

Kenneth Mopper

List of Publications by Year in descending order

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102
papers

17,392
citations

38742

50
h-index

37204

96
g-index

104
all docs

104
docs citations

104
times ranked

10914
citing authors

#	ARTICLE	IF	CITATIONS
1	Evaluation of Specific Ultraviolet Absorbance as an Indicator of the Chemical Composition and Reactivity of Dissolved Organic Carbon. <i>Environmental Science & Technology</i> , 2003, 37, 4702-4708.	10.0	3,418
2	Absorption spectral slopes and slope ratios as indicators of molecular weight, source, and photobleaching of chromophoric dissolved organic matter. <i>Limnology and Oceanography</i> , 2008, 53, 955-969.	3.1	2,071
3	High performance liquid chromatographic determination of subpicomole amounts of amino acids by precolumn fluorescence derivatization with o-phthalaldehyde. <i>Analytical Chemistry</i> , 1979, 51, 1667-1674.	6.5	1,815
4	Photochemical degradation of dissolved organic carbon and its impact on the oceanic carbon cycle. <i>Nature</i> , 1991, 353, 60-62.	27.8	595
5	Illuminated darkness: Molecular signatures of Congo River dissolved organic matter and its photochemical alteration as revealed by ultrahigh precision mass spectrometry. <i>Limnology and Oceanography</i> , 2010, 55, 1467-1477.	3.1	527
6	Hydroxyl Radical Photoproduction in the Sea and Its Potential Impact on Marine Processes. <i>Science</i> , 1990, 250, 661-664.	12.6	453
7	Photochemical source of biological substrates in sea water: implications for carbon cycling. <i>Nature</i> , 1989, 341, 637-639.	27.8	427
8	Formation of carbonyl compounds from UV _A -induced photodegradation of humic substances in natural waters: Fate of riverine carbon in the sea. <i>Limnology and Oceanography</i> , 1990, 35, 1503-1515.	3.1	426
9	Determination of photochemically produced hydroxyl radicals in seawater and freshwater. <i>Marine Chemistry</i> , 1990, 30, 71-88.	2.3	319
10	Advanced Instrumental Approaches for Characterization of Marine Dissolved Organic Matter: Extraction Techniques, Mass Spectrometry, and Nuclear Magnetic Resonance Spectroscopy. <i>Chemical Reviews</i> , 2007, 107, 419-442.	47.7	310
11	Fluorescence as a possible tool for studying the nature and water column distribution of DOC components. <i>Marine Chemistry</i> , 1993, 41, 229-238.	2.3	278
12	Photochemical degradation of dissolved organic matter and dissolved lignin phenols from the Congo River. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	252
13	Diel and depth variations in dissolved free amino acids and ammonium in the Baltic Sea determined by shipboard HPLC analysis. <i>Limnology and Oceanography</i> , 1982, 27, 336-347.	3.1	248
14	The role of surface-active carbohydrates in the flocculation of a diatom bloom in a mesocosm. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 1995, 42, 47-73.	1.4	248
15	The role of surface-active carbohydrates in the formation of transparent exopolymer particles by bubble adsorption of seawater. <i>Limnology and Oceanography</i> , 1998, 43, 1860-1871.	3.1	247
16	Photochemical bleaching of oceanic dissolved organic matter and its effect on absorption spectral slope and fluorescence. <i>Marine Chemistry</i> , 2013, 155, 81-91.	2.3	239
17	Apparent partition coefficients of 15 carbonyl compounds between air and seawater and between air and freshwater; implications for air-sea exchange. <i>Environmental Science & Technology</i> , 1990, 24, 1864-1869.	10.0	223
18	Photochemical production of low-molecular-weight carbonyl compounds in seawater and surface microlayer and their air-sea exchange. <i>Marine Chemistry</i> , 1997, 56, 201-213.	2.3	210

