.0101139.*
77. *Kraal P. and C.P. Slomp. 2014. Rapid and extensive alteration of phosphorus speciation during oxic storage of wet sediment samples. PLoS ONE 9, e96859, doi: 10.1371/journal.pone.0096859*
76. *Funkey C.P., D.J. Conley, N.S. Reuss, C. Humborg, T. Jilbert and C.P. Slomp. 2014, Hypoxia sustains cyanobacteria blooms in the Baltic Sea. Environmental Science and Technology, dx.doi.org/10.1021/es404395a*
75. *Carstensen J., D.J. Conley, E. Bonsdorff, B.G. Gustafsson, S. Hietanen, U. Janas, T. Jilbert, A. Maximov, A. Norkko, J. Norkko, D.C. Reed, C.P. Slomp, K. Timmermann and M. Voss. 2014. Hypoxia in the Baltic Sea: Biogeochemical Cycles, Benthic Fauna, and Management. AMBIO 43, 26–36. doi 10.1007/s13280-013-0474-7*
74. *Ruvalcaba Baroni I., R.P.M. Topper, N.A.G.M. van Helmond, H. Brinkhuis and C.P. Slomp. 2014. Biogeochemistry of the North Atlantic during oceanic anoxic event 2: role of changes in ocean circulation and phosphorus input. Biogeosciences 11, 977-993. doi:10.5194/bg-11-977-2014*
73. *Lenz C. , T. Behrends, T. Jilbert, M. Silveira and C.P. Slomp. 2014. Redox-dependent changes in manganese speciation in Baltic Sea sediments from the Holocene Thermal Maximum: An EXAFS, XANES and LA-ICP-MS study. Chemical Geology 370,49-57. http://dx.doi.org/10.1016/j.chemgeo.2014.01.013*
72. *Rabalais N.N., W.-J. Cai, J. Carstensen, D.J. Conley, B. Fry, X. Hu, Z. Quiñones-Rivera, R. Rosenberg, C.P. Slomp, R.E. Turner, M. Voss, B. Wissel and J. Zhang. 2014. Eutrophication-driven deoxygenation in the coastal ocean. Oceanography 27, 172-183. http://dx.doi.org/10.5670/oceanog.2014.21.*
71. *van Helmond, N., A. Sluijs, G.J. Reichart, J.S. Sinnighe Damste, C.P. Slomp, H. Brinkhuis. 2013. A perturbed hydrological cycle during Oceanic Anoxic Event 2. Geology 42, 123-126, 2014. doi: 10.1130/G34929.1*

