

Christopher M Reddy

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6134932/publications.pdf>

Version: 2024-02-01

228
papers

15,694
citations

20036

63
h-index

22488

117
g-index

232
all docs

232
docs citations

232
times ranked

14473
citing authors

#	ARTICLE	IF	CITATIONS
1	Plastic Accumulation in the North Atlantic Subtropical Gyre. <i>Science</i> , 2010, 329, 1185-1188.	6.0	1,024
2	Tracking Hydrocarbon Plume Transport and Biodegradation at Deepwater Horizon. <i>Science</i> , 2010, 330, 201-204.	6.0	701
3	Organic micropollutants in marine plastics debris from the open ocean and remote and urban beaches. <i>Marine Pollution Bulletin</i> , 2011, 62, 1683-1692.	2.3	654
4	Composition and fate of gas and oil released to the water column during the <i>Deepwater Horizon</i> oil spill. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 20229-20234.	3.3	599
5	The size, mass, and composition of plastic debris in the western North Atlantic Ocean. <i>Marine Pollution Bulletin</i> , 2010, 60, 1873-1878.	2.3	544
6	Combustion-Derived Polycyclic Aromatic Hydrocarbons in the Environment—A Review. <i>Environmental Forensics</i> , 2005, 6, 109-131.	1.3	497
7	Evaluation of a protocol for the quantification of black carbon in sediments. <i>Global Biogeochemical Cycles</i> , 2001, 15, 881-890.	1.9	341
8	Impact of the <i>Deepwater Horizon</i> oil spill on a deep-water coral community in the Gulf of Mexico. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 20303-20308.	3.3	335
9	Resolving the Unresolved Complex Mixture in Petroleum-Contaminated Sediments. <i>Environmental Science & Technology</i> , 2003, 37, 1653-1662.	4.6	302
10	Two Abundant Bioaccumulated Halogenated Compounds Are Natural Products. <i>Science</i> , 2005, 307, 917-920.	6.0	296
11	Oil Weathering after the <i>Deepwater Horizon</i> Disaster Led to the Formation of Oxygenated Residues. <i>Environmental Science & Technology</i> , 2012, 46, 8799-8807.	4.6	290
12	The West Falmouth Oil Spill after Thirty Years: The Persistence of Petroleum Hydrocarbons in Marsh Sediments. <i>Environmental Science & Technology</i> , 2002, 36, 4754-4760.	4.6	282
13	Chemical data quantify <i>Deepwater Horizon</i> hydrocarbon flow rate and environmental distribution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 20246-20253.	3.3	258
14	Fallout plume of submerged oil from <i>Deepwater Horizon</i>. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 15906-15911.	3.3	242
15	Human Health and Ocean Pollution. <i>Annals of Global Health</i> , 2020, 86, 151.	0.8	240
16	High-Resolution Record of Pyrogenic Polycyclic Aromatic Hydrocarbon Deposition during the 20th Century. <i>Environmental Science & Technology</i> , 2003, 37, 53-61.	4.6	213
17	Radiocarbon as a Tool To Apportion the Sources of Polycyclic Aromatic Hydrocarbons and Black Carbon in Environmental Samples. <i>Environmental Science & Technology</i> , 2002, 36, 1774-1782.	4.6	200
18	Sunlight Converts Polystyrene to Carbon Dioxide and Dissolved Organic Carbon. <i>Environmental Science and Technology Letters</i> , 2019, 6, 669-674.	3.9	158

#	ARTICLE	IF	CITATIONS
19	Recalcitrance and Degradation of Petroleum Biomarkers upon Abiotic and Biotic Natural Weathering of <i><i>Deepwater Horizon</i></i> Oil. <i>Environmental Science & Technology</i> , 2014, 48, 6726-6734.	4.6	148
20	Expansion of the Analytical Window for Oil Spill Characterization by Ultrahigh Resolution Mass Spectrometry: Beyond Gas Chromatography. <i>Environmental Science & Technology</i> , 2013, 47, 7530-7539.	4.6	144
21	Assessment of photochemical processes in marine oil spill fingerprinting. <i>Marine Pollution Bulletin</i> , 2014, 79, 268-277.	2.3	143
22	Determination of HBCD, PBDEs and MeO-BDEs in California sea lions (<i>Zalophus californianus</i>) stranded between 1993 and 2003. <i>Marine Pollution Bulletin</i> , 2006, 52, 522-531.	2.3	141
23	Environmental Chemistry of Benzothiazoles Derived from Rubber. <i>Environmental Science & Technology</i> , 1997, 31, 2847-2853.	4.6	140
24	Targeted Petroleomics: Analytical Investigation of Macondo Well Oil Oxidation Products from Pensacola Beach. <i>Energy & Fuels</i> , 2014, 28, 4043-4050.	2.5	130
25	Elevated levels of diesel range organic compounds in groundwater near Marcellus gas operations are derived from surface activities. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 13184-13189.	3.3	130
26	Nanoaggregates of Asphaltenes in a Reservoir Crude Oil and Reservoir Connectivity. <i>Energy & Fuels</i> , 2009, 23, 1178-1188.	2.5	121
27	Nontargeted Comprehensive Two-Dimensional Gas Chromatography/Time-of-Flight Mass Spectrometry Method and Software for Inventorying Persistent and Bioaccumulative Contaminants in Marine Environments. <i>Environmental Science & Technology</i> , 2012, 46, 8001-8008.	4.6	115
28	Contribution of Biomass Burning to Atmospheric Polycyclic Aromatic Hydrocarbons at Three European Background Sites. <i>Environmental Science & Technology</i> , 2005, 39, 2976-2982.	4.6	113
29	Biodegradation and environmental behavior of biodiesel mixtures in the sea: An initial study. <i>Marine Pollution Bulletin</i> , 2007, 54, 894-904.	2.3	111
30	GC-MS analysis of total petroleum hydrocarbons and polycyclic aromatic hydrocarbons in seawater samples after the North Cape oil spill. <i>Marine Pollution Bulletin</i> , 1999, 38, 126-135.	2.3	107
31	Tracking the Weathering of an Oil Spill with Comprehensive Two-Dimensional Gas Chromatography. <i>Environmental Forensics</i> , 2006, 7, 33-44.	1.3	107
32	Analysis of unresolved complex mixtures of hydrocarbons extracted from Late Archean sediments by comprehensive two-dimensional gas chromatography (GC \times GC). <i>Organic Geochemistry</i> , 2008, 39, 846-867.	0.9	107
33	Using Comprehensive Two-Dimensional Gas Chromatography Retention Indices To Estimate Environmental Partitioning Properties for a Complete Set of Diesel Fuel Hydrocarbons. <i>Analytical Chemistry</i> , 2005, 77, 7172-7182.	3.2	106
34	Petroleum dynamics in the sea and influence of subsea dispersant injection during <i><i>Deepwater Horizon</i></i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 10065-10070.	3.3	103
35	Acoustic measurement of the <i><i>Deepwater Horizon</i></i> Macondo well flow rate. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 20235-20239.	3.3	101
36	Early Evaluation of Potential Environmental Impacts of Carbon Nanotube Synthesis by Chemical Vapor Deposition. <i>Environmental Science & Technology</i> , 2009, 43, 8367-8373.	4.6	100

