# Robinson Fulweiler

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7598376/publications.pdf

Version: 2024-02-01

| 106 | 4,738 | 109137 | 110170 |
|---|---|---|---|
| papers | citations | 35 h-index | 64 g-index |

| 112 | 112 | 112 | 5967 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Rebuilding marine life. Nature, 2020, 580, 39-51. | 13.7 | 560 |
| 2 | Challenges to incorporating spatially and temporally explicit phenomena (hotspots and hot moments) in denitrification models. Biogeochemistry, 2009, 93, 49-77. | 1.7 | 529 |
| 3 | Reversal of the net dinitrogen gas flux in coastal marine sediments. Nature, 2007, 448, 180-182. | 13.7 | 182 |
| 4 | The impact of changing climate on phenology, productivity, and benthicâ€“pelagic coupling in Narragansett Bay. Estuarine, Coastal and Shelf Science, 2009, 82, 1-18. | 0.9 | 158 |
| 5 | A synthesis of methane emissions from shallow vegetated coastal ecosystems. Global Change Biology, 2020, 26, 2988-3005. | 4.2 | 134 |
| 6 | Toward the Geoscience Paper of the Future: Best practices for documenting and sharing research from data to software to provenance. Earth and Space Science, 2016, 3, 388-415. | 1.1 | 127 |
| 7 | Global Carbon Cycling on a Heterogeneous Seafloor. Trends in Ecology and Evolution, 2018, 33, 96-105. | 4.2 | 117 |
| 8 | The Terrestrial Silica Pump. PLoS ONE, 2012, 7, e52932. | 1.1 | 111 |
| 9 | Ecological control of nitrite in the upper ocean. Nature Communications, 2018, 9, 1206. | 5.8 | 107 |
| 10 | Evidence and a conceptual model for the coâ€˜occurrence of nitrogen fixation and denitrification in heterotrophic marine sediments. Marine Ecology - Progress Series, 2013, 482, 57-68. | 0.9 | 107 |
| 11 | Modeling denitrification in aquatic sediments. Biogeochemistry, 2009, 93, 159-178. | 1.7 | 103 |
| 12 | Evidence, causes, and consequences of declining nitrogen availability in terrestrial ecosystems. Science, 2022, 376, eabh3767. | 6.0 | 100 |
| 13 | Promoting inclusive metrics of success and impact to dismantle a discriminatory reward system in science. PLoS Biology, 2021, 19, e3001282. | 2.6 | 98 |
| 14 | Human activities directly alter watershed dissolved silica fluxes. Biogeochemistry, 2012, 111, 125-138. | 1.7 | 92 |
| 15 | Methane and Nitrous Oxide Emissions Complicate Coastal Blue Carbon Assessments. Global Biogeochemical Cycles, 2021, 35, e2020GB006858. | 1.9 | 86 |
| 16 | Directly Measured Denitrification Reveals Oyster Aquaculture and Restored Oyster Reefs Remove Nitrogen at Comparable High Rates. Frontiers in Marine Science, 2016, 3, . | 1.2 | 81 |
| 17 | Mississippi River Flood of 2008: Observations of a Large Freshwater Diversion on Physical, Chemical, and Biological Characteristics of a Shallow Estuarine Lake. Environmental Science & Technology, 2009, 43, 5599-5604. | 4.6 | 79 |
| 18 | Terrestrial vegetation and the seasonal cycleof dissolved silica in a southern New Englandcoastal river. Biogeochemistry, 2005, 74, 115-130. | 1.7 | 76 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Human appropriation of biogenic silicon â€“ the increasing role of agriculture. Functional Ecology, 2016, 30, 1331-1339. | 1.7 | 72 |
| 20 | Rebuild the Academy: Supporting academic mothers during COVID-19 and beyond. PLoS Biology, 2021, 19, e3001100. | 2.6 | 67 |
