List of Publications by Year in descending order

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DETED H SANTSCHL

| #  | Article  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Environmental behavior and ecotoxicity of engineered nanoparticles to algae, plants, and fungi.<br>Ecotoxicology, 2008, 17, 372-386.   | 2.4  | 1,459     |
| 2  | The oceanic gel phase: a bridge in the DOM–POM continuum. Marine Chemistry, 2004, 92, 67-85.   | 2.3  | 576       |
| 3  | The algal toxicity of silver engineered nanoparticles and detoxification by exopolymeric substances.<br>Environmental Pollution, 2009, 157, 3034-3041.   | 7.5  | 362       |
| 4  | A kinetic approach to describe trace-element distribution between particles and solution in natural aquatic systems. Geochimica Et Cosmochimica Acta, 1984, 48, 1513-1522.                     | 3.9  | 356       |
| 5  | Metals in aquatic systems. Environmental Science & amp; Technology, 1988, 22, 862-871.   | 10.0 | 328       |
| 6  | Partitioning of Cu, Pb, Ag, Zn, Fe, Al, and Mn between filter-retained particles, colloids, and solution<br>in six Texas estuaries. Marine Chemistry, 1994, 45, 307-336.                       | 2.3  | 303       |
| 7  | An assessment of particulate organic carbon to thorium-234 ratios in the ocean and their impact on the application of 234Th as a POC flux proxy. Marine Chemistry, 2006, 100, 213-233.         | 2.3  | 245       |
| 8  | Estuarine trace metal distributions in Galveston Bay: importance of colloidal forms in the speciation of the dissolved phase. Marine Chemistry, 1999, 63, 185-212.                             | 2.3  | 240       |
| 9  | Historical contamination of PAHs, PCBs, DDTs, and heavy metals in Mississippi River Delta, Galveston<br>Bay and Tampa Bay sediment cores. Marine Environmental Research, 2001, 52, 51-79.      | 2.5  | 239       |
| 10 | Zinc oxide–engineered nanoparticles: Dissolution and toxicity to marine phytoplankton.<br>Environmental Toxicology and Chemistry, 2010, 29, 2814-2822.   | 4.3  | 221       |
| 11 | The distribution of colloidal and dissolved organic carbon in the Gulf of Mexico. Marine Chemistry, 1994, 45, 105-119.   | 2.3  | 211       |
| 12 | Dynamics of dissolved organic carbon (DOC) in oceanic environments. Limnology and Oceanography, 1995, 40, 1392-1403.   | 3.1  | 209       |
| 13 | A critical evaluation of the cross-flow ultrafiltration technique for sampling colloidal organic carbon in seawater. Marine Chemistry, 1996, 55, 113-127.                                      | 2.3  | 182       |
| 14 | lsotopic evidence for the contemporary origin of high-molecular weight organic matter in oceanic<br>environments. Geochimica Et Cosmochimica Acta, 1995, 59, 625-631.                          | 3.9  | 175       |
| 15 | Heterogeneous processes affecting trace contaminant distribution in estuaries: The role of natural organic matter. Marine Chemistry, 1997, 58, 99-125.   | 2.3  | 170       |
| 16 | Fibrillar polysaccharides in marine macromolecular organic matter as imaged by atomic force<br>microscopy and transmission electron microscopy. Limnology and Oceanography, 1998, 43, 896-908. | 3.1  | 169       |
| 17 | Importance of acid polysaccharides for <sup>234</sup> Th complexation to marine organic matter.<br>Limnology and Oceanography, 2002, 47, 367-377.  | 3.1  | 166       |
| 18 | Atmospheric Dispersal of129Iodine from Nuclear Fuel Reprocessing Facilities. Environmental Science<br>& Technology, 1999, 33, 2536-2542.   | 10.0 | 161       |

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|----|---|------|-----------|
| 19 | Intracellular Uptake: A Possible Mechanism for Silver Engineered Nanoparticle Toxicity to a<br>Freshwater Alga Ochromonas danica. PLoS ONE, 2010, 5, e15196.  | 2.5  | 161       |
| 20 | The role of particles and colloids in the transport of radionuclides in coastal environments of Texas.<br>Marine Chemistry, 1993, 43, 95-114.   | 2.3  | 155       |
| 21 | Direct and Indirect Toxic Effects of Engineered Nanoparticles on Algae: Role of Natural Organic<br>Matter. ACS Sustainable Chemistry and Engineering, 2013, 1, 686-702.   | 6.7  | 154       |
| 22 | Scavenging of thorium isotopes by colloids in seawater of the Gulf of Mexico. Geochimica Et<br>Cosmochimica Acta, 1992, 56, 3375-3388.  | 3.9  | 150       |
| 23 | Composition and cycling of colloids in marine environments. Reviews of Geophysics, 1997, 35, 17-40.   | 23.0 | 146       |
| 24 | Thorium speciation in seawater. Marine Chemistry, 2006, 100, 250-268.   | 2.3  | 142       |
| 25 | Re-examination of cross-flow ultrafiltration for sampling aquatic colloids: evidence from molecular probes. Marine Chemistry, 2000, 69, 75-90.  | 2.3  | 139       |
| 26 | History of Trace Metal Pollution in Sabine-Neches Estuary, Beaumont, Texas. Environmental Science<br>& Technology, 1995, 29, 1495-1503.   | 10.0 | 135       |
| 27 | Colloidal and Particulate Silver in River and Estuarine Waters of Texas. Environmental Science &<br>Technology, 1997, 31, 723-731.  | 10.0 | 135       |
| 28 | Sources of iodine and iodine 129 in rivers. Water Resources Research, 2002, 38, 24-1-24-10.   | 4.2  | 133       |