70. Beusen, A.H.W., C.P. Slomp, A.F. Bouwman. 2013. Global land–ocean linkage: direct inputs of nitrogen to coastal waters via submarine groundwater discharge (SGD). *Environmental Research Letters*, 8, 034035, 2013. doi: 10.1088/1748-9326/8/3/034035
69. *Jilbert, T.*, C.P. Slomp. 2013. Rapid high-amplitude variability in Baltic Sea hypoxia during the Holocene. *Geology* 41, p. 1183-1186. doi:10.1130/G34804.1.
68. *Zhang Y.-C.*, H. Prommer, H.P. Broers, C.P. Slomp, J. Greskowiak, B. van der Grift and P. Van Cappellen. 2013. Model-based integration and analysis of biogeochemical and isotopic dynamics in a nitrate-polluted pyritic aquifer. *Environmental Science and Technology* 47, 10415-10422. doi: 10.1021/es4023909.
67. Laruelle, G.G., H.H. Dürr, R. Lauerwald, J. Hartmann, C.P. Slomp, N. Goossens, P.A.G. Regnier. 2013. Global multi-scale segmentation of continental and coastal waters from the watersheds to the continental margins. *Hydrology and Earth System Sciences*, 17, 2029-2051.
66. Slomp C.P., H.P. Mort, T. Jilbert, D.C. Reed, B. Gustafsson, M. Wolthers. 2013. Coupled dynamics of iron and phosphorus in sediments of an oligotrophic coastal basin and the impact of anaerobic oxidation of methane. *PLoS ONE* 8(4): e62386.
65. Slomp, C.P. 2013. Reconstructing the history of euxinia in a coastal basin. 2013. *Geology*, 41(4), 523-524. (Invited Focus article).
64. Bouwman, A.F., A.H.W. Beusen, J. Griffioen, J.W. Van Groeningen, M.M. Hefting, O. Oenema, P.J.T.M. Van Puijenbroek, S. Seitzinger, S., C.P. Slomp, E. Stehfest. 2013. Global trends and uncertainties in terrestrial denitrification and N₂O emissions. *Phil. Transactions B. Royal Society*, London, 368 no. 1621 20130112
63. Bouwman A.F., M.F.P. Bierkens, J. Griffioen, M.M. Hefting, J.J. Middelburg, H. Middelkoop and C.P. Slomp. 2013. Nutrient dynamics, transfer and retention along the aquatic continuum from land to ocean: Towards integration of ecological and biogeochemical models. *Biogeosciences* 10, 1-22, 2013. doi: 10.5194/bg-10-1-2013
62. *Jilbert T.* and C.P. Slomp. 2013. Iron and manganese shuttles control the formation of authigenic phosphorus minerals in the euxinic basins of the Baltic Sea. *Geochimica et Cosmochimica Acta* 107, 155-169.
61. *Palastanga, V.*, C.P. Slomp, C. Heinze, 2013. Glacial-interglacial variability in ocean oxygen and phosphorus in a global biogeochemical model. *Biogeosciences*, 10, 945-958.
60. Steenbergh, A.K., P.L.E. Bodelier, M. Heldal, C.P. Slomp, H.J. Laanbroek, 2012. Does microbial stoichiometry modulate eutrophication of aquatic ecosystems? *Environmental Microbiology* 15, 1572–1579, 2013. doi: 10.1111/1462-2920.12042.
59. *Tsander, I.*, D.C. Reed, C.P. Slomp, 2012. Phosphorus diagenesis in deep-sea sediments: Sensitivity to water column conditions and global scale implications. *Chemical Geology*. 330–331, 127–139, 2012. <http://dx.doi.org/10.1016/j.chemgeo.2012.08.012>
58. *Kraal, P.*, C.P. Slomp, D.C. Reed, G.J. Reichart, S.W. Poulton. 2012. Sedimentary phosphorus and iron cycling in and below the oxygen minimum zone of the northern Arabian Sea. *Biogeosciences* 9, 2603-2624.
57. *Zhang, Y.*, C.P. Slomp, H.P. Broers, B. Bostick, H.F. Passier, M.E. Böttcher, E.O. Omeregic, J.R. Lloyd, D.A. Polya, P. Van Cappellen. 2012. Isotopic and microbiological

signatures of pyrite-driven denitrification in a sandy aquifer *Chemical Geology*, 300-301: 123-132.

56. Norkko*, J., *Reed**, D. C., Timmermann, K., Norkko, A., Gustafsson, B. G., Bonsdorff, E., Slomp, C. P., Carstensen, J. and Conley, D. J., 2012, A welcome can of worms? Hypoxia mitigation by an invasive species. *Global Change Biology*, 18: 422–434. doi: 10.1111/j.1365-2486.2011.02513.x *: joint first author.

55. *Palastanga, V.*, C. P. Slomp, and C. Heinze. 2011. Long-term controls on ocean phosphorus and oxygen in a global biogeochemical model, *Global Biogeochem. Cycles*, 25, GB3024, doi:10.1029/2010GB003827.

54. Steenbergh, A.K., P.L.E. Bodelier, H.L. Hoogveld, C.P. Slomp, H.J. Laanbroek, 2011. Phosphatases relieve carbon limitation of microbial activity in Baltic Sea sediments along a redox-gradient. *Limnology and Oceanography*. 56(6): 2018-2026.