| 21 | Examining the impact of acetylene on N-fixation and the active sediment microbial community. Frontiers in Microbiology, 2015, 6, 418. | 1.5 | 63 |
| 22 | Sediment Nitrogen Fixation: a Call for Re-evaluating Coastal N Budgets. Estuaries and Coasts, 2016, 39, 1626-1638. | 1.0 | 62 |
| 23 | Effects of freshwater input on nutrient loading, phytoplankton biomass, and cyanotoxin production in an oligohaline estuarine lake. Hydrobiologia, 2011, 661, 377-389. | 1.0 | 59 |
| 24 | A critical review of the <sup>15</sup>N<sub>2</sub> tracer method to measure diazotrophic production in pelagic ecosystems. Limnology and Oceanography: Methods, 2020, 18, 129-147. | 1.0 | 59 |
| 25 | Reconsidering Ocean Calamities. BioScience, 2015, 65, 130-139. | 2.2 | 55 |
| 26 | Spartina alterniflora and invasive Phragmites australis stands have similar greenhouse gas emissions in a New England marsh. Aquatic Botany, 2014, 116, 83-92. | 0.8 | 52 |
| 27 | Low Greenhouse Gas Emissions from Oyster Aquaculture. Environmental Science & Technology, 2019, 53, 9118-9127. | 4.6 | 52 |
| 28 | Denitrification in coastal Louisiana: A spatial assessment and research needs. Journal of Sea Research, 2010, 63, 157-172. | 0.6 | 51 |
| 29 | Net Sediment N2 Fluxes in a Coastal Marine Systemâ€”Experimental Manipulations and a Conceptual Model. Ecosystems, 2008, 11, 1168-1180. | 1.6 | 50 |
| 30 | Nitrogen and Phosphorus Inputs to Narragansett Bay: Past, Present, and Future. , 2008, , 101-175. | | 50 |
| 31 | The Declining Role of Organic Matter in New England Salt Marshes. Estuaries and Coasts, 2017, 40, 626-639. | 1.0 | 47 |
| 32 | Responses of benthicâ€“pelagic coupling to climate change in a temperate estuary. Hydrobiologia, 2009, 629, 147-156. | 1.0 | 44 |
| 33 | Spatial and Temporal Variability of Benthic Oxygen Demand and Nutrient Regeneration in an Anthropogenically Impacted New England Estuary. Estuaries and Coasts, 2010, 33, 1377-1390. | 1.0 | 42 |
| 34 | Watershed land use alters riverine silica cycling. Biogeochemistry, 2013, 113, 525-544. | 1.7 | 41 |
| 35 | The relationships among hydrodynamics, sediment distribution, and chlorophyll in a mesotidal estuary. Estuarine, Coastal and Shelf Science, 2014, 144, 54-64. | 0.9 | 41 |
| 36 | Whole truths vs. half truths â€“ And a search for clarity in long-term water temperature records. Estuarine, Coastal and Shelf Science, 2015, 157, A1-A6. | 0.9 | 38 |

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|---|---|---|---|
| 37 | Assessing the Role of pH in Determining Water Column Nitrification Rates in a Coastal System. Estuaries and Coasts, 2011, 34, 1095-1102. | 1.0 | 36 |
| 38 | Molecular evidence for sediment nitrogen fixation in a temperate New England estuary. PeerJ, 2016, 4, e1615. | 0.9 | 36 |
| 39 | Coastal water column ammonium and nitrite oxidation are decoupled in summer. Estuarine, Coastal and Shelf Science, 2016, 178, 110-119. | 0.9 | 35 |
| 40 | A Review of the Emerging Field of Underwater Mass Spectrometry. Frontiers in Marine Science, 2016, 3, . | 1.2 | 32 |
| 41 | Meta-analysis of oyster impacts on coastal biogeochemistry. Nature Sustainability, 2021, 4, 261-269. | 11.5 | 32 |