| 29 | Natural (210Pb, 7Be) and fallout (137Cs, 239,240Pu, 90Sr) radionuclides as geochemical tracers of sedimentation in Greifensee, Switzerland. Chemical Geology, 1987, 63, 181-196.  | 3.3  | 132       |
| 30 | Isotopic and elemental characterization of colloidal organic matter from the Chesapeake Bay and<br>Galveston Bay. Marine Chemistry, 1997, 59, 1-15.   | 2.3  | 128       |
| 31 | Cycling of highâ€molecularâ€weight dissolved organic matter in the Middle Atlantic Bight as revealed by carbon isotopic ( <sup>13</sup> C and <sup>14</sup> C) signatures. Limnology and Oceanography, 1996, 41, 1242-1252. | 3.1  | 122       |
| 32 | An ultraclean cross-flow ultrafiltration technique for the study of trace metal phase speciation in seawater. Marine Chemistry, 1996, 55, 129-152.  | 2.3  | 121       |
| 33 | Distributions of carbohydrates, including uronic acids, in estuarine waters of Galveston Bay. Marine<br>Chemistry, 2001, 73, 305-318.   | 2.3  | 120       |
| 34 | Aggregation, Dissolution, and Stability of Quantum Dots in Marine Environments: Importance of<br>Extracellular Polymeric Substances. Environmental Science & Technology, 2012, 46, 8764-8772.                               | 10.0 | 113       |
| 35 | Organic Nature of Colloidal Actinides Transported in Surface Water Environments. Environmental Science & Technology, 2002, 36, 3711-3719.   | 10.0 | 111       |
| 36 | Distribution and partitioning of trace metals (Cd, Cu, Ni, Pb, Zn) in Galveston Bay waters. Marine<br>Chemistry, 2002, 78, 29-45.   | 2.3  | 110       |

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|----|--|------|-----------|
| 37 | Distributions of carbohydrate species in the Gulf of Mexico. Marine Chemistry, 2003, 81, 119-135.  | 2.3  | 110       |
| 38 | Polymer dynamics of DOC networks and gel formation in seawater. Deep-Sea Research Part II: Topical<br>Studies in Oceanography, 2010, 57, 1486-1493.  | 1.4  | 110       |
| 39 | Coupling adsorption and particle aggregation: laboratory studies of "colloidal pumping" using iron-59-labeled hematite. Environmental Science & amp; Technology, 1991, 25, 1739-1747.                                  | 10.0 | 107       |
| 40 | 234Th scavenging and its relationship to acid polysaccharide abundance in the Gulf of Mexico. Marine<br>Chemistry, 2002, 78, 103-119.  | 2.3  | 105       |
| 41 | The role of microbial exopolymers in determining the fate of oil and chemical dispersants in the ocean. Limnology and Oceanography Letters, 2016, 1, 3-26.   | 3.9  | 105       |
| 42 | Trace metal chemistry of Galveston Bay: water, sediments and biota. Marine Environmental Research,<br>1993, 36, 1-37.  | 2.5  | 99        |
| 43 | The distribution of biogenic thiols in surface waters of Galveston Bay. Limnology and Oceanography, 2000, 45, 1289-1297.   | 3.1  | 95        |
| 44 | Interactions between radioactively labeled colloids and natural particles: Evidence for colloidal pumping. Geochimica Et Cosmochimica Acta, 1997, 61, 2867-2878.   | 3.9  | 93        |
| 45 | Amphiphilic exopolymers from Sagittula stellata induce DOM self-assembly and formation of marine microgels. Marine Chemistry, 2008, 112, 11-19.  | 2.3  | 93        |
| 46 | Chemical composition and relative hydrophobicity of microbial exopolymeric substances (EPS)<br>isolated by anion exchange chromatography and their actinide-binding affinities. Marine Chemistry,<br>2011, 126, 27-36. | 2.3  | 93        |
| 47 | Control of acid polysaccharide production and234Th and POC export fluxes by marine organisms.<br>Geophysical Research Letters, 2003, 30, .   | 4.0  | 91        |
| 48 | Sediment-water exchange of Mn, Fe, Ni and Zn in Galveston Bay, Texas. Marine Chemistry, 2001, 73, 215-231.   | 2.3  | 90        |
| 49 | Sediment accumulation and radionuclide inventories (239,240Pu, 210Pb and 234Th) in the northern<br>Gulf of Mexico, as influenced by organic matter and macrofaunal density. Marine Chemistry, 2004, 91,<br>1-14.       | 2.3  | 89        |
| 50 | 129I in Gulf of Mexico waters. Earth and Planetary Science Letters, 1995, 135, 131-138.  | 4.4  | 88        |
| 51 | Collection of Lanthanides and Actinides from Natural Waters with Conventional and Nanoporous Sorbents. Environmental Science & amp; Technology, 2012, 46, 11251-11258.   | 10.0 | 88        |
| 52 | Trace metal composition of colloidal organic material in marine environments. Marine Chemistry, 2000, 70, 257-275.   | 2.3  | 86        |
| 53 | lodine-129 and lodine-127 Speciation in Groundwater at the Hanford Site, U.S.: lodate Incorporation into Calcite. Environmental Science & amp; Technology, 2013, 47, 9635-9642.  | 10.0 | 86        |
| 54 | Thorium isotopes as analogues for "particle-reactive―pollutants in coastal marine environments.<br>Earth and Planetary Science Letters, 1980, 47, 327-335.   | 4.4  | 85        |

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|----|--|------|-----------|
| 55 | Sources and transport of land-derived particulate and dissolved organic matter in the Gulf of Mexico<br>(Texas shelf/slope): The use of ligninphenols and loliolides as biomarkers. Organic Geochemistry, 1997,<br>27, 65-78.      | 1.8  | 84        |
| 56 | Boundary exchange and scavenging of radionuclides in continental margin waters of the Middle<br>Atlantic Bight: implications for organic carbon fluxes. Continental Shelf Research, 1999, 19, 609-636.                             | 1.8  | 81        |