53. *Reed, D.C.*, C.P. Slomp, G.J. de Lange, 2011. A quantitative reconstruction of organic matter and nutrient diagenesis in Mediterranean Sea sediments over the Holocene. *Geochimica et Cosmochimica Acta* 75, 5540-5558. doi:10.1016/j.gca.2011.07.002

52. *Jilbert T.*, C.P. Slomp, B.G. Gustafsson and W. Boer. 2011. Beyond the Fe-P-redox connection: preferential regeneration of phosphorus from organic matter as a key control on Baltic Sea nutrient cycles. *Biogeosciences* 8, 1699-1720, 2011. doi:10.5194/bg-8-1699-2011.

51. Limburg, K., C. Olsen, Y. Walther, D. Dale, C.P. Slomp, H. Hoie, 2011. Tracking Baltic hypoxia and cod migration over millennia with natural tags. *Proceedings of the National Academy of Sciences of the United States of America*. doi/10.1073/pnas.1100684108. E1177-182.

50. *Reed, D.C.*, C.P. Slomp, B.G. Gustafsson. 2011. Sedimentary phosphorus dynamics and the evolution of bottom water hypoxia: A coupled benthic-pelagic model of a coastal system. *Limnology and Oceanography* 56, 1075-1092.

49. Dürr, H.H., *G.G. Laruelle*, C.M. van Kempen, C.P. Slomp, M. Meybeck, H.Middelkoop. 2011. World-wide typology of nearshore coastal systems: defining the estuarine filter of river inputs to the oceans. *Estuaries and coasts* 34, 441–458. DOI 10.1007/s12237-011-9381-y.

48. Syakila A., C. Kroeze and C.P. Slomp. 2010. Neglecting sinks for N₂O at the earth's surface: does it matter? *Journal of Integrative Environmental Sciences* 7, 79–87.

47. Bernard C.Y., *G.G. Laruelle*, C.P. Slomp, C. Heinze. 2010. Impact of changes in river fluxes of silica on the global marine silicon cycle: a model comparison. *Biogeosciences* 7, 441-453.

46. *Kraal P.*, C.P. Slomp, A. Forster, M.M.M. Kuypers. 2010. Phosphorus cycling from the margin to abyssal depths in the proto-Atlantic during oceanic anoxic event 2. *Palaeogeography, Palaeoclimatology, Palaeoecology* 295, 42–54.

45. *Kraal P.*, C.P. Slomp, G.J. de Lange. 2010. Sedimentary organic carbon to phosphorus ratios as a redox proxy in Quaternary records from the Mediterranean. *Chemical Geology* 277, 167-177.

44. *Laruelle G.G.*, H.H. Dürr, C.P. Slomp, A.V. Borges. 2010. Evaluation of sinks and sources of CO₂ in the global coastal ocean using a spatially-explicit typology of estuaries and continental shelves. *Geophysical Research Letters* 37, L15607, doi:10.1029/2010GL043691.

