John D Kessler

List of Publications by Year
in descending order

50 papers	3,378 citations	249298 26 h-index	206121 51 g-index
55 all docs	55 docs citations	55 times ranked	4536 citing authors

#	Article	IF	Citations
1	Estimating the Impact of Seep Methane Oxidation on Ocean pH and Dissolved Inorganic Radiocarbon Along the U.S. Midâ€Atlantic Bight. Journal of Geophysical Research G: Biogeosciences, 2021, 126, .	1.3	13
2	Elevated levels of radiocarbon in methane dissolved in seawater reveal likely local contamination from nuclear powered vessels. Science of the Total Environment, 2021, 806, 150456.	3.9	1
3	Radiocarbon in Marine Methane Reveals Patchy Impact of Seeps on Surface Waters. Geophysical Research Letters, 2020, 47, e2020GL089516.	1.5	6
4	Dynamics of Gas Bubbles From a Submarine Hydrocarbon Seep Within the Hydrate Stability Zone. Geophysical Research Letters, 2020, 47, e2020GL089256.	1.5	17
5	Surface Methane Concentrations Along the Midâ€Atlantic Bight Driven by Aerobic Subsurface Production Rather Than Seafloor Gas Seeps. Journal of Geophysical Research: Oceans, 2020, 125, e2019JC015989.	1.0	9
6	Ideas and perspectives: A strategic assessment of methane and nitrous oxide measurements in the marine environment. Biogeosciences, 2020, 17, 5809-5828.	1.3	16
7	Methane Sources in the Waters of Lake Michigan and Lake Superior as Revealed by Natural Radiocarbon Measurements. Geophysical Research Letters, 2019, 46, 5436-5444.	1.5	10
8	Investigations of Aerobic Methane Oxidation in Two Marine Seep Environments: Part 1â€”Chemical Kinetics. Journal of Geophysical Research: Oceans, 2019, 124, 8852-8868.	1.0	11
9	Investigations of Aerobic Methane Oxidation in Two Marine Seep Environments: Part 2â€”Isotopic Kinetics. Journal of Geophysical Research: Oceans, 2019, 124, 8392-8399.	1.0	4
10	Limited contribution of ancient methane to surface waters of the U.S. Beaufort Sea shelf. Science Advances, 2018, 4, eaao4842.	4.7	43
11	Using Carbon Isotope Fractionation to Constrain the Extent of Methane Dissolution Into the Water Column Surrounding a Natural Hydrocarbon Gas Seep in the Northern Gulf of Mexico. Geochemistry, Geophysics, Geosystems, 2018, 19, 4459-4475.	1.0	24
12	Comment on â€œThe origin of methane in the East Siberian Arctic Shelf unraveled with triple isotope analysisâ€•by Sapart et al. (2017). Biogeosciences, 2018, 15, 4777-4779.	1.3	2
13	Limited Acute Influence of Aerobic Methane Oxidation on Ocean Carbon Dioxide and pH in Hudson Canyon, Northern U.S. Atlantic Margin. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 2135-2144.	1.3	13
14	Rapid rates of aerobic methane oxidation at the feather edge of gas hydrate stability in the waters of Hudson Canyon, US Atlantic Margin. Geochimica Et Cosmochimica Acta, 2017, 204, 375-387.	1.6	43
15	Efficient collection and preparation of methane from low concentration waters for natural abundance radiocarbon analysis. Limnology and Oceanography: Methods, 2017, 15, 601-617.	1.0	12
16	The interaction of climate change and methane hydrates. Reviews of Geophysics, 2017, 55, 126-168.	9.0	560
17	Light rare earth element depletion during Deepwater Horizon blowout methanotrophy. Scientific Reports, 2017, 7, 10389.	1.6	75
18	Methane transport through submarine groundwater discharge to the <scp>N</scp>orth <scp>P</scp>acific and <scp>A</scp>rctic Ocean at two <scp>A</scp>laskan sites. Limnology and Oceanography, 2016, 61, S344.	1.6	43