| 57 | Organo-Iodine Formation in Soils and Aquifer Sediments at Ambient Concentrations. Environmental<br>Science & Technology, 2009, 43, 7258-7264.  | 10.0 | 81        |
| 58 | The 129iodine bomb pulse recorded in Mississippi River Delta sediments: results from isotopes of I, Pu,<br>Cs, Pb, and C. Geochimica Et Cosmochimica Acta, 2000, 64, 989-996.  | 3.9  | 80        |
| 59 | Effects of Engineered Nanoparticles on the Assembly of Exopolymeric Substances from Phytoplankton. PLoS ONE, 2011, 6, e21865.  | 2.5  | 80        |
| 60 | Nano- and microplastics trigger secretion of protein-rich extracellular polymeric substances from phytoplankton. Science of the Total Environment, 2020, 748, 141469.  | 8.0  | 80        |
| 61 | Effect of Dissolved Organic Matter on the Uptake of Trace Metals by American Oysters. Environmental<br>Science & Technology, 2001, 35, 885-893.  | 10.0 | 79        |
| 62 | Distribution of dissolved and particulate230Th and232Th in seawater from the Gulf of Mexico and off<br>Cape Hatteras as measured by SIMS. Earth and Planetary Science Letters, 1995, 133, 117-128.                                 | 4.4  | 77        |
| 63 | Colloidal Pumping:Â Evidence for the Coagulation Process Using Natural Colloids Tagged with203Hg.<br>Environmental Science & Technology, 1996, 30, 3335-3340.  | 10.0 | 77        |
| 64 | Sequestration and Remobilization of Radioiodine ( <sup>129</sup> 1) by Soil Organic Matter and<br>Possible Consequences of the Remedial Action at Savannah River Site. Environmental Science &<br>Technology, 2011, 45, 9975-9983. | 10.0 | 74        |
| 65 | Organic complexation of copper in surface waters of Galveston Bay. Limnology and Oceanography, 2001, 46, 321-330.  | 3.1  | 73        |
| 66 | Physicochemical speciation of bioactive trace metals (Cd, Cu, Fe, Ni) in the oligotrophic South China<br>Sea. Marine Chemistry, 2006, 101, 104-129.  | 2.3  | 73        |
| 67 | Rapid Formation of Microbe-Oil Aggregates and Changes in Community Composition in Coastal<br>Surface Water Following Exposure to Oil and the Dispersant Corexit. Frontiers in Microbiology, 2018,<br>9, 689.                       | 3.5  | 72        |
| 68 | 129I/127I as a new environmental tracer or geochronometer for biogeochemical or hydrodynamic processes in the hydrosphere and geosphere: the central role of organo-iodine. Science of the Total Environment, 2004, 321, 257-271.  | 8.0  | 71        |
| 69 | Sorption irreversibility and coagulation behavior of 234Th with marine organic matter. Marine Chemistry, 2001, 76, 27-45.  | 2.3  | 68        |
| 70 | Is soil natural organic matter a sink or source for mobile radioiodine (129I) at the Savannah River<br>Site?. Geochimica Et Cosmochimica Acta, 2011, 75, 5716-5735.  | 3.9  | 68        |
| 71 | A method for rapid in situ extraction and laboratory determination of Th, Pb, and Ra isotopes from<br>large volumes of seawater. Deep-Sea Research Part I: Oceanographic Research Papers, 1993, 40, 849-865.                       | 1.4  | 67        |
| 72 | Trace metal (Cd, Cu, Ni and Pb) partitioning, affinities and removal in the Danshuei River estuary, a macro-tidal, temporally anoxic estuary in Taiwan. Marine Chemistry, 2005, 96, 293-313.                                       | 2.3  | 66        |

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|----|---|------|-----------|
| 73 | Factors controlling mobility of 127I and 129I species in an acidic groundwater plume at the Savannah<br>River Site. Science of the Total Environment, 2011, 409, 3857-3865.   | 8.0  | 66        |
| 74 | Isolation and characterization of extracellular polysaccharides produced by Pseudomonas fluorescens Biovar II. Carbohydrate Polymers, 2005, 61, 141-147.  | 10.2 | 65        |
| 75 | Novel molecular-level evidence of iodine binding to natural organic matter from Fourier transform ion cyclotron resonance mass spectrometry. Science of the Total Environment, 2013, 449, 244-252.  | 8.0  | 65        |
| 76 | Interactions of thorium isotopes with colloidal organic matter in oceanic environments. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1997, 120, 255-271.   | 4.7  | 64        |
| 77 | Binding of thorium(IV) to carboxylate, phosphate and sulfate functional groups from marine exopolymeric substances (EPS). Marine Chemistry, 2006, 100, 337-353.   | 2.3  | 64        |
| 78 | Ameliorating effects of extracellular polymeric substances excreted by Thalassiosira pseudonana on algal toxicity of CdSe quantum dots. Aquatic Toxicology, 2013, 126, 214-223.   | 4.0  | 64        |
| 79 | 234 Th: 238 U disequilibria in the Gulf of Mexico: the importance of organic matter and particle concentration. Continental Shelf Research, 1996, 16, 353-380.  | 1.8  | 63        |
| 80 | Can the protein/carbohydrate (P/C) ratio of exopolymeric substances (EPS) be used as a proxy for their<br>â€~stickiness' and aggregation propensity?. Marine Chemistry, 2020, 218, 103734.  | 2.3  | 63        |
| 81 | Spectrophotometric determination of total uronic acids in seawater using cation-exchange separation and pre-concentration by lyophilization. Analytica Chimica Acta, 2001, 427, 111-117.  | 5.4  | 62        |