43. *Mort H.P.*, C.P. Slomp, B.G. Gustafsson, T.J. Andersen. 2010. Phosphorus recycling and burial in Baltic Sea sediments with contrasting redox conditions. *Geochimica et Cosmochimica Acta* 74, 1350-1362.
42. *Tsander I.*, C. Rabouille, C.P. Slomp, P. Van Cappellen. 2010. Shelf erosion and submarine river canyons: implications for deep-sea oxygenation and ocean productivity during glaciation. *Biogeosciences* 7, 1973–1982.
41. Conley D., S. Bjork, E. Bonsdorff, J. Carstensen, G. Destouni, B.G. Gustafsson, S. Hietanen, M. Kortekaas, H. Kuosa, H.E. Markus Meier, B. Muller-Karulis, K. Nordberg, G. Nuernberg, A. Norkko, H. Pitkanen, N.N. Rabalais, R. Rosenberg, O.P. Savchuk, C.P. Slomp, M. Voss, F. Wulff and L. Zillen. 2009. Hypoxia-related processes in the Baltic Sea. *Environmental Science and Technology* 43, 3412-3420.
40. *Kraal P.*, C.P. Slomp, A. Forster, M.M.M. Kuypers, A. Sluijs. 2009. Pyrite oxidation during sample storage determines phosphorus fractionation in carbonate-poor anoxic sediments. *Geochimica et Cosmochimica Acta* 73, 3277–3290.
39. *Laruelle G.G.*, V. Roubex, A. Sferratore, B. Brodherr, D. Ciuffa, D.J. Conley, H.H. Dürr, J. Garnier, C. Lancelot, Q. Le Thi Phuong, J.-D. Meunier, M. Meybeck, P. Michalopoulos, B. Moriceau, S. Ni Longphuiert, S. Loucaides, L. Papush, M. Presti, O. Ragueneau, P. Regnier, L. Saccone, C. P. Slomp, C. Spiteri, P. Van Cappellen. 2009. Anthropogenic perturbations of the silicon cycle at the global scale: Key role of the land-ocean transition. *Global Biogeochemical Cycles* 23, GB4031, doi:10.1029/2008GB003267.
38. Oonk S., C.P. Slomp, D.J. Huisman, S.P. Vriend. 2009. Geochemical and mineralogical investigation of domestic archaeological soil features at the Tiel-Passewaaij site, the Netherlands. *Journal of Geochemical Exploration* 101, 155-165.
37. Oonk S., C.P. Slomp, D.J. Huisman, S.P. Vriend. 2009. Effects of site lithology on geochemical signatures of human occupation in archaeological house plans in the Netherlands. *Journal of Archaeological Science* 36, 1215-1228.
36. *Tsander I.*, C.P. Slomp. 2009. Modeling phosphorus cycling and carbon burial during Cretaceous Oceanic Anoxic Events. *Earth and Planetary Science Letters* 286, 71–79.
35. *Zhang Y.-C.*, C.P. Slomp, H.P. Broers, H.F. Passier, P. Van Cappellen. 2009. Denitrification coupled to pyrite oxidation and changes in groundwater quality in a shallow sandy aquifer. *Geochimica et Cosmochimica Acta* 73, 6716–6726. (Highlighted as the Editor's choice in *Science* (2009; vol. 326: 644).
34. Oonk, S., C.P. Slomp, D.J. Huisman. 2009. Geochemistry as an aid in archaeological prospection and site interpretation: current issues and research directions. *Archeological Prospection*. 16, 35-51.
33. *Tsander I.*, C.P. Slomp, P. Van Cappellen. 2008. Glacial-interglacial variations in marine phosphorus cycling: Implications for ocean productivity. *Global Biogeochemical Cycles* 22 GB4004, doi:10.1029/2007GB003054.
32. De Lange, G.J., J. Thomson, A. Reitz, C.P. Slomp, M. Speranza Principato, E. Erba, C. Corselli. 2008. Synchronous basin-wide formation and redox-controlled preservation of Mediterranean sapropel S1. *Nature Geoscience* 1, 606-610. Doi. 10.1038/ngeo283.