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19	Methane occurrence is associated with sodiumâ€rich valley waters in domestic wells overlying the <scp>M</scp>arcellus shale in <scp>N</scp>ew <scp>Y</scp>ork <scp>S</scp>tate. Water Resources Research, 2016, 52, 206-226.	1.7	22
20	Determining the flux of methane into <scp>H</scp>udson <scp>C</scp>anyon at the edge of methane clathrate hydrate stability. Geochemistry, Geophysics, Geosystems, 2016, 17, 3882-3892.	1.0	19
21	Dissolved methane and carbon dioxide fluxes in Subarctic and Arctic regions: Assessing measurement techniques and spatial gradients. Earth and Planetary Science Letters, 2016, 436, 43-55.	1.8	23
22	Aqueous Mesocosm Techniques Enabling the Real-Time Measurement of the Chemical and Isotopic Kinetics of Dissolved Methane and Carbon Dioxide. Environmental Science & Technology, 2016, 50, 3039-3046.	4.6	6
23	A rapid method for preparing low volume CH 4 and CO 2 gas samples for 14 C AMS analysis. Organic Geochemistry, 2015, 78, 89-98.	0.9	28
24	Methane transport from the active layer to lakes in the Arctic using Toolik Lake, Alaska, as a case study. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3636-3640.	3.3	55
25	Current Magnitude and Mechanisms of Groundwater Discharge in the Arctic: Case Study from Alaska. Environmental Science & Technology, 2015, 49, 12036-12043.	4.6	34
26	Atlantic bubble bath. Nature Geoscience, 2014, 7, 625-626.	5.4	9
27	High Resolution Measurements of Methane and Carbon Dioxide in Surface Waters over a Natural Seep Reveal Dynamics of Dissolved Phase Airâ€“Sea Flux. Environmental Science & Technology, 2014, 48, 10165-10173.	4.6	15
28	Using Discriminant Analysis to Determine Sources of Salinity in Shallow Groundwater Prior to Hydraulic Fracturing. Environmental Science & Technology, 2014, 48, 9061-9069.	4.6	40
29	Reponses of the dinoflagellate Karenia brevis to climate change: pCO2 and sea surface temperatures. Harmful Algae, 2014, 37, 110-116.	2.2	54
30	Measurement of the ¹³C/¹²C of Atmospheric CH₄ Using Near-Infrared (NIR) Cavity Ring-Down Spectroscopy. Analytical Chemistry, 2013, 85, 11250-11257.	3.2	28
31	Chemical data quantify Deepwater Horizon hydrocarbon flow rate and environmental distribution. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20246-20253.	3.3	258
32	Methane fluxes to the atmosphere from deepwater hydrocarbon seeps in the northern Gulf of Mexico. Journal of Geophysical Research, 2012, 117, .	3.3	30
33	Assessment of the Spatial and Temporal Variability of Bulk Hydrocarbon Respiration Following the Deepwater Horizon Oil Spill. Environmental Science & Technology, 2012, 46, 10499-10507.	4.6	57
34	A Persistent Oxygen Anomaly Reveals the Fate of Spilled Methane in the Deep Gulf of Mexico. Science, 2011, 331, 312-315.	6.0	420
35	Methane flux to the atmosphere from the Deepwater Horizon oil disaster. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	50
36	Methane sources and sinks in Lake Kivu. Journal of Geophysical Research, 2011, 116, .	3.3	96

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37	The methane cycle in ferruginous Lake Matano. Geobiology, 2011, 9, 61-78.	1.1	159
38	Response to Comment on â€œA Persistent Oxygen Anomaly Reveals the Fate of Spilled Methane in the Deep Gulf of Mexicoâ€. Science, 2011, 332, 1033-1033.	6.0	14
39	Propane Respiration Jump-Starts Microbial Response to a Deep Oil Spill. Science, 2010, 330, 208-211.	6.0	444
40	Molecular and isotopic partitioning of low-molecular-weight hydrocarbons during migration and gas hydrate precipitation in deposits of a high-flux seepage site. Chemical Geology, 2010, 269, 350-363.	1.4	102
41	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
42	Controls on methane concentration and stable isotope (Î´2H-CH4andÎ´13C-CH4) distributions in the water columns of the Black Sea and Cariaco Basin. Global Biogeochemical Cycles, 2006, 20, n/a-n/a.	1.9	41
43	Basin-wide estimates of the input of methane from seeps and clathrates to the Black Sea. Earth and Planetary Science Letters, 2006, 243, 366-375.	1.8	80
44	Martian CH4: Sources, Flux, and Detection. Astrobiology, 2006, 6, 377-395.	1.5	89
45	On the isolation of elemental carbon (EC) for micro-molar ¹⁴C accelerator mass spectrometry: development of a hybrid reference material for ¹⁴C-EC accuracy assurance, and a critical evaluation of the thermal optical kinetic (TOK) EC isolation procedure. Atmospheric Chemistry and Physics, 2005, 5, 2833-2845.	1.9	13
46	Long range transport of biomass aerosol to Greenland: Multi-spectroscopic investigation of particles deposited in the snow. Journal of Radioanalytical and Nuclear Chemistry, 2005, 263, 399-411.	0.7	7
47	Preparation of natural methane samples for stable isotope and radiocarbon analysis. Limnology and Oceanography: Methods, 2005, 3, 408-418.	1.0	28
48	Fossil methane source dominates Cariaco Basin water column methane geochemistry. Geophysical Research Letters, 2005, 32, n/a-n/a.	1.5	41
49	A critical evaluation of interlaboratory data on total, elemental, and isotopic carbon in the carbonaceous particle reference material, NIST SRM 1649a. Journal of Research of the National Institute of Standards and Technology, 2002, 107, 279.	0.4	163
50	Low-level (submicromole) environmental 14C metrology. Nuclear Instruments & Methods in Physics Research B, 2000, 172, 440-448.	0.6	17