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19	Geochemical formation of organosulphur compounds (thiols) by addition of H ₂ S to sedimentary organic matter. <i>Nature</i> , 1987, 329, 623-625.	27.8	202
20	Fluorescence contouring analysis of DOC intercalibration experiment samples: a comparison of techniques. <i>Marine Chemistry</i> , 1993, 41, 173-178.	2.3	183
21	Free amino acids in marine rains: evidence for oxidation and potential role in nitrogen cycling. <i>Nature</i> , 1987, 325, 246-249.	27.8	174
22	Determination of sugars in unconcentrated seawater and other natural waters by liquid chromatography and pulsed amperometric detection.. <i>Environmental Science & Technology</i> , 1992, 26, 133-138.	10.0	167
23	Automated High-Performance, High-Temperature Combustion Total Organic Carbon Analyzer. <i>Analytical Chemistry</i> , 1996, 68, 3090-3097.	6.5	167
24	Sources and sinks of low molecular weight organic carbonyl compounds in seawater. <i>Marine Chemistry</i> , 1986, 19, 305-321.	2.3	151
25	Photochemistry and the Cycling of Carbon, Sulfur, Nitrogen and Phosphorus. , 2002, , 455-507.		151
26	Effect of Humic Substance Photodegradation on Bacterial Growth and Respiration in Lake Water. <i>Applied and Environmental Microbiology</i> , 2005, 71, 6267-6275.	3.1	130
27	Trace determination of biological thiols by liquid chromatography and precolumn fluorometric labeling with o-phthalaldehyde. <i>Analytical Chemistry</i> , 1984, 56, 2557-2560.	6.5	129
28	A new noncorrosive dye reagent for automatic sugar chromatography. <i>Analytical Biochemistry</i> , 1973, 56, 440-442.	2.4	126
29	The monosaccharide spectra of natural waters. <i>Marine Chemistry</i> , 1980, 10, 55-66.	2.3	122
30	Determination of picomolar concentrations of carbonyl compounds in natural waters, including seawater, by liquid chromatography. <i>Environmental Science & Technology</i> , 1990, 24, 1477-1481.	10.0	117
31	Sugars and uronic acids in sediment and water from the black sea and north sea with emphasis on analytical techniques. <i>Marine Chemistry</i> , 1977, 5, 585-603.	2.3	113
32	Nitrate and Nitrite Ultraviolet Actinometers. <i>Photochemistry and Photobiology</i> , 1999, 70, 319-328.	2.5	113
33	Marine Photochemistry of Organic Matter. , 2015, , 389-450.		111
34	Loss of optical and molecular indicators of terrigenous dissolved organic matter during long-term photobleaching. <i>Aquatic Sciences</i> , 2014, 76, 353-373.	1.5	105
35	Competition between photochemical and biological degradation of dissolved organic matter from the cyanobacteria <i>Microcystis aeruginosa</i> . <i>Limnology and Oceanography</i> , 2015, 60, 1172-1194.	3.1	103
36	Open-ocean carbon monoxide photoproduction. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2006, 53, 1695-1705.	1.4	102

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37	Factors Controlling the Distribution and Early Diagenesis of Organic Material in Marine Sediments. , 1976, , 59-113.		97
38	Measurement of sub-parts-per-billion levels of carbonyl compounds in marine air by a simple cartridge trapping procedure followed by liquid chromatography. Environmental Science & Technology, 1990, 24, 1482-1485.	10.0	94
39	Relating Carbon Monoxide Photoproduction to Dissolved Organic Matter Functionality. Environmental Science & Technology, 2008, 42, 3271-3276.	10.0	87
40	Photochemical production of hydrogen peroxide in Antarctic Waters. Deep-Sea Research Part I: Oceanographic Research Papers, 2000, 47, 1077-1099.	1.4	83
41	Reversed-phase liquid chromatographic analysis of dns-sugars. Journal of Chromatography A, 1983, 256, 27-38.	3.7	82
42	Isolation and characterization of estuarine dissolved organic matter: Comparison of ultrafiltration and C18 solid-phase extraction techniques. Marine Chemistry, 2005, 96, 219-235.	2.3	81
43	Production of Black Carbon-like and Aliphatic Molecules from Terrestrial Dissolved Organic Matter in the Presence of Sunlight and Iron. Environmental Science and Technology Letters, 2014, 1, 399-404.	8.7	81
44	Photochemical production of the hydroxyl radical in Antarctic waters. Deep-Sea Research Part I: Oceanographic Research Papers, 2001, 48, 741-759.	1.4	80
45	Carbon dioxide and carbon monoxide photoproduction quantum yields in the Delaware Estuary. Marine Chemistry, 2010, 118, 11-21.	2.3	78
46	Photochemical formation of glyoxylic and pyruvic acids in seawater. Marine Chemistry, 1987, 21, 135-149.	2.3	77
47	A new chromatographic sugar autoanalyzer with a sensitivity of 10 ⁻¹⁰ moles. Analytical Biochemistry, 1972, 45, 147-153.	2.4	74
48	Insights into the Photoproduction Sites of Hydroxyl Radicals by Dissolved Organic Matter in Natural Waters. Environmental Science and Technology Letters, 2015, 2, 352-356.	8.7	74
49	Marine photochemistry and its impact on carbon cycling. , 2000, , 101-129.		73
50	Borate complex ion exchange chromatography with fluorimetric detection for determination of saccharide ethylenediamine. Analytical Chemistry, 1980, 52, 2018-2022.	6.5	71
51	Photochemical flocculation of terrestrial dissolved organic matter and iron. Geochimica Et Cosmochimica Acta, 2013, 121, 398-413.	3.9	71
52	Effects of cross-flow filtration on the absorption and fluorescence properties of seawater. Marine Chemistry, 1996, 55, 53-74.	2.3	63
53	Ultrahigh resolution mass spectrometric differentiation of dissolved organic matter isolated by coupled reverse osmosis-electrodialysis from various major oceanic water masses. Marine Chemistry, 2014, 164, 48-59.	2.3	61
54	Characterization and photodegradation of dissolved organic matter (DOM) from a tropical lake and its dominant primary producer, the cyanobacteria Microcystis aeruginosa. Marine Chemistry, 2015, 177, 205-217.	2.3	61