| 82 | Colloidal Cutin-Like Substances Cross-Linked to Siderophore Decomposition Products Mobilizing<br>Plutonium from Contaminated Soils. Environmental Science & Technology, 2008, 42, 8211-8217.  | 10.0 | 62        |
| 83 | Terrestrially derived dissolved organic matter in the chesapeake bay and the middle atlantic bight.<br>Geochimica Et Cosmochimica Acta, 2000, 64, 3547-3557.  | 3.9  | 59        |
| 84 | Ultrafiltration and its Applications to Sampling and Characterisation of Aquatic Colloids. , 2007, ,<br>159-221.  |      | 59        |
| 85 | Molecular environment of stable iodine and radioiodine (1291) in natural organic matter: Evidence inferred from NMR and binding experiments at environmentally relevant concentrations. Geochimica Et Cosmochimica Acta, 2012, 97, 166-182. | 3.9  | 59        |
| 86 | Accumulation rates and sources of sediments and organic carbon on the Palos Verdes shelf based on radioisotopic tracers (137Cs, 239,240Pu, 210Pb, 234Th, 238U and 14C). Marine Chemistry, 2001, 73, 125-152.                                | 2.3  | 57        |
| 87 | Evaluation of a Radioiodine Plume Increasing in Concentration at the Savannah River Site.<br>Environmental Science & Technology, 2011, 45, 489-495.   | 10.0 | 56        |
| 88 | Causes of Salt Marsh Erosion in Galveston Bay, Texas. Journal of Coastal Research, 2009, 252, 265-272.  | 0.3  | 55        |
| 89 | Nano-plastics induce aquatic particulate organic matter (microgels) formation. Science of the Total Environment, 2020, 706, 135681.   | 8.0  | 55        |
| 90 | Bacterial Production of Organic Acids Enhances H <sub>2</sub> O <sub>2</sub> -Dependent lodide<br>Oxidation. Environmental Science & Technology, 2012, 46, 4837-4844.   | 10.0 | 54        |

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|-----|---|------|-----------|
| 91  | Chemical composition and 234Th (IV) binding of extracellular polymeric substances (EPS) produced by the marine diatom Amphora sp Marine Chemistry, 2008, 112, 81-92.  | 2.3  | 53        |
| 92  | Comparative evaluation of sediment trap and 234Th-derived POC fluxes from the upper oligotrophic waters of the Gulf of Mexico and the subtropical northwestern Pacific Ocean. Marine Chemistry, 2010, 121, 132-144.   | 2.3  | 51        |
| 93  | Adsorption characteristics of 210Pb, 210Po and 7Be onto micro-particle surfaces and the effects of macromolecular organic compounds. Geochimica Et Cosmochimica Acta, 2013, 107, 47-64.   | 3.9  | 51        |
| 94  | Sediment Transport and Hg Recovery in Lavaca Bay, as Evaluated from Radionuclide and Hg<br>Distributions. Environmental Science & Technology, 1999, 33, 378-391.  | 10.0 | 50        |
| 95  | Sedimentary sources of old high molecular weight dissolved organic carbon from the ocean margin benthic nepheloid layer. Geochimica Et Cosmochimica Acta, 2000, 64, 651-660.  | 3.9  | 50        |
| 96  | The role of organic carbon, iron, and aluminium oxyhydroxides as trace metal carriers: Comparison<br>between the Trinity River and the Trinity River Estuary (Galveston Bay, Texas). Marine Chemistry, 2008,<br>112, 20-37.   | 2.3  | 50        |
| 97  | Marine colloids, agents of the self-cleansing capacity of aquatic systems: Historical perspective and new discoveries. Marine Chemistry, 2018, 207, 124-135.  | 2.3  | 50        |
| 98  | Seasonality in nutrient concentrations in Galveston Bay. Marine Environmental Research, 1995, 40, 337-362.  | 2.5  | 49        |
| 99  | Comparative bioaccumulation studies of colloidally complexed and free-ionic heavy metals in juvenile<br>brown shrimp Penaeus aztecus (Crustacea: Decapoda: Penaeidae). Limnology and Oceanography, 1999,<br>44, 403-414.  | 3.1  | 49        |
| 100 | Benthic Exchange of Nutrients in Galveston Bay, Texas. Estuaries and Coasts, 2000, 23, 647.   | 1.7  | 49        |
| 101 | Silver concentrations in Colorado, USA, watersheds using improved methodology. Environmental<br>Toxicology and Chemistry, 2002, 21, 2040-2051.  | 4.3  | 49        |
| 102 | Upper ocean carbon flux determined by the 234Th approach and sediment traps using size-fractionated POC and 234Th data from the Gulf of Mexico. Geochemical Journal, 2004, 38, 601-611.   | 1.0  | 49        |
| 103 | The dissolved organic iodine species of the isotopic ratio of <sup>129</sup> I/ <sup>127</sup> I: A novel tool for tracing terrestrial organic carbon in the estuarine surface waters of Galveston Bay, Texas. Limnology and Oceanography: Methods, 2005, 3, 326-337. | 2.0  | 49        |
| 104 | Radioiodine sorption/desorption and speciation transformation by subsurface sediments from the Hanford Site. Journal of Environmental Radioactivity, 2015, 139, 43-55.  | 1.7  | 48        |
| 105 | Unique Organic Matter and Microbial Properties in the Rhizosphere of a Wetland Soil. Environmental<br>Science & Technology, 2016, 50, 4169-4177.  | 10.0 | 48        |
| 106 | Role of natural organic matter on iodine and 239,240Pu distribution and mobility in environmental<br>samples from the northwestern Fukushima Prefecture, Japan. Journal of Environmental Radioactivity,<br>2016, 153, 156-166.  | 1.7  | 46        |