#	ARTICLE	IF	CITATIONS
37	Rapid microbial respiration of oil from the <i>Deepwater Horizon</i> spill in offshore surface waters of the Gulf of Mexico. <i>Environmental Research Letters</i> , 2011, 6, 035301.	2.2	98
38	Indications of Transformation Products from Hydraulic Fracturing Additives in Shale-Gas Wastewater. <i>Environmental Science & Technology</i> , 2016, 50, 8036-8048.	4.6	96
39	Comparison of GC-MS, GC-MRM-MS, and GC-MS-MS to characterise higher plant biomarkers in Tertiary oils and rock extracts. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 87, 299-322.	1.6	94
40	Resolving Biodegradation Patterns of Persistent Saturated Hydrocarbons in Weathered Oil Samples from the <i>Deepwater Horizon</i> Disaster. <i>Environmental Science & Technology</i> , 2014, 48, 1628-1637.	4.6	94
41	Partial Photochemical Oxidation Was a Dominant Fate of <i>Deepwater Horizon</i> Surface Oil. <i>Environmental Science & Technology</i> , 2018, 52, 1797-1805.	4.6	94
42	Persistence and biodegradation of oil at the ocean floor following <i>Deepwater Horizon</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E9-E18.	3.3	93
43	Identification of a novel alkenone in Black Sea sediments. <i>Organic Geochemistry</i> , 2001, 32, 633-645.	0.9	89
44	Weathering of Oil Spilled in the Marine Environment. <i>Oceanography</i> , 2016, 29, 126-135.	0.5	89
45	Disentangling Oil Weathering Using GC-MS-MS. 1. Chromatogram Analysis. <i>Environmental Science & Technology</i> , 2007, 41, 5738-5746.	4.6	88
46	Unprecedented Ultrahigh Resolution FT-ICR Mass Spectrometry and Parts-Per-Billion Mass Accuracy Enable Direct Characterization of Nickel and Vanadyl Porphyrins in Petroleum from Natural Seeps. <i>Energy & Fuels</i> , 2014, 28, 2454-2464.	2.5	88
47	Photochemical Degradation of Polycyclic Aromatic Hydrocarbons in Oil Films. <i>Environmental Science & Technology</i> , 2008, 42, 2432-2438.	4.6	86
48	High-resolution historical records from Pettaquamscutt River basin sediments: 2. Pb isotopes reveal a potential new stratigraphic marker. <i>Geochimica Et Cosmochimica Acta</i> , 2005, 69, 1813-1824.	1.6	84
49	Industrially synthesized single-walled carbon nanotubes: compositional data for users, environmental risk assessments, and source apportionment. <i>Nanotechnology</i> , 2008, 19, 185706.	1.3	82
50	Oxygenated weathering products of Deepwater Horizon oil come from surprising precursors. <i>Marine Pollution Bulletin</i> , 2013, 75, 140-149.	2.3	80
51	Long-term consequences of residual petroleum on salt marsh grass. <i>Journal of Applied Ecology</i> , 2008, 45, 1284-1292.	1.9	79
52	Multiple Alkynes React with Ethylene To Enhance Carbon Nanotube Synthesis, Suggesting a Polymerization-like Formation Mechanism. <i>ACS Nano</i> , 2010, 4, 7185-7192.	7.3	79
53	First Day of an Oil Spill on the Open Sea: Early Mass Transfers of Hydrocarbons to Air and Water. <i>Environmental Science & Technology</i> , 2014, 48, 9400-9411.	4.6	78
54	Long-term biological effects of petroleum residues on fiddler crabs in salt marshes. <i>Marine Pollution Bulletin</i> , 2007, 54, 955-962.	2.3	74