31. *Spiteri, C., C.P. Slomp, M. Charette, K. Tuncay, C. Meile.* 2008. Reactive transport modeling of flow and nutrient dynamics in a subterranean estuary (Waquoit Bay, MA , USA). *Geochimica et Cosmochimica Acta.* 72, 3398-3412.
30. *Spiteri, C., C. P. Slomp, K. Tuncay, C. Meile.* 2008. Modeling biogeochemical processes in subterranean estuaries: Effect of flow dynamics and redox conditions on submarine groundwater discharge of nutrients, *Water Resources Research* 44, W02430, doi:10.1029/2007WR006071.
29. Laverman, A., *R.W. Canavan, C.P. Slomp, P. Van Cappellen.* 2007. Nitrogen Transformations in Coastal Freshwater Sediments and Response to Salinization. *Water Research* 41: 3061-3068.
28. *Canavan, R.W., Van Cappellen, P., J.J.G. Zwolsman, G. van den Berg, C.P.Slomp.* 2007. Geochemistry of trace metals in a fresh water sediment: field results and diagenetic modeling. *Science of the Total Environment* 381: 263-279.
27. *Spiteri, C., C.P. Slomp, P. Regnier P., C. Meile C., P. Van Cappellen.* 2007. Modeling the geochemical fate and transport of waste-water derived phosphorus in contrasting groundwater systems *Journal of Contaminant Hydrology* 92, 87-108.
26. *Canavan, R.W., A.M. Laverman, C.P. Slomp.* 2007. Modeling of Nitrogen Cycling in a Freshwater sediment. *Hydrobiologia* 584, 27-36.
25. Slomp C. P. and P. Van Cappellen. 2007. The global marine phosphorus cycle: sensitivity to oceanic circulation. *Biogeosciences*, 4, 155-171.
24. Crudeli, D. J. R. Young, E. Erba, M. Geisen, P. Ziveri, G.J. de Lange, C.P. Slomp. 2006. Fossil record of holococcoliths and selected hetero-holococcolith associations from the Mediterranean (Holocene-late Pleistocene): evaluation of carbonate diagenesis and palaeoecological-palaeoceanographic implications. *Paleoceanography, Palaeogeography, Palaeoclimatology*, 237, 191-224.
23. *Canavan, R.W., C.P. Slomp, P. Jourabchi, P. Van Capellen, A.M. Laverman, G. van den Berg.* 2006. Organic matter mineralization in sediment of a coastal freshwater lake and response to salinization. *Geochimica Cosmochimica Acta* 70, 2836-2855.
22. Principato, M.S., D. Crudeli, P. Ziveri, P., C.P. Slomp, C. Corselli, E. Erba, G.J. de Lange. 2006. Phyto- and zooplankton paleofluxes during the deposition of sapropel S1 (eastern Mediterranean): biogenic carbonate preservation and paleoecological implications. *Palaeogeography, Palaeoclimatology, Palaeoecology.* 235, 8-27.
21. *Spiteri, C., P. Regnier, C.P. Slomp, M.A. Charette.* 2006. pH-dependent Iron oxide precipitation in a subterranean estuary. *Journal of Geochemical Exploration* 88, 399-403.
20. Reitz A., J. Thomson, G.J. de Lange, D.R.H. Green, C.P. Slomp and A.C. Gebhardt. 2006. Effects of the Santorini (Thera) eruption on manganese behavior in Holocene sediments of the eastern Mediterranean. *Earth and Planetary Science Letters* 241, 188-201.
19. Van der Zee, C., C.P. Slomp, D.G. Rancourt, W. Van Raaphorst. 2005. A Mössbauer spectroscopic study on iron redox transition in eastern Mediterranean sediments. *Geochimica et Cosmochimica Acta.* 62, 441-453.
18. Thomson, J., D. Crudeli, G.J. de Lange, C.P. Slomp., E. Erba, C. Corselli. 2004. Aragonite, Sr/Ca, sulfide and *Florisphaera profunda* in eastern Mediterranean sapropel units:

Biogenic, diagenetic and detrital considerations. *Paleoceanography* 19, PA3003, doi:10.1029/2003PA000976.

17. Slomp, C.P., P. Van Cappellen. 2004. Nutrient inputs to the coastal ocean through submarine groundwater discharge: controls and potential impact. *J. of Hydrology*, 295, 64-86.

16. Crudeli, D., J.R. Young, E. Erba, G.J. de Lange, K. Henriksen, H. Kinkel, C.P. Slomp, P. Ziveri. 2004. Abnormal carbonate diagenesis in Holocene-Late Pleistocene sapropel-associated sediments from the Eastern Mediterranean; evidence from *Emiliana huxleyi* coccolith morphology. Special Issue INA9 Conference, Parma. *Mar. Micropaleontol.*, 52,217-240.