| 107 | Biogeochemical behavior of organic carbon in the Trinity River downstream of a large reservoir lake<br>in Texas, USA. Science of the Total Environment, 2004, 329, 131-144.   | 8.0  | 45        |
| 108 | Role of biopolymers as major carrier phases of Th, Pa, Pb, Po, and Be radionuclides in settling particles from the Atlantic Ocean. Marine Chemistry, 2013, 157, 131-143.  | 2.3  | 44        |

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|-----|--|------|-----------|
| 109 | Plant pigments as biomarkers of high-molecular-weight dissolved organic carbon. Limnology and Oceanography, 1995, 40, 422-428.   | 3.1  | 42        |
| 110 | A seasonal survey of carbohydrates and uronic acids in the Trinity River, Texas. Organic Geochemistry, 2005, 36, 463-474.  | 1.8  | 42        |
| 111 | Evidence for elevated levels of iodine-129 in the Deep Western Boundary Current in the Middle<br>Atlantic Bight. Deep-Sea Research Part I: Oceanographic Research Papers, 1996, 43, 259-265.   | 1.4  | 41        |
| 112 | Superoxide Production by a Manganese-Oxidizing Bacterium Facilitates Iodide Oxidation. Applied and Environmental Microbiology, 2014, 80, 2693-2699.  | 3.1  | 41        |
| 113 | Dioxin Chronology and Fluxes in Sediments of the Houston Ship Channel, Texas:Â Influences of<br>Non-Steady-State Sediment Transport and Total Organic Carbon. Environmental Science &<br>Technology, 2007, 41, 5291-5298.  | 10.0 | 40        |
| 114 | Response of photosynthesis and the antioxidant defense system of two microalgal species<br>(Alexandrium minutum and Dunaliella salina) to the toxicity of BDE-47. Marine Pollution Bulletin,<br>2017, 124, 459-469.  | 5.0  | 40        |
| 115 | lodine and plutonium association with natural organic matter: A review of recent advances. Applied<br>Geochemistry, 2017, 85, 121-127.   | 3.0  | 40        |
| 116 | Thorium sorption in the marine environment: Equilibrium partitioning at the hematite/water interface, sorption/desorption kinetics and particle tracing. Aquatic Geochemistry, 1996, 1, 277-301.   | 1.3  | 39        |
| 117 | Spontaneous Assembly of Exopolymers from Phytoplankton. Terrestrial, Atmospheric and Oceanic Sciences, 2009, 20, 741.  | 0.6  | 39        |
| 118 | Controls of 234Th removal from the oligotrophic ocean by polyuronic acids and modification by microbial activity. Marine Chemistry, 2011, 123, 111-126.  | 2.3  | 38        |
| 119 | Binding of Th, Pa, Pb, Po and Be radionuclides to marine colloidal macromolecular organic matter.<br>Marine Chemistry, 2015, 173, 320-329.   | 2.3  | 38        |
| 120 | Scavenging and fractionation of thorium vs. protactinium in the ocean, as determined from<br>particle–water partitioning experiments with sediment trap material from the Gulf of Mexico and<br>Sargasso Sea. Earth and Planetary Science Letters, 2009, 286, 131-138. | 4.4  | 37        |
| 121 | Iodide Accumulation by Aerobic Bacteria Isolated from Subsurface Sediments of a <sup>129</sup><br>I-Contaminated Aquifer at the Savannah River Site, South Carolina. Applied and Environmental<br>Microbiology, 2011, 77, 2153-2160.                                   | 3.1  | 37        |
| 122 | 234Th in different size classes of sediment trap collected particles from the Northwestern Pacific<br>Ocean. Geochimica Et Cosmochimica Acta, 2012, 91, 60-74.   | 3.9  | 37        |
| 123 | Methods for analyzing the concentration and speciation of major and trace elements in marine particles. Progress in Oceanography, 2015, 133, 32-42.  | 3.2  | 37        |
| 124 | Microbial Transformation of Iodine: From Radioisotopes to Iodine Deficiency. Advances in Applied Microbiology, 2017, 101, 83-136.  | 2.4  | 36        |
| 125 | Effect of Engineered Nanoparticles on Exopolymeric Substances Release from Marine Phytoplankton.<br>Nanoscale Research Letters, 2017, 12, 620.   | 5.7  | 36        |
| 126 | Production and flux of carbohydrate species in the Gulf of Mexico. Global Biogeochemical Cycles, 2003, 17, n/a-n/a.  | 4.9  | 34        |

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|-----|---|------|-----------|
| 127 | Influence of organic matter on the adsorption of 210Pb, 210Po and 7Be and their fractionation on nanoparticles in seawater. Earth and Planetary Science Letters, 2015, 423, 193-201.  | 4.4  | 34        |
| 128 | Light-induced aggregation of microbial exopolymeric substances. Chemosphere, 2017, 181, 675-681.  | 8.2  | 34        |
| 129 | Nitrogen and carbon isotopic composition of high-molecular-weight dissolved organic matter in marine environments. Marine Ecology - Progress Series, 2003, 252, 51-60.  | 1.9  | 34        |
| 130 | Evidence for Hydroxamate Siderophores and Other N-Containing Organic Compounds Controlling<br><sup>239,240</sup> Pu Immobilization and Remobilization in a Wetland Sediment. Environmental<br>Science & Technology, 2015, 49, 11458-11467.                                    | 10.0 | 33        |
| 131 | Protein: Polysaccharide ratio in exopolymeric substances controlling the surface tension of<br>seawater in the presence or absence of surrogate Macondo oil with and without Corexit. Marine<br>Chemistry, 2018, 206, 84-92.  | 2.3  | 33        |
| 132 | Incorporation of oil into diatom aggregates. Marine Ecology - Progress Series, 2019, 612, 65-86.  | 1.9  | 33        |
