Dave Lowry

List of Publications by Year
in descending order

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112 papers	7,495 citations	66343 42 h-index	54911 84 g-index
146 all docs	146 docs citations	146 times ranked	7652 citing authors

#	Article	IF	Citations
1	Natural organic matter in sedimentary basins and its relation to arsenic in anoxic ground water: the example of West Bengal and its worldwide implications. Applied Geochemistry, 2004, 19, 1255-1293.	3.0	721
2	Oxygen isotope composition of mantle peridotite. Earth and Planetary Science Letters, 1994, 128, 231-241.	4.4	591
3	Global atmospheric methane: budget, changes and dangers. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 2058-2072.	3.4	510
4	Arsenic and other drinking water quality issues, Muzaffargarh District, Pakistan. Applied Geochemistry, 2005, 20, 55-68.	3.0	378
5	Very Strong Atmospheric Methane Growth in the 4ÂYears 2014â€“2017: Implications for the Paris Agreement. Global Biogeochemical Cycles, 2019, 33, 318-342.	4.9	353
6	Rising atmospheric methane: 2007â€“2014 growth and isotopic shift. Global Biogeochemical Cycles, 2016, 30, 1356-1370.	4.9	317
7	A 53Âyear seasonally resolved oxygen and carbon isotope record from a modern Gibraltar speleothem: Reconstructed drip water and relationship to local precipitation. Earth and Planetary Science Letters, 2008, 269, 80-95.	4.4	220
8	Diamondiferous eclogites from Siberia: Remnants of Archean oceanic crust. Geochimica Et Cosmochimica Acta, 1994, 58, 5191-5207.	3.9	198
9	Methane Mitigation: Methods to Reduce Emissions, on the Path to the Paris Agreement. Reviews of Geophysics, 2020, 58, e2019RG000675.	23.0	163
10	Emission of methane from plants. Proceedings of the Royal Society B: Biological Sciences, 2009, 276, 1347-1354.	2.6	149
11	Evidence for distinct proportions of subducted oceanic crust and lithosphere in HIMU-type mantle beneath El Hierro and La Palma, Canary Islands. Geochimica Et Cosmochimica Acta, 2010, 74, 6565-6589.	3.9	146
12	Oxygen isotopic composition of hydrous and anhydrous mantle peridotites. Geochimica Et Cosmochimica Acta, 1997, 61, 161-169.	3.9	123
13	Arctic methane sources: Isotopic evidence for atmospheric inputs. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	119
14	Pyroxenite-rich mantle formed by recycled oceanic lithosphere: Oxygen-osmium isotope evidence from Canary Island lavas. Geology, 2009, 37, 555-558.	4.4	116
15	Sulfur Isotope Analysis of Sulfide and Sulfate Minerals by Continuous Flow-Isotope Ratio Mass Spectrometry. Analytical Chemistry, 2001, 73, 220-225.	6.5	110
16	Crustal Assimilation as a Major Petrogenetic Process in the East Carpathian Neogene and Quaternary Continental Margin Arc, Romania. Journal of Petrology, 1996, 37, 927-959.	2.8	106
17	High-precision, automated stable isotope analysis of atmospheric methane and carbon dioxide using continuous-flow isotope-ratio mass spectrometry. Rapid Communications in Mass Spectrometry, 2006, 20, 200-208.	1.5	102
18	Constraining Fluid and Sediment Contributions to Subduction-Related Magmatism in Indonesia: Ijen Volcanic Complex. Journal of Petrology, 2007, 48, 1155-1183.	2.8	97