15. Slomp, C.P., J. Thomson, G.J. de Lange. 2004. Controls on phosphorus regeneration and burial during formation of eastern Mediterranean sapropels. *Marine Geology* 203, 141-159.

14. Regnier, P., P. Jourabchi, C.P. Slomp. 2003. Reactive transport modeling as a technique for understanding coupled biogeochemical processes in surface and subsurface environments. *Neth. J. of Geosciences*. 82, 5-18.

13. Van der Zee, C., D.R. Roberts, D.G. Rancourt, C.P. Slomp, 2003. Nanogoethite is the dominant reactive oxyhydroxide phase in lake and marine sediments. *Geology*. 31, 993-996.

12. Slomp, C.P., J. Thomson, G.J. de Lange. 2002. Enhanced regeneration of phosphorus during formation of the most recent eastern Mediterranean sapropel (S1). *Geochimica et Cosmochimica Acta* 66, 1171-1184.

11. Van der Zee, C., C.P. Slomp, W. Van Raaphorst. 2002. Authigenic P formation and reactive P burial in sediments of the Nazare canyon on the Iberian margin (NE Atlantic). *Marine Geology* 185, 379-392.

10. Van Santvoort, P.J.M., G.J. de Lange, J. Thomson, S. Colley, F. Meysman, C.P. Slomp. 2002. Oxidation and origin of organic matter in surficial Eastern Mediterranean hemipelagic sediments. *Aquatic Geochemistry* 8, 153-17.

9. Schenau, S.J., C.P. Slomp, G.J. de Lange. 2000. Phosphogenesis and phosphorite formation in sediments located within the Arabian Sea Oxygen Minimum Zone. *Marine Geology* 169, 1-20.

8. Slomp, C.P., J.F.P. Malschaert, W. van Raaphorst. 1998. The role of sorption in sediment-water exchange of phosphate in North Sea continental margin sediments. *Limnology and Oceanography* 43, 832-846.

7. Slomp, C.P., J.F.P. Malschaert, L. Lohse, W. van Raaphorst. 1997. Iron and manganese cycling in different sedimentary environments on the North Sea continental margin. *Continental Shelf Research* 17, 1083-1117.

6. Slomp, C.P., S.J. van der Gaast, W. van Raaphorst. 1996. Phosphorus binding by poorly crystalline iron oxides in North Sea sediments. *Marine Chemistry* 52, 55-73.

5. Slomp, C.P., E.H.G. Epping, W. Helder, W. van Raaphorst. 1996. A key role for iron-bound phosphorus in authigenic apatite formation in North Atlantic continental platform sediments. *Journal of Marine Research* 54, 1179-1205.

4. Lohse, L., J.F.P. Malschaert, C.P. Slomp, W. Helder, W. van Raaphorst. 1995. Sediment-water fluxes of inorganic nitrogen compounds along the transport route of organic matter in the North Sea . *Ophelia* 41, 173-197.
3. Lohse, L., J.F.P. Malschaert, C.P. Slomp, W. Helder, W. van Raaphorst. 1993. Nitrogen cycling in North Sea sediments: interaction of denitrification and nitrification in offshore and coastal areas. *Marine Ecology Progress Series* 101, 283-296.
2. Slomp, C.P., W. van Raaphorst, J.F.P. Malschaert, A. Kok, A.J.J. Sandee. 1993. The effect of deposition of organic matter on phosphorus dynamics in experimental marine sediment systems. *Hydrobiologia* 253, 83-98.
1. Slomp, C.P., W. van Raaphorst. 1993. Phosphate adsorption in oxidized marine sediments. *Chemical Geology* 107, 477-480.

