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	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
2	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
3	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
4	The Molecular Basis for the Heat Capacity and Thermal Expansion of Natural Waters. Geophysical Research Letters, 2019, 46, 13227-13233.	1.5	11
5	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
6	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
7	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
8	The speciation of water in sea water and in gelatinous marine animals. Marine Chemistry, 2017, 195, 94-104.	0.9	11
9	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
10	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
11	Ocean chemistry, ocean warming, and emerging hypoxia: Commentary. Journal of Geophysical Research: Oceans, 2016, 121, 3659-3667.	1.0	30
12	Eel Canyon Slump Scar and Associated Fluid Venting. Advances in Natural and Technological Hazards Research, 2016, , 411-418.	1.1	6
13	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
14	Ocean chemistry and the speed of sound in seawater. Marine Chemistry, 2015, 177, 591-606.	0.9	9
15	Free-ocean CO₂ enrichment (FOCE) systems: present status and future developments. Biogeosciences, 2014, 11, 4057-4075.	1.3	51
16	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
17	Deep-Sea Field Test of the CH₄ Hydrate to CO₂ Hydrate Spontaneous Conversion Hypothesis. Energy & Fuels, 2014, 28, 7061-7069.	2.5	24
18	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

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19	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
20	Kinetic bottlenecks to respiratory exchange rates in the deep-sea â€“ Part 1: Oxygen. Biogeosciences, 2013, 10, 5049-5060.	1.3	5
21	Kinetic bottlenecks to chemical exchange rates for deep-sea animals â€“ Part 2: Carbon Dioxide. Biogeosciences, 2013, 10, 2409-2425.	1.3	8
22	A Review of Advances in Deep-Ocean Raman Spectroscopy. Applied Spectroscopy, 2012, 66, 237-249.	1.2	54
23	Microstructure characteristics during hydrate formation and dissociation revealed by X-ray tomographic microscopy. Geo-Marine Letters, 2012, 32, 555-562.	0.5	29
24	In situ Raman probe for quantitative observation of sediment pore waters in the Deep Ocean — Development and applications. , 2011, , .		1
25	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
26	Hypoxia by degrees: Establishing definitions for a changing ocean. Deep-Sea Research Part I: Oceanographic Research Papers, 2011, 58, 1212-1226.	0.6	137
27	Cabled instrument technologies for ocean acidification research — FOCE (free ocean) Tj ETQq1 1 0.784314 rgBT /Overlo		2
28	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
29	The coral proto - free ocean carbon enrichment system (CP-FOCE): Engineering and development. , 2010, , .		11
30	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
31	Geochemistry of Chemical Weapon Breakdown Products on the Seafloor: 1,4-Thioxane in Seawater. Environmental Science & Technology, 2009, 43, 610-615.	4.6	19
32	Limits to Marine Life. Science, 2009, 324, 347-348.	6.0	171
33	Unanticipated consequences of ocean acidification: A noisier ocean at lower pH. Geophysical Research Letters, 2008, 35, .	1.5	76
34	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
35	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
36	Gas hydrate measurements at Hydrate Ridge using Raman spectroscopy. Geochimica Et Cosmochimica Acta, 2007, 71, 2947-2959.	1.6	122

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37	In Situ Ocean Acidification Environmental Observations: MBARI's Cabled Observatory Technology for Controlled Studies of Changing Ocean pH. , 2007, , .		2
38	In situ Raman analyses of deep-sea hydrothermal and cold seep systems (Gorda Ridge and Hydrate) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.0	55
39	Three-dimensional acoustic monitoring and modeling of a deep-sea CO2droplet cloud. Geophysical Research Letters, 2006, 33, .	1.5	29
40	Raman spectroscopic measurements of synthetic gas hydrates in the ocean. Marine Chemistry, 2006, 98, 304-314.	0.9	68
41	Lessons Learned while Optimizing Instrument Sensitivity for Deep Ocean Raman Spectroscopy. , 2006, , .		1
42	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
43	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
44	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
45	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
46	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
47	Ocean abyssal carbon experiments at 0.7 and 4 KM depth. , 2005, , 801-808.		1
48	Lipid geochemistry of remote aerosols from the southwestern Pacific Ocean sector. Atmospheric Environment, 2004, 38, 1615-1624.	1.9	24
49	Effects of Direct Ocean CO2 Injection on Deep-Sea Meiofauna. Journal of Oceanography, 2004, 60, 759-766.	0.7	96
50	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
51	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
52	Raman Spectroscopy in the Deep Ocean: Successes and Challenges. Applied Spectroscopy, 2004, 58, 195A-208A.	1.2	73
53	Seafloor nuclear magnetic resonance assay of methane hydrate in sediment and rock. Journal of Geophysical Research, 2003, 108, .	3.3	61
54	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