| 42 | The ebb and flood of Silica: Quantifying dissolved and biogenic silica fluxes from a temperate salt marsh. Estuarine, Coastal and Shelf Science, 2011, 95, 415-423. | 0.9 | 31 |
| 43 | Net sediment N2 fluxes in a southern New England estuary: variations in space and time. Biogeochemistry, 2012, 111, 111-124. | 1.7 | 28 |
| 44 | Sediment Nitrous Oxide Fluxes Are Dominated by Uptake in a Temperate Estuary. Frontiers in Marine Science, 2016, 3, . | 1.2 | 28 |
| 45 | (Nearly) A Decade of Directly Measured Sediment N2 Fluxes: What Can Narragansett Bay Tell Us About the Global Ocean Nitrogen Budget?. Oceanography, 2014, 27, 184-195. | 0.5 | 28 |
| 46 | Silica uptake by SpartinaÃ¢â‚¬â€evidence of multiple modes of accumulation from salt marshes around the world. Frontiers in Plant Science, 2014, 5, 186. | 1.7 | 27 |
| 47 | Impacts of long-term fertilization on salt marsh tidal creek benthic nutrient and N<sub>2 gas fluxes. Marine Ecology - Progress Series, 2012, 471, 11-22. | 0.9 | 27 |
| 48 | Nitrogen enrichment increases net silica accumulation in a temperate salt marsh. Limnology and Oceanography, 2013, 58, 99-111. | 1.6 | 26 |
| 49 | Estuarine Sediments Exhibit Dynamic and Variable Biogeochemical Responses to Hypoxia. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 737-758. | 1.3 | 26 |
| 50 | Export of Nitrogen, Phosphorus, and Suspended Solids from a Southern New England Watershed to Little Narragansett Bay. Biogeochemistry, 2005, 76, 567-593. | 1.7 | 25 |
| 51 | Directly measured net denitrification rates in offshore New England sediments. Continental Shelf Research, 2012, 45, 78-86. | 0.9 | 23 |
| 52 | Ecological footprints and shadows in an urban estuary, Narragansett Bay, RI (USA). Regional Environmental Change, 2012, 12, 381-394. | 1.4 | 23 |
| 53 | Spatial and historic variability of benthic nitrogen cycling in an anthropogenically impacted estuary. Frontiers in Marine Science, 2014, 1, . | 1.2 | 23 |
| 54 | Nitrogen fixation: A poorly understood process along the freshwaterâ€marine continuum. Limnology and Oceanography Letters, 2022, 7, 1-10. | 1.6 | 22 |

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|---|---|---|---|
| 55 | Salt marsh tidal exchange increases residence time of silica in estuaries. Limnology and Oceanography, 2014, 59, 1203-1212. | 1.6 | 21 |
| 56 | Does elevated CO2 alter silica uptake in trees?. Frontiers in Plant Science, 2014, 5, 793. | 1.7 | 20 |
| 57 | Low ratios of silica to dissolved nitrogen supplied to rivers arise from agriculture not reservoirs. Ecology Letters, 2016, 19, 1414-1418. | 3.0 | 19 |
| 58 | Fate and Effect of Dissolved Silicon within Wastewater Treatment Effluent. Environmental Science & Technology, 2017, 51, 7403-7411. | 4.6 | 19 |
| 59 | Nitrogen and phosphorus cycling in the digestive system and shell biofilm of the eastern oyster Crassostrea virginica. Marine Ecology - Progress Series, 2019, 621, 95-105. | 0.9 | 19 |
| 60 | Winter climate change and fine root biogenic silica in sugar maple trees ( Acer saccharum ): Implications for silica in the Anthropocene. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 708-715. | 1.3 | 18 |
| 61 | The eutrophication commandments. Marine Pollution Bulletin, 2012, 64, 1997-1999. | 2.3 | 17 |
