Edward T Peltzer

List of Publications by Year
in descending order

87 papers	5,681 citations	57719 44 h-index	76872 74 g-index
91 all docs	91 docs citations	91 times ranked	4702 citing authors

#	Article	IF	Citations
1	Deep sea NMR: Methane hydrate growth habit in porous media and its relationship to hydraulic permeability, deposit accumulation, and submarine slope stability. Journal of Geophysical Research, 2003, 108, .	3.3	367
2	Direct Experiments on the Ocean Disposal of Fossil Fuel CO2. Science, 1999, 284, 943-945.	6.0	329
3	The chemical conditions on the parent body of the murchison meteorite: Some conclusions based on amino, hydroxy and dicarboxylic acids. Advances in Space Research, 1984, 4, 69-74.	1.2	243
4	Atmospheric transport of continentally derived lipids to the tropical North Pacific. Nature, 1981, 291, 312-314.	13.7	217
5	The importance of atmospheric input of terrestrial organic material to deep sea sediments. Organic Geochemistry, 1986, 10, 661-669.	0.9	207
6	Limits to Marine Life. Science, 2009, 324, 347-348.	6.0	171
7	Enhanced lifetime of methane bubble streams within the deep ocean. Geophysical Research Letters, 2002, 29, 21-1-21-4.	1.5	170
8	Analyses of dissolved organic carbon in seawater: the JGOFS EqPac methods comparison. Marine Chemistry, 1995, 48, 91-108.	0.9	157
9	Î±-Hydroxycarboxylic acids in the Murchison meteorite. Nature, 1978, 272, 443-444.	13.7	150
10	Development of a laser Raman spectrometer for deep-ocean science. Deep-Sea Research Part I: Oceanographic Research Papers, 2004, 51, 739-753.	0.6	142
11	Stocks and dynamics of dissolved and particulate organic matter in the southern Ross Sea, Antarctica. Deep-Sea Research Part II: Topical Studies in Oceanography, 2000, 47, 3201-3225.	0.6	141
12	Final dissolved organic carbon broad community intercalibration and preliminary use of DOC reference materials. Marine Chemistry, 2002, 77, 239-253.	0.9	140
13	Hypoxia by degrees: Establishing definitions for a changing ocean. Deep-Sea Research Part I: Oceanographic Research Papers, 2011, 58, 1212-1226.	0.6	137
14	Long-range transport of terrestrially derived lipids in aerosols from the south Pacific. Nature, 1987, 325, 800-803.	13.7	132
15	The use of in situ and airborne fluorescence measurements to determine UV absorption coefficients and DOC concentrations in surface waters. Limnology and Oceanography, 1995, 40, 411-415.	1.6	130
16	Lipids in aerosols from the tropical North Pacific: Temporal variability. Journal of Geophysical Research, 1982, 87, 11133-11144.	3.3	125
17	Dissolution rates of pure methane hydrate and carbon-dioxide hydrate in undersaturated seawater at 1000-m depth. Geochimica Et Cosmochimica Acta, 2004, 68, 285-292.	1.6	123
18	Gas hydrate measurements at Hydrate Ridge using Raman spectroscopy. Geochimica Et Cosmochimica Acta, 2007, 71, 2947-2959.	1.6	122