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55	Distribution and biological turnover of dissolved organic compounds in the water column of the Black Sea. <i>Deep-sea Research Part A, Oceanographic Research Papers</i> , 1991, 38, S1021-S1047.	1.5	52
56	Improved chromatographic separations on anion exchange resins. <i>Analytical Biochemistry</i> , 1978, 87, 162-168.	2.4	51
57	Oxygen isotope fractionation between biogenic silica and ocean water. <i>Geochimica Et Cosmochimica Acta</i> , 1971, 35, 1185-1187.	3.9	48
58	Determination of sulfite and thiosulfate in aqueous samples including anoxic seawater by liquid chromatography after derivatization with 2,2'-dithiobis(5-nitropyridine). <i>Environmental Science & Technology</i> , 1990, 24, 333-337.	10.0	48
59	Trace analysis of aldehydes by pre-column fluorogenic labeling with 1,3-cyclohexanedione and reversed-phase high-performance liquid chromatography. <i>Journal of Chromatography A</i> , 1984, 298, 399-406.	3.7	47
60	Hydrogen peroxide method intercomparison study in seawater. <i>Marine Chemistry</i> , 2005, 97, 4-13.	2.3	47
61	Determination of amino acids in sea water " Recent chromatographic developments and future directions. <i>Science of the Total Environment</i> , 1986, 49, 115-131.	8.0	45
62	Evaluating the photoalteration of estuarine dissolved organic matter using direct temperature-resolved mass spectrometry and UV-visible spectroscopy. <i>Aquatic Sciences</i> , 2007, 69, 440-455.	1.5	42
63	Biogeochemical Cycling of Sulfur. <i>ACS Symposium Series</i> , 1986, , 324-339.	0.5	41
64	Development and Intercalibration of Ultraviolet Solar Actinometers. <i>Photochemistry and Photobiology</i> , 2000, 71, 431.	2.5	41
65	Wavelength and temperature-dependent apparent quantum yields for photochemical formation of hydrogen peroxide in seawater. <i>Environmental Sciences: Processes and Impacts</i> , 2014, 16, 777-791.	3.5	40
66	EARLY DIAGENESIS OF ORGANIC MATTER IN MARINE SOILS. <i>Soil Science</i> , 1975, 119, 65-72.	0.9	39
67	Carbonyl compounds in the lower marine troposphere over the Caribbean Sea and Bahamas. <i>Journal of Geophysical Research</i> , 1993, 98, 2385-2392.	3.3	39
68	Occurrence of particle-bound polysulfides and significance of their reaction with organic matters in marine sediments. <i>Geophysical Research Letters</i> , 1992, 19, 2043-2046.	4.0	36
69	Chromatographic Determination of Nanomolar Cyanate Concentrations in Estuarine and Sea Waters by Precolumn Fluorescence Derivatization. <i>Analytical Chemistry</i> , 2013, 85, 6661-6666.	6.5	36
70	Trace analysis of aldehydes by reversed-phase high-performance liquid chromatography and precolumn fluorogenic labeling with 5,5-dimethyl-1,3-cyclohexanedione. <i>Journal of Chromatography A</i> , 1983, 256, 243-252.	3.7	34
71	A note on the losses of monosaccharides, amino sugars, and amino acids from extracts during concentration procedures. <i>Analytical Biochemistry</i> , 1978, 84, 186-190.	2.4	32
72	Determination of low-molecular-weight carboxylic acids in aqueous samples by gas chromatography and nitrogen-selective detection of 2-nitrophenylhydrazides. <i>Analytica Chimica Acta</i> , 1990, 237, 215-221.	5.4	32