| 133 | Recent advances in the detection of specific natural organic compounds as carriers for radionuclides<br>in soil and water environments, with examples of radioiodine and plutonium. Journal of<br>Environmental Radioactivity, 2017, 171, 226-233.                            | 1.7  | 31        |
| 134 | Plutonium Immobilization and Remobilization by Soil Mineral and Organic Matter in the Far-Field of the Savannah River Site, U.S Environmental Science & amp; Technology, 2014, 48, 3186-3195.   | 10.0 | 30        |
| 135 | Extracellular Enzyme Activity Profile in a Chemically Enhanced Water Accommodated Fraction of<br>Surrogate Oil: Toward Understanding Microbial Activities After the Deepwater Horizon Oil Spill.<br>Frontiers in Microbiology, 2018, 9, 798.                                  | 3.5  | 30        |
| 136 | Optimized isolation procedure for obtaining strongly actinide binding exopolymeric substances (EPS)<br>from two bacteria (Sagittula stellata and Pseudomonas fluorescens Biovar II). Bioresource<br>Technology, 2009, 100, 6010-6021.   | 9.6  | 29        |
| 137 | Identifying oil/marine snow associations in mesocosm simulations of the Deepwater Horizon oil spill event using solid-state 13C NMR spectroscopy. Marine Pollution Bulletin, 2018, 126, 159-165.  | 5.0  | 29        |
| 138 | Radioiodine concentrated in a wetland. Journal of Environmental Radioactivity, 2014, 131, 57-61.  | 1.7  | 28        |
| 139 | Response of natural phytoplankton communities exposed to crude oil and chemical dispersants during a mesocosm experiment. Aquatic Toxicology, 2019, 206, 43-53.   | 4.0  | 28        |
| 140 | Application of cross-flow ultrafiltration for isolating exopolymeric substances from a marine diatom (Amphorasp.). Limnology and Oceanography: Methods, 2009, 7, 419-429.   | 2.0  | 27        |
| 141 | The effects of sunlight on the composition of exopolymeric substances and subsequent aggregate formation during oil spills. Marine Chemistry, 2018, 203, 49-54.   | 2.3  | 27        |
| 142 | Delivery of Trace Metals (Al, Fe, Mn, V, Co, Ni, Cu, Cd, Ag, Pb) from the Trinity River Watershed Towards<br>the Ocean. Estuaries and Coasts, 2009, 32, 158-172.  | 2.2  | 26        |
| 143 | Important role of biomolecules from diatoms in the scavenging of particleâ€reactive radionuclides of thorium, protactinium, lead, polonium, and beryllium in the ocean: A case study with <i>Phaeodactylum tricornutum</i> . Limnology and Oceanography, 2014, 59, 1256-1266. | 3.1  | 26        |
| 144 | The role of microbially-mediated exopolymeric substances (EPS) in regulating Macondo oil transport<br>in a mesocosm experiment. Marine Chemistry, 2018, 206, 52-61.   | 2.3  | 26        |

| #   | Article  | IF   | CITATIONS |
|-----|--|------|-----------|
| 145 | Protein to carbohydrate (P/C) ratio changes in microbial extracellular polymeric substances induced by oil and Corexit. Marine Chemistry, 2020, 223, 103789.   | 2.3  | 26        |
| 146 | Polycyclic aromatic hydrocarbons (PAHs) and putative PAH-degrading bacteria in Galveston Bay, TX<br>(USA), following Hurricane Harvey (2017). Environmental Science and Pollution Research, 2020, 27,<br>34987-34999.                                    | 5.3  | 26        |
| 147 | Sunlight induced aggregation of dissolved organic matter: Role of proteins in linking organic carbon and nitrogen cycling in seawater. Science of the Total Environment, 2019, 654, 872-877.   | 8.0  | 25        |
| 148 | Decreased sedimentation efficiency of petro- and non-petro-carbon caused by a dispersant for<br>Macondo surrogate oil in a mesocosm simulating a coastal microbial community. Marine Chemistry,<br>2018, 206, 34-43.                                     | 2.3  | 24        |
| 149 | Molecular weight and chemical reactivity of dissolved trace metals (Cd, Cu, Ni) in surface waters<br>from the Mississippi River to Gulf of Mexico. Estuarine, Coastal and Shelf Science, 2011, 92, 649-658.  | 2.1  | 23        |
| 150 | Comparison of microgels, extracellular polymeric substances (EPS) and transparent exopolymeric particles (TEP) determined in seawater with and without oil. Marine Chemistry, 2019, 215, 103667.   | 2.3  | 23        |
| 151 | Geochemical controls of iodine uptake and transport in Savannah River Site subsurface sediments.<br>Applied Geochemistry, 2014, 45, 105-113.   | 3.0  | 22        |
| 152 | Impact of exposure of crude oil and dispersant (Corexit) on aggregation of extracellular polymeric substances. Science of the Total Environment, 2019, 657, 1535-1542.   | 8.0  | 22        |
| 153 | Near-conservative behavior of 129I in the orange county aquifer system, California. Applied Geochemistry, 2005, 20, 1461-1472.   | 3.0  | 21        |
| 154 | Rapid Degradation of Oil in Mesocosm Simulations of Marine Oil Snow Events. Environmental Science<br>& Technology, 2019, 53, 3441-3450.  | 10.0 | 21        |
| 155 | From Nano-Gels to Marine Snow: A Synthesis of Gel Formation Processes and Modeling Efforts<br>Involved with Particle Flux in the Ocean. Gels, 2021, 7, 114.  | 4.5  | 21        |
| 156 | Relationships Between Geochemical Parameters (pH, DOC, SPM, EDTA Concentrations) and Trace Metal<br>(Cd, Co, Cu, Fe, Mn, Ni, Pb, Zn) Concentrations in River Waters of Texas (USA). Aquatic Geochemistry,<br>2013, 19, 173-193.                          | 1.3  | 20        |