| 62 | Telepresence is a potentially transformative tool for field science. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4841-4844. | 3.3 | 17 |
| 63 | Incomplete tidal restoration may lead to persistent high CH<sub>4</sub> emission. Ecosphere, 2017, 8, e01968. | 1.0 | 17 |
| 64 | Salt Marsh Greenhouse Gas Fluxes and Microbial Communities Are Not Sensitive to the First Year of Precipitation Change. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 1071-1087. | 1.3 | 17 |
| 65 | Urban Dissolved Silica: Quantifying the Role of Groundwater and Runoff in Wastewater Influent. Environmental Science & Technology, 2016, 50, 54-61. | 4.6 | 16 |
| 66 | Sediment biogeochemistry along an oyster aquaculture chronosequence. Marine Ecology - Progress Series, 2020, 646, 13-27. | 0.9 | 16 |
| 67 | Ideas and perspectives: A strategic assessment of methane and nitrous oxide measurements in the marine environment. Biogeosciences, 2020, 17, 5809-5828. | 1.3 | 16 |
| 68 | Tidal pulsing alters nitrous oxide fluxes in a temperate intertidal mudflat. Ecology, 2014, 95, 1960-1971. | 1.5 | 15 |
| 69 | Opportunities and Challenges for Including Oyster-Mediated Denitrification in Nitrogen Management Plans. Estuaries and Coasts, 2021, 44, 2041-2055. | 1.0 | 15 |
| 70 | Benthic metabolism and nutrient regeneration in hydrographically different regions on the inner continental shelf of Southern New England. Estuarine, Coastal and Shelf Science, 2014, 148, 14-26. | 0.9 | 14 |
| 71 | A review of how we assess denitrification in oyster habitats and proposed guidelines for future studies. Limnology and Oceanography: Methods, 2021, 19, 714-731. | 1.0 | 13 |
| 72 | The effect of evaporation on the erodibility of mudflats in a mesotidal estuary. Estuarine, Coastal and Shelf Science, 2017, 194, 118-127. | 0.9 | 12 |

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|---|---|---|---|
| 73 | Fantastic Fixers. Science, 2009, 326, 377-378. | 6.0 | 11 |
| 74 | Beyond Bioextraction: The Role of Oyster-Mediated Denitrification in Nutrient Management. Environmental Science & Technology, 2021, 55, 14457-14465. | 4.6 | 11 |
| 75 | 12.13 Ecogeomorphology of Tidal Flats. , 2013, , 201-220. | | 10 |
| 76 | Soil Warming Accelerates Biogeochemical Silica Cycling in a Temperate Forest. Frontiers in Plant Science, 2019, 10, 1097. | 1.7 | 10 |
| 77 | Responses of benthic-pelagic coupling to climate change in a temperate estuary. , 2009, , 147-156. | | 9 |
| 78 | 12.12 Ecogeomorphology of Salt Marshes. , 2013, , 182-200. | | 8 |
| 79 | Urban groundwater dissolved silica concentrations are elevated due to vertical composition of historic land-filling. Science of the Total Environment, 2019, 684, 89-95. | 3.9 | 7 |
| 80 | Seasonal patterns of benthic-pelagic coupling in oyster habitats. Marine Ecology - Progress Series, 2020, 652, 95-109. | 0.9 | 7 |
| 81 | Greenhouse Gas Emissions From Native and Non-native Oysters. Frontiers in Environmental Science, 2019, 7, . | 1.5 | 6 |
| 82 | Tidal rewetting in salt marshes triggers pulses of nitrous oxide emissions but slows carbon dioxide emission. Soil Biology and Biochemistry, 2021, 156, 108197. | 4.2 | 6 |
| 83 | A case for addressing the unresolved role of permeable shelf sediments in ocean denitrification. Limnology and Oceanography Letters, 2022, 7, 11-25. | 1.6 | 6 |