#	ARTICLE	IF	CITATIONS
55	Molecular and isotopic identification of PAH sources in a highly industrialized urban estuary. <i>Organic Geochemistry</i> , 2005, 36, 619-632.	0.9	72
56	Compound class oil fingerprinting techniques using comprehensive two-dimensional gas chromatography (GC \times GC). <i>Organic Geochemistry</i> , 2010, 41, 1026-1035.	0.9	71
57	Determination of Microbial Carbon Sources in Petroleum Contaminated Sediments Using Molecular ¹⁴ C Analysis. <i>Environmental Science & Technology</i> , 2005, 39, 2552-2558.	4.6	70
58	Molecular evidence of Late Archean archaea and the presence of a subsurface hydrothermal biosphere. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 14260-14265.	3.3	70
59	Halogenated organic compounds in archived whale oil: A pre-industrial record. <i>Environmental Pollution</i> , 2007, 145, 668-671.	3.7	69
60	Disentangling Oil Weathering at a Marine Seep Using GC \times GC: Broad Metabolic Specificity Accompanies Subsurface Petroleum Biodegradation. <i>Environmental Science & Technology</i> , 2008, 42, 7166-7173.	4.6	69
61	Stable chlorine and carbon isotopic compositions of selected semi-volatile organochlorine compounds. <i>Organic Geochemistry</i> , 2002, 33, 437-444.	0.9	67
62	Humic Substances and Crude Oil Induce Cytochrome P450 1A Expression in the Amazonian Fish Species <i>Colossoma macropomum</i> (Tambaqui). <i>Environmental Science & Technology</i> , 2006, 40, 2851-2858.	4.6	67
63	Combining biomarker and bulk compositional gradient analysis to assess reservoir connectivity. <i>Organic Geochemistry</i> , 2010, 41, 812-821.	0.9	66
64	High-resolution historical records from Pettaquamscutt River basin sediments: 1. ²¹⁰ Pb and varve chronologies validate record of ¹³⁷ Cs released by the Chernobyl accident. <i>Geochimica Et Cosmochimica Acta</i> , 2005, 69, 1803-1812.	1.6	65
65	Natural organobromine in marine sediments: New evidence of biogeochemical Br cycling. <i>Global Biogeochemical Cycles</i> , 2010, 24, .	1.9	65
66	Carbon and Chlorine Isotope Effects During Abiotic Reductive Dechlorination of Polychlorinated Ethanes. <i>Environmental Science & Technology</i> , 2007, 41, 4662-4668.	4.6	63
67	Simulating Gas-Liquid Water Partitioning and Fluid Properties of Petroleum under Pressure: Implications for Deep-Sea Blowouts. <i>Environmental Science & Technology</i> , 2016, 50, 7397-7408.	4.6	63
68	Precursor gas chemistry determines the crystallinity of carbon nanotubes synthesized at low temperature. <i>Carbon</i> , 2011, 49, 804-810.	5.4	62
69	We need better data about the environmental persistence of plastic goods. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 14618-14621.	3.3	60
70	Identification and quantification of alkene-based drilling fluids in crude oils by comprehensive two-dimensional gas chromatography with flame ionization detection. <i>Journal of Chromatography A</i> , 2007, 1148, 100-107.	1.8	58
71	Black carbon in marine particulate organic carbon: Inputs and cycling of highly recalcitrant organic carbon in the Gulf of Maine. <i>Marine Chemistry</i> , 2009, 113, 172-181.	0.9	58
72	Even carbon number predominance of plant wax n-alkanes. <i>Organic Geochemistry</i> , 2000, 31, 331-336.	0.9	57

#	ARTICLE	IF	CITATIONS
73	Stable Chlorine Isotopic Compositions of Aroclors and Aroclor-Contaminated Sediments. <i>Environmental Science & Technology</i> , 2000, 34, 2866-2870.	4.6	57
74	The North Cape oil spill: hydrocarbons in Rhode Island coastal waters and Point Judith Pond. <i>Marine Environmental Research</i> , 2001, 52, 445-461.	1.1	57
75	Weathering and the Fallout Plume of Heavy Oil from Strong Petroleum Seeps Near Coal Oil Point, CA. <i>Environmental Science & Technology</i> , 2009, 43, 3542-3548.	4.6	57
76	Analysis of petroleum compositional similarity using multiway principal components analysis (MPCA) with comprehensive two-dimensional gas chromatographic data. <i>Journal of Chromatography A</i> , 2011, 1218, 2584-2592.	1.8	57
77	Simultaneous Quantitation of Multiple Classes of Organohalogen Compounds in Fish Oils with Direct Sample Introduction Comprehensive Two-Dimensional Gas Chromatography and Time-of-Flight Mass Spectrometry. <i>Journal of Agricultural and Food Chemistry</i> , 2009, 57, 2653-2660.	2.4	56
78	Microbial production and consumption of hydrocarbons in the global ocean. <i>Nature Microbiology</i> , 2021, 6, 489-498.	5.9	56
79	Radiocarbon Apportionment of Fossil versus Biofuel Combustion Sources of Polycyclic Aromatic Hydrocarbons in the Stockholm Metropolitan Area. <i>Environmental Science & Technology</i> , 2004, 38, 5344-5349.	4.6	55
80	Asphalt volcanoes as a potential source of methane to late Pleistocene coastal waters. <i>Nature Geoscience</i> , 2010, 3, 345-348.	5.4	55
81	The Absence and Application of Stable Carbon Isotopic Fractionation during the Reductive Dechlorination of Polychlorinated Biphenyls. <i>Environmental Science & Technology</i> , 2001, 35, 3310-3313.	4.6	54
82	A Chlorine Isotope Effect for Enzyme-Catalyzed Chlorination. <i>Journal of the American Chemical Society</i> , 2002, 124, 14526-14527.	6.6	54
83	Disentangling Oil Weathering Using GC-MS. 2. Mass Transfer Calculations. <i>Environmental Science & Technology</i> , 2007, 41, 5747-5755.	4.6	54
84	Effect of field exposure to 38-year-old residual petroleum hydrocarbons on growth, condition index, and filtration rate of the ribbed mussel, <i>Geukensia demissa</i> . <i>Environmental Pollution</i> , 2008, 154, 312-319.	3.7	54
85	GC-MS—GC—A New Analytical Tool For Environmental Forensics. <i>Environmental Forensics</i> , 2002, 3, 27-34.	1.3	53
86	Capabilities of Direct Sample Introduction Comprehensive Two-Dimensional Gas Chromatography Time-of-Flight Mass Spectrometry to Analyze Organic Chemicals of Interest in Fish Oils. <i>Environmental Science & Technology</i> , 2009, 43, 3240-3247.	4.6	53
87	Deciphering the lithological consequences of bottom trawling to sedimentary habitats on the shelf. <i>Journal of Marine Systems</i> , 2016, 159, 120-131.	0.9	53
88	Radiocarbon Evidence for a Naturally Produced, Bioaccumulating Halogenated Organic Compound. <i>Environmental Science & Technology</i> , 2004, 38, 1992-1997.	4.6	52
89	The composition, origin and fate of complex mixtures in the maltene fractions of hydrothermal petroleum assessed by comprehensive two-dimensional gas chromatography. <i>Organic Geochemistry</i> , 2012, 45, 48-65.	0.9	52
90	The first decade of scientific insights from the Deepwater Horizon oil release. <i>Nature Reviews Earth & Environment</i> , 2020, 1, 237-250.	12.2	52