| 157 | Colloid-Trace Element Interactions in Aquatic Systems. , 2007, , 95-157.   |      | 19        |
| 158 | Estimates of recovery of the Penobscot River and estuarine system from mercury contamination in the 1960's. Science of the Total Environment, 2017, 596-597, 351-359.  | 8.0  | 19        |
| 159 | Composition and transport of settling particles in Lake Zurich: relative importance of vertical and lateral pathways. Aquatic Sciences, 2001, 63, 123-149.   | 1.5  | 17        |
| 160 | Impacts of Dredging Activities on the Accumulation of Dioxins in Surface Sediments of the Houston<br>Ship Channel, Texas. Journal of Coastal Research, 2010, 264, 743-752.   | 0.3  | 17        |
| 161 | Temporal Variation of Iodine Concentration and Speciation ( <sup>127</sup> I and <sup>129</sup> I) in<br>Wetland Groundwater from the Savannah River Site, USA. Environmental Science & Technology,<br>2014, 48, 11218-11226.                            | 10.0 | 17        |
| 162 | Widespread Distribution of Dehalococcoides mccartyi in the Houston Ship Channel and Galveston<br>Bay, Texas, Sediments and the Potential for Reductive Dechlorination of PCDD/F in an Estuarine<br>Environment. Marine Biotechnology, 2016, 18, 630-644. | 2.4  | 17        |

| #   | Article   | IF        | CITATIONS                   |
|-----|---|-----------|-----------------------------|
| 163 | Centennial record of anthropogenic impacts in Galveston Bay: Evidence from trace metals (Hg, Pb, Ni,) Tj ETQq1  | 1 9.78431 | .4 <mark>[g</mark> BT /Over |
| 164 | Modeling Variability in210Pb and Sediment Fluxes Near the Whites Point Outfalls, Palos Verdes Shelf,<br>California. Environmental Science & Technology, 1999, 33, 3077-3085.  | 10.0      | 16                          |
| 165 | Characterization of organic-rich colloids from surface and ground waters at the<br>actinide-contaminated Rocky Flats Environmental Technology Site (RFETS), Colorado, USA. Colloids<br>and Surfaces A: Physicochemical and Engineering Aspects, 2004, 244, 105-111. | 4.7       | 16                          |
| 166 | Pu(V) reduction and enhancement of particle-water partitioning by exopolymeric substances.<br>Radiochimica Acta, 2008, 96, 739-745.   | 1.2       | 16                          |
| 167 | Mercury inputs and redistribution in the Penobscot River and estuary, Maine. Science of the Total Environment, 2018, 622-623, 172-183.  | 8.0       | 16                          |
| 168 | Stickiness of extracellular polymeric substances on different surfaces via magnetic tweezers. Science of the Total Environment, 2021, 757, 143766.  | 8.0       | 16                          |
| 169 | Protective Role of Alginic Acid Against Metal Uptake by American Oyster (Crassostrea virginica).<br>Environmental Chemistry, 2006, 3, 172.  | 1.5       | 15                          |
| 170 | The interplay of extracellular polymeric substances and oil/Corexit to affect the petroleum incorporation into sinking marine oil snow in four mesocosms. Science of the Total Environment, 2019, 693, 133626.  | 8.0       | 15                          |
| 171 | lodine speciation in a silver-amended cementitious system. Environment International, 2019, 126, 576-584.   | 10.0      | 15                          |
| 172 | The cycling and oxidation pathways of organic carbon in a shallow estuary along the Texas Gulf<br>Coast. Estuarine, Coastal and Shelf Science, 2008, 76, 69-84.   | 2.1       | 14                          |
| 173 | Speciation of iodine isotopes inside and outside of a contaminant plume at the Savannah River Site.<br>Science of the Total Environment, 2014, 497-498, 671-678.  | 8.0       | 14                          |
| 174 | Increased zooplankton PAH concentrations across hydrographic fronts in the East China Sea. Marine<br>Pollution Bulletin, 2014, 83, 248-257.   | 5.0       | 14                          |
| 175 | Nagasaki sediments reveal that long-term fate of plutonium is controlled by select organic matter moieties. Science of the Total Environment, 2019, 678, 409-418.   | 8.0       | 14                          |
| 176 | Sources of alluvium in a coastal plain stream based on radionuclide signatures from the238U<br>and232Th decay series. Water Resources Research, 2002, 38, 24-1-24-11.   | 4.2       | 13                          |
| 177 | Plutonium Partitioning Behavior to Humic Acids from Widely Varying Soils Is Related to<br>Carboxyl-Containing Organic Compounds. Environmental Science & Technology, 2017, 51,<br>11742-11751.  | 10.0      | 13                          |
| 178 | Limited mobility of dioxins near San Jacinto super fund site (waste pit) in the Houston Ship Channel,<br>Texas due to strong sediment sorption. Environmental Pollution, 2018, 238, 988-998.  | 7.5       | 13                          |
| 179 | Iodine speciation in cementitious environments. Applied Geochemistry, 2019, 103, 15-22.   | 3.0       | 13                          |
| 180 | Marine Snow Aggregates are Enriched in Polycyclic Aromatic Hydrocarbons (PAHs) in Oil<br>Contaminated Waters: Insights from a Mesocosm Study. Journal of Marine Science and Engineering,<br>2020, 8, 781.   | 2.6       | 13                          |