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73	Reversed-phase high-performance liquid chromatographic analysis of α -keto acid quinoxalinol derivatives. <i>Journal of Chromatography A</i> , 1983, 281, 135-149.	3.7	31
74	Field method for determination of traces of thiols in natural waters. <i>Analytica Chimica Acta</i> , 1990, 236, 363-370.	5.4	31
75	Improved chromatographic separations on anion-exchange resins. <i>Analytical Biochemistry</i> , 1978, 85, 528-532.	2.4	28
76	Distribution, Sources, and Sinks of Cyanate in the Coastal North Atlantic Ocean. <i>Environmental Science and Technology Letters</i> , 2016, 3, 297-302.	8.7	25
77	Synthesis of carbohydrates and lipids on kaolinite. <i>Chemical Geology</i> , 1972, 9, 79-87.	3.3	24
78	Estimating hydroxyl radical photochemical formation rates in natural waters during long-term laboratory irradiation experiments. <i>Environmental Sciences: Processes and Impacts</i> , 2014, 16, 757-763.	3.5	22
79	Spectroscopic characterization of oceanic dissolved organic matter isolated by reverse osmosis coupled with electrodialysis. <i>Marine Chemistry</i> , 2015, 177, 278-287.	2.3	22
80	Free-floating drifter for photochemical studies in the water column. <i>Limnology and Oceanography</i> , 1997, 42, 1829-1833.	3.1	20
81	Uronic and other organic acids in Baltic Sea and Black Sea sediments. <i>Geochimica Et Cosmochimica Acta</i> , 1978, 42, 153-163.	3.9	19
82	Mechanistic Studies of Organosulfur (Thiol) Formation in Coastal Marine Sediments. <i>ACS Symposium Series</i> , 1989, , 231-242.	0.5	19
83	Determination of picomolar levels of flavins in natural waters by solid-phase ion-pair extraction and liquid chromatography. <i>Analytica Chimica Acta</i> , 1987, 201, 127-133.	5.4	18
84	Improved chromatographic separations on anion-exchange resins. <i>Analytical Biochemistry</i> , 1978, 86, 597-601.	2.4	17
85	Determination of formate in natural waters by a coupled enzymatic/high-performance liquid chromatographic technique. <i>Analytical Chemistry</i> , 1988, 60, 1654-1659.	6.5	17
86	Trace determination of α -keto acid in natural waters. <i>Analytica Chimica Acta</i> , 1986, 183, 129-140.	5.4	16
87	Natural Photosensitizers in Sea Water: Riboflavin and Its Breakdown Products. <i>ACS Symposium Series</i> , 1987, , 174-190.	0.5	16
88	Title is missing!. <i>Journal of Atmospheric Chemistry</i> , 2000, 36, 81-105.	3.2	16
89	Determination of photochemically produced carbon dioxide in seawater. <i>Limnology and Oceanography: Methods</i> , 2008, 6, 441-453.	2.0	16
90	A comparison of a simplified cupric oxide oxidation HPLC method with the traditional GC-MS method for characterization of lignin phenolics in environmental samples. <i>Limnology and Oceanography: Methods</i> , 2015, 13, 1-8.	2.0	16

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91	Contrasting effects of solar radiation and nitrates on the bioavailability of dissolved organic matter to marine bacteria. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2009, 201, 243-247.	3.9	14
92	An automatic analyzer for the specific determination of amino sugars. <i>Analytical Biochemistry</i> , 1978, 84, 191-195.	2.4	13
93	Extraction and Analysis of Polysaccharides, Chiral Amino Acids, and Sfe-Extractable Lipids from Marine POM. <i>Geophysical Monograph Series</i> , 0, , 151-161.	0.1	12
94	Development and Intercalibration of Ultraviolet Solar Actinometers. <i>Photochemistry and Photobiology</i> , 2007, 71, 431-440.	2.5	11
95	Determination of nanomolar levels of formate in natural waters based on a luminescence enzymatic assay. <i>Analytica Chimica Acta</i> , 1990, 231, 299-303.	5.4	10
96	Studies on Hydroxyl Radical Formation and Correlated Photoflocculation Process Using Degraded Wood Leachate as a CDOM Source. <i>Frontiers in Marine Science</i> , 2016, 2, .	2.5	9
97	Measurement of Antioxidant Activity toward Superoxide in Natural Waters. <i>Frontiers in Marine Science</i> , 2016, 3, .	2.5	6
98	Chapter 4 Early Diagenesis of Sugars and Amino Acids in Sediments. <i>Developments in Sedimentology</i> , 1979, 25, 143-205.	0.5	5
99	A preliminary examination of an in situ dual dye approach to measuring light fluxes in lotic systems. <i>Limnology and Oceanography: Methods</i> , 2013, 11, 631-642.	2.0	4
100	Mixing effects on light exposure in a large lake epilimnion: A preliminary dual dye study. <i>Limnology and Oceanography: Methods</i> , 2016, 14, 542-554.	2.0	4
101	Organic Chemical Dynamics of the Mixed Layer: Measurement of Dissolved Hydrophilic Organics at Sea. , 1986, , 137-157.		3
102	Organic geochemistry of natural waters. <i>Organic Geochemistry</i> , 1987, 11, 53.	1.8	1