#	Article	IF	Citations
19	Spatial and temporal variability of total organic carbon along 140Â°W in the equatorial Pacific Ocean in 1992. Deep-Sea Research Part II: Topical Studies in Oceanography, 1996, 43, 1155-1180.	0.6	112
20	Controls on methane bubble dissolution inside and outside the hydrate stability field from open ocean field experiments and numerical modeling. Marine Chemistry, 2009, 114, 19-30.	0.9	110
21	Effects of Direct Ocean CO2 Injection on Deep-Sea Meiofauna. Journal of Oceanography, 2004, 60, 759-766.	0.7	96
22	Spatial and temporal variations of total organic carbon in the Arabian Sea. Deep-Sea Research Part II: Topical Studies in Oceanography, 1998, 45, 2171-2193.	0.6	94
23	Airâ€toâ€sea fluxes of lipids at Enewetak Atoll. Journal of Geophysical Research, 1985, 90, 2409-2423.	3.3	90
24	A field study of the effects of CO2 ocean disposal on mobile deep-sea animals. Marine Chemistry, 2000, 72, 95-101.	0.9	80
25	Some practical aspects of measuring DOC â€" sampling artifacts and analytical problems with marine samples. Marine Chemistry, 1993, 41, 243-252.	0.9	79
26	Formaldehyde in remote marine air and rain: Flux measurements and estimates. Geophysical Research Letters, 1980, 7, 341-344.	1.5	77
27	Unanticipated consequences of ocean acidification: A noisier ocean at lower pH. Geophysical Research Letters, 2008, 35, .	1.5	76
28	Experimental Determination of the Fate of Rising CO2Droplets in Seawater. Environmental Science & Technology, 2002, 36, 5441-5446.	4.6	74
29	Raman Spectroscopy in the Deep Ocean: Successes and Challenges. Applied Spectroscopy, 2004, 58, 195A-208A.	1.2	73
30	Raman spectroscopic measurements of synthetic gas hydrates in the ocean. Marine Chemistry, 2006, 98, 304-314.	0.9	68
31	Seafloor nuclear magnetic resonance assay of methane hydrate in sediment and rock. Journal of Geophysical Research, 2003, 108, .	3.3	61
32	A comparison of methods for the measurement of dissolved organic carbon in natural waters. Marine Chemistry, 1996, 54, 85-96.	0.9	60
33	Experiments on the ocean sequestration of fossil fuel CO2: pH measurements and hydrate formation. Marine Chemistry, 2000, 72, 83-93.	0.9	58
34	Authigenic carbon entombed in methane-soaked sediments from the northeastern transform margin of the Guaymas Basin, Gulf of California. Deep-Sea Research Part II: Topical Studies in Oceanography, 2007, 54, 1240-1267.	0.6	57
35	In situ Raman analyses of deep-sea hydrothermal and cold seep systems (Gorda Ridge and Hydrate) Tj ETQq1 1 0.784314 rgBT /Overlo	1.0	55
36	Development and deployment of a deep-sea Raman probe for measurement of pore water geochemistry. Deep-Sea Research Part I: Oceanographic Research Papers, 2010, 57, 297-306.	0.6	55