#	ARTICLE	IF	CITATIONS
91	Abundance, Composition, and Vertical Transport of PAHs in Marsh Sediments. <i>Environmental Science & Technology</i> , 2005, 39, 8273-8280.	4.6	51
92	Oil Spill Source Identification by Principal Component Analysis of Electrospray Ionization Fourier Transform Ion Cyclotron Resonance Mass Spectra. <i>Analytical Chemistry</i> , 2013, 85, 9064-9069.	3.2	51
93	How Persistent and Bioavailable Are Oxygenated <i>Deepwater Horizon</i> Oil Transformation Products?. <i>Environmental Science & Technology</i> , 2018, 52, 7250-7258.	4.6	51
94	The M/V Cosco Busan spill: Source identification and short-term fate. <i>Marine Pollution Bulletin</i> , 2010, 60, 2123-2129.	2.3	50
95	Free and Bound Benzotriazoles in Marine and Freshwater Sediments. <i>Environmental Science & Technology</i> , 2000, 34, 973-979.	4.6	48
96	The 1974 spill of the Bouchard 65 oil barge: Petroleum hydrocarbons persist in Winsor Cove salt marsh sediments. <i>Marine Pollution Bulletin</i> , 2007, 54, 214-225.	2.3	48
97	Thermogravimetry-Mass Spectrometry for Carbon Nanotube Detection in Complex Mixtures. <i>Environmental Science & Technology</i> , 2012, 46, 12254-12261.	4.6	48
98	Compound-specific ⁸¹ Br/ ⁷⁹ Br analysis by capillary gas chromatography/multicollector inductively coupled plasma mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2007, 21, 3301-3305.	0.7	45
99	Intrinsic bacterial biodegradation of petroleum contamination demonstrated in situ using natural abundance, molecular-level ¹⁴ C analysis. <i>Organic Geochemistry</i> , 2006, 37, 981-989.	0.9	44
100	Analysis and Identification of Biomarkers and Origin of Color in a Bright Blue Crude Oil. <i>Energy & Fuels</i> , 2011, 25, 172-182.	2.5	44
101	Evaluation of Gas Chromatographic Isotope Fractionation and Process Contamination by Carbon in Compound-Specific Radiocarbon Analysis. <i>Analytical Chemistry</i> , 2007, 79, 2042-2049.	3.2	41
102	Determination of Biodiesel Blending Percentages Using Natural Abundance Radiocarbon Analysis: Testing the Accuracy of Retail Biodiesel Blends. <i>Environmental Science & Technology</i> , 2008, 42, 2476-2482.	4.6	41
103	Scientist Citizens. <i>Science</i> , 2009, 323, 1405-1405.	6.0	41
104	Isotopic Constraints on the Fate of Petroleum Residues Sequestered in Salt Marsh Sediments. <i>Environmental Science & Technology</i> , 2005, 39, 2545-2551.	4.6	39
105	Separation of ¹⁸ ±(H)-, ¹⁸ ²(H)-oleanane and lupane by comprehensive two-dimensional gas chromatography. <i>Journal of Chromatography A</i> , 2011, 1218, 5549-5553.	1.8	39
106	Long-term weathering and continued oxidation of oil residues from the Deepwater Horizon spill. <i>Marine Pollution Bulletin</i> , 2016, 113, 380-386.	2.3	39
107	Radiocarbon content of synthetic and natural semi-volatile halogenated organic compounds. <i>Environmental Pollution</i> , 2002, 120, 163-168.	3.7	38
108	Expanding the range of halogenated 1-²-methyl-2-²-bipyrroles (MBPs) using GC/ECNI-MS and GC-TOF-MS. <i>Chemosphere</i> , 2008, 71, 1557-1565.	4.2	38