| 84 | A workflow for reproducing mean benthic gas fluxes. Earth and Space Science, 2016, 3, 318-325. | 1.1 | 5 |
| 85 | Negligible Greenhouse Gas Release from Sediments in Oyster Habitats. Environmental Science & Technology, 2021, 55, 14225-14233. | 4.6 | 5 |
| 86 | Low denitrification rates and variable benthic nutrient fluxes characterize Long Island Sound sediments. Biogeochemistry, 2021, 154, 37-62. | 1.7 | 4 |
| 87 | High Productivity Makes Mangroves Potentially Important Players in the Tropical Silicon Cycle. Frontiers in Marine Science, 2021, 8, . | 1.2 | 4 |
| 88 | 16S rRNA Amplicon Sequencing of Sediment Bacterial Communities in an Oyster Farm in Rhode Island. Microbiology Resource Announcements, 2019, 8, . | 0.3 | 4 |
| 89 | Evaluating Connections Between Nitrogen Cycling and the Macrofauna in Native Oyster Beds in a New England Estuary. Estuaries and Coasts, 2022, 45, 196-212. | 1.0 | 3 |
| 90 | Cold Seeps on the Passive Northern U.S. Atlantic Margin Host Globally Representative Members of the Seep Microbiome with Locally Dominant Strains of Archaea. Applied and Environmental Microbiology, 2022, 88, . | 1.4 | 3 |

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|---|---|---|---|
| 91 | Ocean Calamities: Delineating the Boundaries between Scientific Evidence and Belief. BioScience, 2015, 65, 746-747. | 2.2 | 2 |
| 92 | The Role of Marshes in Coastal Nutrient Dynamics and Loss. , 2021, , 113-154. | | 2 |
| 93 | The Nitrogen Cycle. , 2021, , 161-188. | | 2 |
| 94 | A mass spectrometerâ€based poreâ€water sampling system for sandy sediments. Limnology and Oceanography: Methods, 2021, 19, 769-784. | 1.0 | 2 |
| 95 | Marine macroalgae are an overlooked sink of silicon in coastal systems. New Phytologist, 2022, 233, 2330-2336. | 3.5 | 2 |
| 96 | Explanations for nitrogen declineâ€”Response. Science, 2022, 376, 1170-1170. | 6.0 | 2 |
| 97 | First, do no harm. Frontiers in Ecology and the Environment, 2013, 11, 59-59. | 1.9 | 1 |
| 98 | Coastal silicon cycling amplified by oyster aquaculture. Marine Ecology - Progress Series, 2021, 673, 29-41. | 0.9 | 1 |
| 99 | Variation among Estuarine Geochemistry and Productivity. , 2011, , 87-98. | | 0 |
| 100 | CITATION FOR SCIENTIFIC EXCELLENCE: SCOTT W. NIXON. Limnology and Oceanography Bulletin, 2013, 22, 20-21. | 0.2 | 0 |
| 101 | In Memoriam, Scott M. Nixon (1943â€“2012). Estuaries and Coasts, 2015, 38, 1123-1125. | 1.0 | 0 |
| 102 | Corrigendum to â€œCoastal water column ammonium and nitrite oxidation are decoupled in summerâ€[Estuar. Coast. Shelf Sci. 178 (2016) 110â€“119]. Estuarine, Coastal and Shelf Science, 2018, 209, 210. | 0.9 | 0 |
| 103 | Response to concerns and uncertainties relating to methane emissions synthesis for vegetated coastal ecosystems. Global Change Biology, 2020, 26, e10-e11. | 4.2 | 0 |
| 104 | The Oligotrophication of Narragansett Bay. , 2021, , 301-309. | | 0 |
| 105 | Influence of Late Holocene climate on Lake Eggers hydrology, McMurdo Sound. Antarctic Science, 2021, 33, 217-229. | 0.5 | 0 |
| 106 | Greenhouse Gas Concentrations Driven by Microbial Community Structure in Boston Groundwater Wells. FASEB Journal, 2020, 34, 1-1. | 0.2 | 0 |