| #   | Article   | IF                | CITATIONS             |
|-----|---|-------------------|-----------------------|
| 181 | Exoenzymes as a Signature of Microbial Response to Marine Environmental Conditions. MSystems, 2020, 5, .  | 3.8               | 13                    |
| 182 | Marine Gel Interactions with Hydrophilic and Hydrophobic Pollutants. Gels, 2021, 7, 83.   | 4.5               | 13                    |
| 183 | Carbon isotopes and iodine concentrations in a Mississippi River delta core recording land use,<br>sediment transport, and dam building in the river's drainage basin. Marine Environmental Research,<br>2007, 63, 278-290.   | 2.5               | 12                    |
| 184 | Molecular level characterization of diatomâ€associated biopolymers that bind <sup>234</sup> Th,<br><sup>233</sup> Pa, <sup>210</sup> Pb, and <sup>7</sup> Be in seawater: A case study with<br><i>Phaeodactylum tricornutum</i> . Journal of Geophysical Research G: Biogeosciences, 2015, 120,<br>1858-1869. | 3.0               | 11                    |
| 185 | Diatom aggregation when exposed to crude oil and chemical dispersant: Potential impacts of ocean acidification. PLoS ONE, 2020, 15, e0235473.   | 2.5               | 10                    |
| 186 | Radionuclide uptake by colloidal and particulate humic acids obtained from 14 soils collected worldwide. Scientific Reports, 2018, 8, 4795.   | 3.3               | 9                     |
| 187 | Polycyclic aromatic hydrocarbons (PAHs) cycling and fates in Galveston Bay, Texas, USA. PLoS ONE, 2020, 15, e0243734.   | 2.5               | 9                     |
| 188 | Sediment accumulation and mixing in the Penobscot River and estuary, Maine. Science of the Total Environment, 2018, 635, 228-239.   | 8.0               | 8                     |
| 189 | Molecular Interaction of Aqueous Iodine Species with Humic Acid Studied by I and C K-Edge X-ray<br>Absorption Spectroscopy. Environmental Science & Technology, 2019, 53, 12416-12424.  | 10.0              | 8                     |
| 190 | Diagnostic tool to ascertain marine phytoplankton exposure to chemically enhanced water<br>accommodated fraction of oil using Fourier Transform Infrared spectroscopy. Marine Pollution<br>Bulletin, 2018, 130, 170-178.  | 5.0               | 7                     |
| 191 | Biogenic Manganese Oxides Facilitate Iodide Oxidation at pH ≤5. Geomicrobiology Journal, 2018, 35,<br>167-173.  | 2.0               | 7                     |
| 192 | Photo-oxidation of proteins facilitates the preservation of high molecular weight dissolved organic nitrogen in the ocean. Marine Chemistry, 2021, 229, 103907.   | 2.3               | 7                     |
| 193 | Sorption of selected radionuclides on different MnO2 phases. Environmental Chemistry, 2017, 14, 207.  | 1.5               | 6                     |
| 194 | The Interplay of Phototrophic and Heterotrophic Microbes Under Oil Exposure: A Microcosm Study.<br>Frontiers in Microbiology, 2021, 12, 675328.   | 3.5               | 6                     |
| 195 | Comment on "How accurate are <sup>234</sup> Th measurements in seawater based on the<br>MnO <sub>2</sub> â€impregnated cartridge technique?―by Pinghe Cai et al Geochemistry, Geophysics,<br>Geosystems, 2008, 9, .   | 2.5               | 5                     |
| 196 | Molecular Level Characterization of Diatom and Coccolithophore-Associated Biopolymers That Are<br>Binding 210Pb and 210Po in Seawater. Frontiers in Marine Science, 2021, 8, .  | 2.5               | 5                     |
| 197 | Importance of coccolithophoreâ€associated organic biopolymers for fractionating particleâ€reactive radionuclides ( <sup>234</sup> Th, <sup>233</sup> Pa, <sup>210</sup> Pb, <sup>210</sup> Po, and) Tj ETQq1  | 1 <b>0.</b> ø8431 | .4 <b>s</b> gBT /Over |
| 198 | Actinide Migration from Contaminated Soil to Surface Water at the Rocky Flats Environmental Technology Site. Journal of Nuclear Science and Technology, 2002, 39, 485-488.  | 1.3               | 4                     |

| #   | Article   | IF   | CITATIONS |
|-----|---|------|-----------|
| 199 | Response to Comment on "lodine-129 and Iodine-127 Speciation in Groundwater at Hanford Site, U.S.:<br>Iodate Incorporation into Calcite― Environmental Science & Technology, 2013, 47, 13205-13206.   | 10.0 | 3         |
| 200 | Incorporation of Hydroxamate Siderophore and Associated Fe Into Marine Particles in Natural Seawater. Frontiers in Marine Science, 2020, 7, .   | 2.5  | 2         |
| 201 | Large seasonal fluctuations of groundwater radioiodine speciation and concentrations in a riparian wetland in South Carolina. Science of the Total Environment, 2022, 816, 151548.  | 8.0  | 2         |
| 202 | Aggregation and Degradation of Dispersants and Oil by Microbial Exopolymers (ADDOMEx): Toward a<br>Synthesis of Processes and Pathways of Marine Oil Snow Formation in Determining the Fate of<br>Hydrocarbons. Frontiers in Marine Science, 2021, 8, . | 2.5  | 1         |
| 203 | Clean Sampling and Analysis of River and Estuarine Waters for Trace Metal Studies. Journal of Visualized Experiments, 2016, , .   | 0.3  | 0         |