#	ARTICLE	IF	CITATIONS
109	Plastic Formulation is an Emerging Control of Its Photochemical Fate in the Ocean. <i>Environmental Science & Technology</i> , 2021, 55, 12383-12392.	4.6	38
110	Brominated flame retardants and organochlorine contaminants in winter flounder, harp and hooded seals, and North Atlantic right whales from the Northwest Atlantic Ocean. <i>Marine Pollution Bulletin</i> , 2010, 60, 1160-1169.	2.3	37
111	The West Falmouth Oil Spill: ~14100 Kg of Oil Found to Persist Decades Later. <i>Environmental Forensics</i> , 2005, 6, 273-281.	1.3	36
112	Floating oil-covered debris from <i>Deepwater Horizon</i> : identification and application. <i>Environmental Research Letters</i> , 2012, 7, 015301.	2.2	36
113	Unresolved Complex Mixture (UCM) in Coastal Environments Is Derived from Fossil Sources. <i>Environmental Science & Technology</i> , 2013, 47, 726-731.	4.6	36
114	Global and Local Sources of Mercury Deposition in Coastal New England Reconstructed from a Multiproxy, High-Resolution, Estuarine Sediment Record. <i>Environmental Science & Technology</i> , 2018, 52, 7614-7620.	4.6	36
115	Molecular Evidence of Heavy-Oil Weathering Following the M/V <i>Cosco Busan</i> Spill: Insights from Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. <i>Environmental Science & Technology</i> , 2014, 48, 3760-3767.	4.6	35
116	Identification of highly brominated analogues of Q1 in marine mammals. <i>Environmental Pollution</i> , 2006, 144, 336-344.	3.7	34
117	Response of Different Types of Sulfur Compounds to Oxidative Desulfurization of Jet Fuel. <i>Energy & Fuels</i> , 2014, 28, 2977-2983.	2.5	34
118	GC-MS/MS A New Analytical Tool For Environmental Forensics. <i>Environmental Forensics</i> , 2002, 3, 27-34.	1.3	33
119	Organohalogen contaminants and metabolites in cerebrospinal fluid and cerebellum gray matter in short-beaked common dolphins and Atlantic white-sided dolphins from the western North Atlantic. <i>Environmental Pollution</i> , 2009, 157, 2345-2358.	3.7	33
120	Unprecedented Insights into the Chemical Complexity of Coal Tar from Comprehensive Two-Dimensional Gas Chromatography Mass Spectrometry and Direct Infusion Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. <i>Energy & Fuels</i> , 2015, 29, 641-648.	2.5	33
121	Photochemical Oxidation of Oil Reduced the Effectiveness of Aerial Dispersants Applied in Response to the <i>Deepwater Horizon</i> Spill. <i>Environmental Science and Technology Letters</i> , 2018, 5, 226-231.	3.9	33
122	A Geological Model for the Origin of Fluid Compositional Gradients in a Large Saudi Arabian Oilfield: An Investigation by Two-Dimensional Gas Chromatography (GC-MS) and Asphaltene Chemistry. <i>Energy & Fuels</i> , 2015, 29, 5666-5680.	2.5	32
123	Radiocarbon Dating of Alkenones from Marine Sediments: I. Isolation Protocol. <i>Radiocarbon</i> , 2005, 47, 401-412.	0.8	31
124	Visible-Near-Infrared Spectroscopy by Downhole Fluid Analysis Coupled with Comprehensive Two-Dimensional Gas Chromatography To Address Oil Reservoir Complexity. <i>Energy & Fuels</i> , 2008, 22, 496-503.	2.5	31
125	Biodegradation preference for isomers of alkylated naphthalenes and benzothiophenes in marine sediment contaminated with crude oil. <i>Organic Geochemistry</i> , 2011, 42, 630-639.	0.9	31
126	Recurrent Oil Sheens at the <i>Deepwater Horizon</i> Disaster Site Fingerprinted with Synthetic Hydrocarbon Drilling Fluids. <i>Environmental Science & Technology</i> , 2013, 47, 8211-8219.	4.6	31

#	ARTICLE	IF	CITATIONS
127	Integrating comprehensive two-dimensional gas chromatography and downhole fluid analysis to validate a spill-fill sequence of reservoirs with variations of biodegradation, water washing and thermal maturity. <i>Fuel</i> , 2017, 191, 538-554.	3.4	31
128	Latent hydrocarbons from cyanobacteria. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 13434-13435.	3.3	30
129	Product Formulation Controls the Impact of Biofouling on Consumer Plastic Photochemical Fate in the Ocean. <i>Environmental Science & Technology</i> , 2021, 55, 8898-8907.	4.6	30
130	Stable chlorine intramolecular kinetic isotope effects from the abiotic dehydrochlorination of DDT. <i>Environmental Science and Pollution Research</i> , 2002, 9, 183-186.	2.7	29
131	Naturally produced halogenated dimethyl bipyrrroles bind to the aryl hydrocarbon receptor and induce cytochrome P4501A and porphyrin accumulation in chicken embryo hepatocytes. <i>Environmental Toxicology and Chemistry</i> , 2003, 22, 1622-1631.	2.2	28
132	Exploring the Complexity of Two Iconic Crude Oil Spills in the Gulf of Mexico (Ixtoc I and Deepwater) <i>Tj ETQq0 0 0 rgBT /Overlock 10 TF 5</i> 2019, 33, 3925-3933.	2.5	28
133	MV Wakashio grounding incident in Mauritius 2020: The world's first major spillage of Very Low Sulfur Fuel Oil. <i>Marine Pollution Bulletin</i> , 2021, 171, 112917.	2.3	28
134	The <i>M/V X-Press Pearl</i> Nurdle Spill: Contamination of Burnt Plastic and Unburnt Nurdles along Sri Lanka's Beaches. <i>ACS Environmental Au</i> , 2022, 2, 128-135.	3.3	28
135	Modern and Fossil Contributions to Polycyclic Aromatic Hydrocarbons in PM2.5 from North Birmingham, Alabama in the Southeastern U.S.. <i>Environmental Science & Technology</i> , 2012, 46, 1422-1429.	4.6	27
136	Methods of Oil Detection in Response to the Deepwater Horizon Oil Spill. <i>Oceanography</i> , 2016, 29, 76-87.	0.5	27
137	Compound-specific bromine isotope compositions of one natural and six industrially synthesised organobromine substances. <i>Environmental Chemistry</i> , 2011, 8, 127.	0.7	25
138	Production of Jet Fuel Range Hydrocarbons as a Coproduct of Algal Biodiesel by Butenolysis of Long-Chain Alkenones. <i>Energy & Fuels</i> , 2015, 29, 922-930.	2.5	25
139	Significance of Perylene for Source Allocation of Terrigenous Organic Matter in Aquatic Sediments. <i>Environmental Science & Technology</i> , 2019, 53, 8244-8251.	4.6	25
140	Contemporary ¹⁴ C radiocarbon levels of oxygenated polybrominated diphenyl ethers (O-PBDEs) isolated in sponge-associated cyanobacteria associations. <i>Marine Pollution Bulletin</i> , 2011, 62, 631-636.	2.3	24
141	Distribution Patterns Suggest Biomagnification of Halogenated 1,2-Dimethyl-1,2-Bipyrroles (MBPs). <i>Environmental Science & Technology</i> , 2009, 43, 122-127.	4.6	23
142	New thermodynamic modeling of reservoir crude oil. <i>Fuel</i> , 2014, 117, 839-850.	3.4	23
143	Combined Petroleum System Modeling and Comprehensive Two-Dimensional Gas Chromatography To Improve Understanding of the Crude Oil Chemistry in the Llanos Basin, Colombia. <i>Energy & Fuels</i> , 2015, 29, 4755-4767.	2.5	23
144	What on Earth Have We Been Burning? Deciphering Sedimentary Records of Pyrogenic Carbon. <i>Environmental Science & Technology</i> , 2017, 51, 12972-12980.	4.6	23