Other publications (selection)

15. Slomp, C.P. Lang leve de aarde. Inaugural lecture, Radboud University, September 2023.
14. Working group report on ocean Oxygen. European Marine Board. Future Science Brief 10, 'Ocean oxygen: the role of the ocean in the oxygen we breathe and the threat of deoxygenation.' <https://www.marineboard.eu/ocean-oxygen>
13. Conley, D.J. and Slomp, C.P. Ocean deoxygenation. 2019. Impacts on microbial processes, biogeochemistry and feedbacks. Chapter 7. IUCN Report on Ocean deoxygenation: Everyone's problem. Edited by D. Laffoley and J.M. Baxter. <https://www.iucn.org/theme/marine-and-polar/our-work/climate-change-and-oceans/ocean-deoxygenation>
12. Asmala, E., Carstensen, J., Conley, D.J., Slomp, C.P., Stadmark, J., Voss, M. 2019 A reply to the comment by Karlsson et al. *Limnology and Oceanography* <https://doi.org/10.1002/lno.11195>
11. Andrén, T., Barker Jorgensen, B., Cotterill, C., Green, S. And Expedition 347 Scientists (17.12.2015). IODP expedition 347: Baltic Sea basin paleoenvironment and biosphere. *Scientific Drilling*, 20, (pp. 1-12) (12 p.).
10. Andrén, T., Jørgensen, B.B., and Cotterill, C., and the Expedition 347 Scientists, 2015. *Proc. IODP, 347: College Station, TX (Integrated Ocean Drilling Program)*. doi:10.2204/iodp.proc.347.2015.
9. Expedition 347 Scientists, 2014. Baltic Sea Basin Paleoenvironment: paleoenvironmental evolution of the Baltic Sea Basin through the last glacial cycle. *IODP Prel. Rept.*, 347. doi:10.2204/iodp.pr.347.2014.
8. Slomp, C. Lang leve de zee. Inaugural lecture, Utrecht University, September, 2014.
7. Slomp, C.P. 2012. Phosphorus cycling in the estuarine and coastal zones: sources, sinks and transformations. *Treatise on Estuarine and Coastal Science*. Vol. 5. Editors: R. Laane, J.J. Middelburg. Elsevier.
6. Slomp, C.P., 2011. Marine pollution: give more priority to phosphorus studies. *Nature* 478: 591. doi:10.1038/478459a

5. Voss, M., A. Baker, H.W. Bange, D. Conley, S. Cornell, B. Deutsch, A. Engel, R. Ganeshram, J. Garnier, A.S. Heiskanen, T. Jickells, C. Lancelot, A. McQuatters-Gollop, J. Middelburg, D. Schiedek, C.P. Slomp 2011. Nitrogen processes in coastal and marine ecosystems. ENA European Nitrogen Assessment. p147-176. In: M.A. Sutton, C.M. Howard, J.W. Erisman, G. Billen, A. Bleeker, P. Grennfelt, H. van Grinsven, B. Grizzetti (editors). The European Nitrogen Assessment. Cambridge University Press. 612p.
4. Ragueneau, O., D.J. Conley, A. Leynaert, S. Ni Longphuir, C.P. Slomp. 2006. Role of diatoms in silicon cycling and coastal marine food webs. p163-195. In: Ittekkot, V., D. Unger, C. Humborg, N.T. An. (eds.) The Silicon Cycle. Human Perturbations and Impacts on Aquatic Systems. Scope 66, Island Press, 275pp.
3. Ragueneau, O., D.J. Conley, A. Leynaert, S. Ni Longphuir, C.P. Slomp. 2006. Responses of coastal ecosystems to anthropogenic perturbations of silicon cycling. p197-213. al ecosystems. In: Ittekkot, V., D. Unger, C. Humborg, N.T. An. (eds.) The Silicon Cycle. Human Perturbations and Impacts on Aquatic Systems. Scope 66, Island Press, 275pp.
2. Kroeze, C., L. Bouwman, C.P. Slomp. 2007. Sinks of N₂O at the Earth's surface. p227-242. In: D. Reay, N. Hewitt, K. Smith, J. Grace. Greenhouse Gas Sinks. CABI publishing. 290p.
1. Slomp, C.P. 1997. Early diagenesis of phosphorus in continental margin sediments. PhD-thesis, Wageningen Agricultural University, the Netherlands. 178p.