#	Article	IF	Citations
37	A Review of Advances in Deep-Ocean Raman Spectroscopy. Applied Spectroscopy, 2012, 66, 237-249.	1.2	54
38	Free-ocean CO₂ enrichment (FOCE) systems: present status and future developments. Biogeosciences, 2014, 11, 4057-4075.	1.3	51
39	A timescale for dissolved organic carbon production in equatorial Pacific surface waters. Global Biogeochemical Cycles, 1997, 11, 435-452.	1.9	49
40	Determination of Amino Acid Enantiomeric Ratios by Gas Liquid Chromatography of the N-Trifluoroacetyl-L-Prolyl-Peptide Methyl Esters. Journal of Chromatographic Science, 1978, 16, 556-560.	0.7	48
41	Seeing a Deep Ocean CO2Enrichment Experiment in a New Light:Â Laser Raman Detection of Dissolved CO2in Seawater. Environmental Science & Technology, 2005, 39, 9630-9636.	4.6	48
42	Use of a Free Ocean CO₂ Enrichment (FOCE) System to Evaluate the Effects of Ocean Acidification on the Foraging Behavior of a Deep-Sea Urchin. Environmental Science & Technology, 2014, 48, 9890-9897.	4.6	48
43	In situ Raman-based measurements of high dissolved methane concentrations in hydrate-rich ocean sediments. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	47
44	Dissolved organic carbon on Georges Bank. Continental Shelf Research, 1996, 16, 409-420.	0.9	46
45	Development and deployment of a precision underwater positioning system for in situ laser Raman spectroscopy in the deep ocean. Deep-Sea Research Part I: Oceanographic Research Papers, 2005, 52, 2376-2389.	0.6	42
46	Measurements of the fate of gas hydrates during transit through the ocean water column. Geophysical Research Letters, 2002, 29, 38-1-38-4.	1.5	39
47	In situ Raman measurement of HSâ¯ and H2S in sediment pore waters and use of the HSâ¯:H2S ratio as an indicator of pore water pH. Marine Chemistry, 2016, 184, 32-42.	0.9	34
48	Depth perception: the need to report ocean biogeochemical rates as functions of temperature, not depth. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2017, 375, 20160319.	1.6	34
49	Deep ocean experiments with fossil fuel carbon dioxide: Creation and sensing of a controlled plume at 4 km depth. Journal of Marine Research, 2005, 63, 9-33.	0.3	33
50	Comparison of the Augustâ€“September 1991 and 1979 surface partial pressure of CO2 distribution in the Equatorial Pacific Ocean near 150Â°W. Marine Chemistry, 1994, 45, 257-266.	0.9	32
51	A survey of methane isotope abundance (¹⁴C, ¹³C, ²H) from five nearshore marine basins that reveals unusual radiocarbon levels in subsurface waters. Journal of Geophysical Research, 2008, 113, .	3.3	32
52	Ocean chemistry, ocean warming, and emerging hypoxia: Commentary. Journal of Geophysical Research: Oceans, 2016, 121, 3659-3667.	1.0	30
53	Three-dimensional acoustic monitoring and modeling of a deep-sea CO2droplet cloud. Geophysical Research Letters, 2006, 33, .	1.5	29
54	Microstructure characteristics during hydrate formation and dissociation revealed by X-ray tomographic microscopy. Geo-Marine Letters, 2012, 32, 555-562.	0.5	29

#	Article	IF	Citations
55	Variation of CO2 partial pressure in surface seawater in the equatorial Pacific Ocean. Deep-Sea Research Part I: Oceanographic Research Papers, 1997, 44, 1611-1625.	0.6	25
56	Field Studies on the Formation of Sinking CO2Particles for Ocean Carbon Sequestration:Â Effects of Injector Geometry on Particle Density and Dissolution Rate and Model Simulation of Plume Behavior. Environmental Science & Technology, 2005, 39, 7287-7293.	4.6	25
57	Lipid geochemistry of remote aerosols from the southwestern Pacific Ocean sector. Atmospheric Environment, 2004, 38, 1615-1624.	1.9	24
58	Deep-Sea Field Test of the CH₄ Hydrate to CO₂ Hydrate Spontaneous Conversion Hypothesis. Energy & Fuels, 2014, 28, 7061-7069.	2.5	24
59	Sampling and quantitation of lipids in aerosols from the remote marine atmosphere. Analytica Chimica Acta, 1987, 198, 125-144.	2.6	21
60	Geochemistry of Chemical Weapon Breakdown Products on the Seafloor: 1,4-Thioxane in Seawater. Environmental Science & Technology, 2009, 43, 610-615.	4.6	19
61	Carbonate chemistry of an in-situ free-ocean CO2 enrichment experiment (antFOCE) in comparison to short term variation in Antarctic coastal waters. Scientific Reports, 2018, 8, 2816.	1.6	19
62	Evaluating microbial chemical choices: The ocean chemistry basis for the competition between use of O2 or NO3â˜ as an electron acceptor. Deep-Sea Research Part I: Oceanographic Research Papers, 2014, 87, 35-42.	0.6	18
63	Free Ocean CO2 Enrichment (FOCE) experiments: Scientific and technical recommendations for future in situ ocean acidification projects. Progress in Oceanography, 2019, 172, 89-107.	1.5	16
64	Low molecular weight Î±-hydroxy carboxylic and dicarboxylic acids in reducing marine sediments. Geochimica Et Cosmochimica Acta, 1981, 45, 1847-1854.	1.6	13
65	Evaluation of the atmospheric transport of marineâ€derived particles using longâ€chain unsaturated ketones. Journal of Geophysical Research, 1990, 95, 1789-1795.	3.3	12
66	Stereospecific Deaminations of SomeN-Alkylaziridines bym-Chloroperbenzoic Acid. Angewandte Chemie International Edition in English, 1970, 9, 374-374.	4.4	11
67	The coral proto - free ocean carbon enrichment system (CP-FOCE): Engineering and development. , 2010, , .		11
68	The speciation of water in sea water and in gelatinous marine animals. Marine Chemistry, 2017, 195, 94-104.	0.9	11
69	The Molecular Basis for the Heat Capacity and Thermal Expansion of Natural Waters. Geophysical Research Letters, 2019, 46, 13227-13233.	1.5	11
70	How Much H 2 O Is There in the Ocean? The Structure of Water in Sea Water. Journal of Geophysical Research: Oceans, 2019, 124, 212-226.	1.0	10
71	Molecular characteristics of water-soluble dicarboxylic acids, Ï‰-oxocarboxylic acids, pyruvic acid and Î±-dicarbonyls in the aerosols from the eastern North Pacific. Marine Chemistry, 2020, 224, 103812.	0.9	10
72	Ocean chemistry and the speed of sound in seawater. Marine Chemistry, 2015, 177, 591-606.	0.9	9