#	ARTICLE	IF	CITATIONS
145	Ocean Dumping of Containerized DDT Waste Was a Sloppy Process. <i>Environmental Science & Technology</i> , 2019, 53, 2971-2980.	4.6	23
146	Influence of anthropogenic activities and risk assessment on protected mangrove forest using traditional and emerging molecular markers (Cear coast, northeastern Brazil). <i>Science of the Total Environment</i> , 2019, 656, 877-888.	3.9	23
147	Metal oxide supported Ni-impregnated bifunctional catalysts for controlling char formation and maximizing energy recovery during catalytic hydrothermal liquefaction of food waste. <i>Sustainable Energy and Fuels</i> , 2021, 5, 941-955.	2.5	23
148	Modeling comprehensive chemical composition of weathered oil following a marine spill to predict ozone and potential secondary aerosol formation and constrain transport pathways. <i>Journal of Geophysical Research: Oceans</i> , 2015, 120, 7300-7315.	1.0	22
149	Alkenones as renewable phase change materials. <i>Renewable Energy</i> , 2019, 134, 89-94.	4.3	21
150	Marine Natural Products, the Halogenated 1-Methyl-1,2-bipyrroles, Biomagnify in a Northwestern Atlantic Food Web. <i>Environmental Science & Technology</i> , 2010, 44, 5741-5747.	4.6	20
151	The relative contribution of methanotrophs to microbial communities and carbon cycling in soil overlying a coal-bed methane seep. <i>FEMS Microbiology Ecology</i> , 2013, 84, 474-494.	1.3	20
152	Applications of comprehensive two-dimensional gas chromatography (GC-GC) instudying the source, transport, andfate of petroleum hydrocarbons inthe environment. , 2016, , 399-448.		20
153	Vapour pressures, aqueous solubilities, Henrys Law constants, and octanol/water partition coefficients of a series of mixed halogenated dimethyl bipyrroles. <i>Chemosphere</i> , 2004, 57, 1373-1381.	4.2	19
154	Radiocarbon-Based Assessment of Fossil Fuel-Derived Contaminant Associations in Sediments. <i>Environmental Science & Technology</i> , 2008, 42, 5428-5434.	4.6	19
155	Oxygen Isotopes (¹⁸ O) Trace Photochemical Hydrocarbon Oxidation at the Sea Surface. <i>Geophysical Research Letters</i> , 2019, 46, 6745-6754.	1.5	18
156	Beyond Fatty Acid Methyl Esters: Expanding the Renewable Carbon Profile with Alkenones from <i>Isochrysis</i> sp.. <i>Energy & Fuels</i> , 2012, 26, 2434-2441.	2.5	17
157	Detailed Compositional Characterization of the 2014 Bangladesh Furnace Oil Released into the Worlds Largest Mangrove Forest. <i>Energy & Fuels</i> , 2018, 32, 3232-3242.	2.5	17
158	Alkenones as a Promising Green Alternative for Waxes in Cosmetics and Personal Care Products. <i>Cosmetics</i> , 2018, 5, 34.	1.5	17
159	n-alkanes and fatty acids of <i>Hypericum perforatum</i> , <i>Hypericum maculatum</i> and <i>Hypericum olympicum</i> . <i>Biochemical Systematics and Ecology</i> , 2003, 31, 223-226.	0.6	16
160	Invariant chlorine isotopic signatures during microbial PCB reductive dechlorination. <i>Environmental Pollution</i> , 2004, 128, 445-448.	3.7	16
161	Evaluation of alkenones, a renewably sourced, plantderived wax as a structuring agent for lipsticks. <i>International Journal of Cosmetic Science</i> , 2020, 42, 146-155.	1.2	16
162	Using Radiocarbon to Apportion Sources of Polycyclic Aromatic Hydrocarbons in Household Soot. <i>Environmental Forensics</i> , 2003, 4, 191-197.	1.3	15