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55	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
56	Experimental Determination of the Fate of Rising CO2Droplets in Seawater. Environmental Science & Technology, 2002, 36, 5441-5446.	4.6	74
57	Enhanced lifetime of methane bubble streams within the deep ocean. Geophysical Research Letters, 2002, 29, 21-1-21-4.	1.5	170
58	Final dissolved organic carbon broad community intercalibration and preliminary use of DOC reference materials. Marine Chemistry, 2002, 77, 239-253.	0.9	140
59	Direct Experiments on the Ocean Disposal of Fossil Fuel CO2. , 2001, , .		0
60	A field study of the effects of CO2 ocean disposal on mobile deep-sea animals. Marine Chemistry, 2000, 72, 95-101.	0.9	80
61	Experiments on the ocean sequestration of fossil fuel CO2: pH measurements and hydrate formation. Marine Chemistry, 2000, 72, 83-93.	0.9	58
62	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
63	Direct Experiments on the Ocean Disposal of Fossil Fuel CO2. Science, 1999, 284, 943-945.	6.0	329
64	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
65	A timescale for dissolved organic carbon production in equatorial Pacific surface waters. Global Biogeochemical Cycles, 1997, 11, 435-452.	1.9	49
66	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
67	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
68	Dissolved organic carbon on Georges Bank. Continental Shelf Research, 1996, 16, 409-420.	0.9	46
69	A comparison of methods for the measurement of dissolved organic carbon in natural waters. Marine Chemistry, 1996, 54, 85-96.	0.9	60
70	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
71	Analyses of dissolved organic carbon in seawater: the JGOFS EqPac methods comparison. Marine Chemistry, 1995, 48, 91-108.	0.9	157
72	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

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73	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
74	Some practical aspects of measuring DOC â€” sampling artifacts and analytical problems with marine samples. Marine Chemistry, 1993, 41, 243-252.	0.9	79
75	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
76	Sampling and quantitation of lipids in aerosols from the remote marine atmosphere. Analytica Chimica Acta, 1987, 198, 125-144.	2.6	21
77	Long-range transport of terrestrially derived lipids in aerosols from the south Pacific. Nature, 1987, 325, 800-803.	13.7	132
78	The importance of atmospheric input of terrestrial organic material to deep sea sediments. Organic Geochemistry, 1986, 10, 661-669.	0.9	207
79	Airâ€toâ€sea fluxes of lipids at Enewetak Atoll. Journal of Geophysical Research, 1985, 90, 2409-2423.	3.3	90
80	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
81	Lipids in aerosols from the tropical North Pacific: Temporal variability. Journal of Geophysical Research, 1982, 87, 11133-11144.	3.3	125
82	Low molecular weight Î±-hydroxy carboxylic and dicarboxylic acids in reducing marine sediments. Geochimica Et Cosmochimica Acta, 1981, 45, 1847-1854.	1.6	13
83	Atmospheric transport of continentally derived lipids to the tropical North Pacific. Nature, 1981, 291, 312-314.	13.7	217
84	Formaldehyde in remote marine air and rain: Flux measurements and estimates. Geophysical Research Letters, 1980, 7, 341-344.	1.5	77
85	Î±-Hydroxycarboxylic acids in the Murchison meteorite. Nature, 1978, 272, 443-444.	13.7	150
86	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
87	Stereospecific Deaminations of SomeN-Alkylaziridines bym-Chloroperbenzoic Acid. Angewandte Chemie International Edition in English, 1970, 9, 374-374.	4.4	11