#	Article	IF	Citations
73	Kinetic bottlenecks to chemical exchange rates for deep-sea animals â€“ Part 2: Carbon Dioxide. Biogeosciences, 2013, 10, 2409-2425.	1.3	8
74	Development of improved space sampling strategies for ocean chemical properties: Total carbon dioxide and dissolved nitrate. Geophysical Research Letters, 1995, 22, 945-948.	1.5	6
75	First results from a controlled deep sea CO2perturbation experiment: Evidence for rapid equilibration of the oceanic CO2system at depth. Journal of Geophysical Research, 2005, 110, .	3.3	6
76	Design, construction, and operation of an actively controlled deep-sea CO 2 enrichment experiment using a cabled observatory system. Deep-Sea Research Part I: Oceanographic Research Papers, 2015, 97, 1-9.	0.6	6
77	Eel Canyon Slump Scar and Associated Fluid Venting. Advances in Natural and Technological Hazards Research, 2016, , 411-418.	1.1	6
78	Kinetic bottlenecks to respiratory exchange rates in the deep-sea â€“ Part 1: Oxygen. Biogeosciences, 2013, 10, 5049-5060.	1.3	5
79	Life at low Reynolds Number Re-visited: The apparent activation energy of viscous flow in sea water. Deep-Sea Research Part I: Oceanographic Research Papers, 2021, 176, 103592.	0.6	5
80	In Situ Ocean Acidification Environmental Observations: MBARI's Cabled Observatory Technology for Controlled Studies of Changing Ocean pH. , 2007, , .		2
81	Cabled instrument technologies for ocean acidification research — FOCE (free ocean) Tj ETQq1 1 0.784314 rgBT /Overlo		2
82	High-Resolution Topography-Following Chemical Mapping of Ocean Hypoxia by Use of an Autonomous Underwater Vehicle: The Santa Monica Basin Example. Journal of Atmospheric and Oceanic Technology, 2013, 30, 2630-2646.	0.5	2
83	Life at low Reynolds number Re-visited: The efficiency of microbial propulsion. Deep-Sea Research Part I: Oceanographic Research Papers, 2022, 185, 103790.	0.6	2
84	Lessons Learned while Optimizing Instrument Sensitivity for Deep Ocean Raman Spectroscopy. , 2006, , .		1
85	In situ Raman probe for quantitative observation of sediment pore waters in the Deep Ocean — Development and applications. , 2011, , .		1
86	Ocean abyssal carbon experiments at 0.7 and 4 KM depth. , 2005, , 801-808.		1
87	Direct Experiments on the Ocean Disposal of Fossil Fuel CO2. , 2001, , .		0