#	ARTICLE	IF	CITATIONS
163	Interpreting comprehensive two-dimensional gas chromatography using peak topography maps with application to petroleum forensics. <i>Chemistry Central Journal</i> , 2016, 10, 75.	2.6	15
164	Biodegradation and water washing in a spill-fill sequence of oilfields. <i>Fuel</i> , 2019, 237, 707-719.	3.4	15
165	Synthesis and Analysis of an Alkenone-Free Biodiesel from <i>Isochrysis</i> sp.. <i>Energy & Fuels</i> , 2014, 28, 2677-2683.	2.5	14
166	Rapid Degradation of Cellulose Diacetate by Marine Microbes. <i>Environmental Science and Technology Letters</i> , 2022, 9, 37-41.	3.9	14
167	Expanding the range of brominated Q1 analogues. <i>Marine Pollution Bulletin</i> , 2006, 52, 578-582.	2.3	13
168	Estimating Phospholipid Membrane-Water Partition Coefficients Using Comprehensive Two-Dimensional Gas Chromatography. <i>Environmental Science & Technology</i> , 2012, 46, 3449-3456.	4.6	13
169	Impact of protists on a hydrocarbon-degrading bacterial community from deep-sea Gulf of Mexico sediments: A microcosm study. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2016, 129, 350-359.	0.6	13
170	Advances in Chemical Analysis of Oil Spills Since the Deepwater Horizon Disaster. <i>Critical Reviews in Analytical Chemistry</i> , 2023, 53, 1638-1697.	1.8	13
171	Spectral characterization of two bioaccumulated methoxylated polybrominated diphenyl ethers. <i>Chemosphere</i> , 2006, 62, 197-203.	4.2	12
172	Examining Inputs of Biogenic and Oil-Derived Hydrocarbons in Surface Waters Following the Deepwater Horizon Oil Spill. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 1329-1337.	1.2	12
173	¹⁴ C in Methane and DIC in the Deep Terrestrial Subsurface: Implications for Microbial Methanogenesis. <i>Geomicrobiology Journal</i> , 2006, 23, 453-462.	1.0	11
174	Oil spill source identification by comprehensive two-dimensional gas chromatography (GC-MS). <i>Journal of Chromatography A</i> , 2007, 1157, 169-178.		11
175	Inferring Black Carbon Concentrations in Particulate Organic Matter by Observing Pyrene Fluorescence Losses. <i>Environmental Science & Technology</i> , 2009, 43, 4864-4870.	4.6	11
176	Decolorization improves the fuel properties of algal biodiesel from <i>Isochrysis</i> sp.. <i>Fuel</i> , 2016, 179, 229-234.	3.4	11
177	Decoupled sedimentary records of combustion: Causes and implications. <i>Geophysical Research Letters</i> , 2016, 43, 5098-5108.	1.5	11
178	Advances on the separation of crocetane and phytane using GC-MS and GC-TOFMS. <i>Organic Geochemistry</i> , 2016, 98, 176-182.	0.9	11
179	Developing tools for risk assessment in protected species: Relative potencies inferred from competitive binding of halogenated aromatic hydrocarbons to aryl hydrocarbon receptors from beluga (<i>Delphinapterus leucas</i>) and mouse. <i>Aquatic Toxicology</i> , 2010, 100, 238-245.	1.9	10
180	Reservoir Implications of a Spill-Fill Sequence of Reservoir Charge Coupled with Viscosity and Asphaltene Gradients from a Combination of Water Washing and Biodegradation. <i>Energy & Fuels</i> , 2017, 31, 1000-1010.		10

#	ARTICLE	IF	CITATIONS
181	Ongoing biodegradation of Deepwater Horizon oil in beach sands: Insights from tracing petroleum carbon into microbial biomass. <i>Marine Pollution Bulletin</i> , 2018, 126, 130-136.	2.3	10
182	Emerging and traditional organic markers: Baseline study showing the influence of untraditional anthropogenic activities on coastal zones with multiple activities (Cear� coast, Northeast Brazil). <i>Marine Pollution Bulletin</i> , 2019, 139, 256-262.	2.3	10
183	Relationships between carbon isotopic composition and mode of binding of natural organic matter in selected marine sediments. <i>Organic Geochemistry</i> , 2007, 38, 1824-1837.	0.9	9
184	Molecular and Isotopic Analysis of Motor Oil from a Biodiesel-Driven Vehicle. <i>Energy & Fuels</i> , 2010, 24, 1037-1042.	2.5	9
185	RADIOCARBON IN DISSOLVED ORGANIC CARBON BY UV OXIDATION: PROCEDURES AND BLANK CHARACTERIZATION AT NOSAMS. <i>Radiocarbon</i> , 2021, 63, 357-374.	0.8	9
186	Innovative methods for determining alkenone unsaturation indices. <i>Marine Chemistry</i> , 2003, 83, 5-22.	0.9	8
187	Alkenones, a Renewably Sourced, Biobased Wax as an SPF Booster for Organic Sunscreens. <i>Cosmetics</i> , 2019, 6, 11.	1.5	8
188	Characterizations and comparison of low sulfur fuel oils compliant with 2020 global sulfur cap regulation for international shipping. <i>Marine Pollution Bulletin</i> , 2022, 180, 113791.	2.3	8
189	Hydrocarbon transformations in sediments from the Cathedral Hill hydrothermal vent complex at Guaymas Basin, Gulf of California â A chemometric study of shallow seep architecture. <i>Organic Geochemistry</i> , 2021, 152, 104173.	0.9	7
190	Thermodynamic feasibility of shipboard conversion of marine plastics to blue diesel for self-powered ocean cleanup. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, e2107250118.	3.3	7
191	When Science and the Media Mix. <i>Science</i> , 2011, 332, 13-13.	6.0	6
192	Accessing Monomers, Surfactants, and the Queen Bee Substance by Acrylate Cross-Metathesis of Long-Chain Alkenones. <i>JAOCs, Journal of the American Oil Chemists' Society</i> , 2017, 94, 831-840.	0.8	6
193	Jet biofuels from algae. , 2019, , 359-395.		6
194	Age of Nitrogen Deficient Microalgal Cells is a Key Factor for Maximizing Lipid Content. <i>Research Journal of Phytochemistry</i> , 2012, 6, 42-53.	0.1	6
195	¹⁵ N Enrichment Suggests Possible Source for Halogenated �-Methyl-1,2-bipyrroles (MBPs). <i>Environmental Science & Technology</i> , 2012, 46, 2064-2070.	4.6	5
196	Leveraging Lessons Learned from Black Carbon Research to Study Plastics in the Environment. <i>Environmental Science & Technology</i> , 2019, 53, 6599-6600.	4.6	5
197	Biomaterials Science Can Offer a Valuable Second Opinion on Nature's Plastic Malady. <i>Environmental Science & Technology</i> , 2022, 56, 1475-1477.	4.6	5
198	Oil-spill forensics using two-dimensional gas chromatography: Differentiating highly correlated petroleum sources using peak manifold clusters. , 2015, , .		4

#	ARTICLE	IF	CITATIONS
199	Harnessing a decade of data to inform future decisions: Insights into the ongoing hydrocarbon release at Taylor Energy's Mississippi Canyon Block 20 (MC20) site. <i>Marine Pollution Bulletin</i> , 2020, 155, 111056.	2.3	4
200	Experimental Protocol for Biodiesel Production with Isolation of Alkenones as Coproducts from Commercial <i>Isochrysis</i> Algal Biomass. <i>Journal of Visualized Experiments</i> , 2016, , .	0.2	3
201	Designing a solution to enable agency-academic scientific collaboration for disasters. <i>Ecology and Society</i> , 2017, 22, .	1.0	3
202	Tracking and Modeling the Degradation of a 30 Year Old Fuel Oil Spill with Comprehensive Two-Dimensional Gas Chromatography. <i>International Oil Spill Conference Proceedings</i> , 2011, 2011, abs428.	0.1	3
203	Response to Comment on "The West Falmouth Oil Spill after Thirty Years: The Persistence of Petroleum Hydrocarbons in Marsh Sediments" <i>Environmental Science & Technology</i> , 2003, 37, 2021-2021.	4.6	2
204	A cautionary tale about evaluating analytical methods to assess contamination after oil spills. <i>Marine Pollution Bulletin</i> , 2008, 56, 1380.	2.3	2
205	Comment on "Occurrence and Concentrations of Benzotriazole UV Stabilizers in Marine Organisms and Sediments from the Ariake Sea, Japan" <i>Environmental Science & Technology</i> , 2009, 43, 7998-7998.	4.6	2
206	Compound-Cognizant Feature Compression of Gas Chromatographic Data to Facilitate Environmental Forensics. , 2015, , .		2
207	Compressed Forensic Source Image Using Source Pattern Map. , 2016, , .		2
208	A One-Pot/Single-Analysis Approach to Substrate Scope Investigations Using Comprehensive Two-Dimensional Gas Chromatography (GC ² -GC). <i>Journal of Organic Chemistry</i> , 2016, 81, 3533-3541.	1.7	2
209	Pelagic tar balls collected in the North Atlantic Ocean and Caribbean Sea from 1988 to 2016 have natural and anthropogenic origins. <i>Marine Pollution Bulletin</i> , 2018, 137, 352-359.	2.3	2
210	Hurricane Isaac brings more than oil ashore: Characteristics of beach deposits following the Deepwater Horizon spill. <i>PLoS ONE</i> , 2019, 14, e0213464.	1.1	2
211	Unusual Shorter α -Chain C 35 and C 36 Alkenones from Commercially Grown <i>Isochrysis</i> sp. Microalgae. <i>JAACS, Journal of the American Oil Chemists' Society</i> , 2021, 98, 757-768.	0.8	2
212	Production of Two Highly Abundant 2-Methyl-Branched Fatty Acids by Blooms of the Globally Significant Marine Cyanobacteria <i>Trichodesmium erythraeum</i> . <i>ACS Omega</i> , 2021, 6, 22803-22810.	1.6	2
213	BIOTIC AND ABIOTIC OIL DEGRADATION AFTER THE DEEPWATER HORIZON DISASTER LEADS TO FORMATION OF RECALCITRANT OXYGENATED HYDROCARBONS: NEW INSIGHTS USING GC ² -GC. <i>International Oil Spill Conference Proceedings</i> , 2014, 2014, 1087-1098.	0.1	2
214	<i>Nematostella vectensis</i> exhibits an enhanced molecular stress response upon co-exposure to highly weathered oil and surface UV radiation. <i>Marine Environmental Research</i> , 2022, 175, 105569.	1.1	2
215	GC ² -GC Analysis of Novel 2 \pm -Methyl Biomarker Compounds from a Large Middle East Oilfield. <i>Energy & Fuels</i> , 2022, 36, 8853-8865.	2.5	2
216	A Sluggish Response to a Smoldering Problem. <i>Environmental Forensics</i> , 2005, 6, 103-104.	1.3	1

#	ARTICLE	IF	CITATIONS
217	Dude, You Are Speaking Romulan. <i>Eos</i> , 2010, 91, 384-384.	0.1	1
218	A hump in ocean-air exchange. <i>Nature Geoscience</i> , 2016, 9, 415-416.	5.4	1
219	Comprehensive Two-Dimensional Gas Chromatography to Assess Petroleum Product Weathering. <i>Springer Protocols</i> , 2016, , 129-149.	0.1	1
220	Archaeal lipid diversity, alteration, preservation at Cathedral Hill, Guaymas Basin, Gulf of California, and its link to the deep time preservation paradox. <i>Organic Geochemistry</i> , 2021, , 104302.	0.9	1
221	GC – GC–A New Analytical Tool For Environmental Forensics. , 0, .		1
222	Naturally produced halogenated dimethyl bipyroles bind to the aryl hydrocarbon receptor and induce cytochrome P4501A and porphyrin accumulation in chicken embryo hepatocytes. , 2003, 22, 1622.		1
223	Modeling the effects of evaporation and dissolution for a heavy fuel oil: the M/V Cosco Busan spill. <i>International Oil Spill Conference Proceedings</i> , 2014, 2014, 300301.	0.1	1
224	A New Look at an Old Oil Spill. <i>Soil and Sediment Contamination</i> , 2002, 11, 417-417.	1.1	0
225	Introduction to the Invited Article. <i>Environmental Forensics</i> , 2003, 4, 11-11.	1.3	0
226	Acceptance of the 2014 C.C. Patterson Award by Christopher M. Reddy. <i>Geochimica Et Cosmochimica Acta</i> , 2016, 172, 461-462.	1.6	0
227	Signal variability and data compression considerations for petroleum forensics in two-dimensional gas chromatography. , 2017, , .		0
228	High Resolution Forensic Analysis Of Surface Sheens Helps Pinpoint Source Of Oil Leakage From The Deepwater Horizon. <i>International Oil Spill Conference Proceedings</i> , 2014, 2014, 300290.	0.1	0