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19	Geochemical zonation of the Miocene AlborÃ¡n Basin volcanism (westernmost Mediterranean): geodynamic implications. Contributions To Mineralogy and Petrology, 2008, 156, 577-593.	3.1	95
20	Top-down estimates of European CH₄ and N₂O emissions based on four different inverse models. Atmospheric Chemistry and Physics, 2015, 15, 715-736.	4.9	92
21	London methane emissions: Use of diurnal changes in concentration and Î´13C to identify urban sources and verify inventories. Journal of Geophysical Research, 2001, 106, 7427-7448.	3.3	90
22	Antiquity of the biological sulphur cycle: evidence from sulphur and carbon isotopes in 2700 millionâ€“yearâ€“old rocks of the Belingwe Belt, Zimbabwe. Proceedings of the Royal Society B: Biological Sciences, 2001, 268, 113-119.	2.6	83
23	Methane emissions in East Asia for 2000â€“2011 estimated using an atmospheric Bayesian inversion. Journal of Geophysical Research D: Atmospheres, 2015, 120, 4352-4369.	3.3	82
24	Contrasting types of metasomatism in dunite, wehrlite and websterite xenoliths from Kimberley, South Africa. Geochimica Et Cosmochimica Acta, 2008, 72, 5722-5756.	3.9	78
25	High-3He/4He, depleted mantle and low-Î´18O, recycled oceanic lithosphere in the source of central Iceland magmatism. Earth and Planetary Science Letters, 2005, 233, 411-427.	4.4	77
26	In situ observations of the isotopic composition of methane at the Cabauw tall tower site. Atmospheric Chemistry and Physics, 2016, 16, 10469-10487.	4.9	77
27	Oxygen isotope systematics of the Banda Arc: low Î´18O despite involvement of subducted continental material in magma genesis. Geochimica Et Cosmochimica Acta, 2001, 65, 589-609.	3.9	74
28	Extensive release of methane from Arctic seabed west of Svalbard during summer 2014 does not influence the atmosphere. Geophysical Research Letters, 2016, 43, 4624-4631.	4.0	74
29	Low Î´18O in the Icelandic mantle and its origins: Evidence from Reykjanes Ridge and Icelandic lavas. Geochimica Et Cosmochimica Acta, 2006, 70, 993-1019.	3.9	73
30	Development of a cavity-enhanced absorption spectrometer for airborne measurements of CH₄ and CO₂. Atmospheric Measurement Techniques, 2013, 6, 1095-1109.	3.1	70
31	Atmospheric constraints on the methane emissions from the East Siberian Shelf. Atmospheric Chemistry and Physics, 2016, 16, 4147-4157.	4.9	69
32	Crustal Processes: Major Controls on Reykjanes Peninsula Lava Chemistry, SW Iceland. Journal of Petrology, 1998, 39, 819-839.	2.8	64
33	Plume mapping and isotopic characterisation of anthropogenic methane sources. Atmospheric Environment, 2015, 110, 151-162.	4.1	62
34	Recent fluid processes in the Kaapvaal Craton, South Africa: coupled oxygen isotope and trace element disequilibrium in polymict peridotites. Earth and Planetary Science Letters, 2000, 176, 57-72.	4.4	59
35	Fluxes and fate of dissolved methane released at the seafloor at the landward limit of the gas hydrate stability zone offshore western Svalbard. Journal of Geophysical Research: Oceans, 2015, 120, 6185-6201.	2.6	57
36	Measurement of the ¹³C isotopic signature of methane emissions from northern European wetlands. Global Biogeochemical Cycles, 2017, 31, 605-623.	4.9	52

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37	Quantification of methane emissions from UK biogas plants. Waste Management, 2021, 124, 82-93.	7.4	51
38	Oxygen isotope composition of syngenetic inclusions in diamond from the Finsch Mine, RSA. Geochimica Et Cosmochimica Acta, 1999, 63, 1825-1836.	3.9	50
39	Petrogenesis of the Eocene Tamazert Continental Carbonatites (Central High Atlas, Morocco): Implications for a Common Source for the Tamazert and Canary and Cape Verde Island Carbonatites. Journal of Petrology, 2010, 51, 1655-1686.	2.8	50
40	The nature of the lithospheric mantle near the Tancheng-Lujiang fault, China: an integration of texture, chemistry and O-isotopes. Chemical Geology, 1996, 134, 67-81.	3.3	45
41	Carbon isotopic signature of coal-derived methane emissions to the atmosphere: from coalification to alteration. Atmospheric Chemistry and Physics, 2016, 16, 13669-13680.	4.9	45
42	Evaluating methane inventories by isotopic analysis in the London region. Scientific Reports, 2017, 7, 4854.	3.3	44
43	THE PROVENANCE AND TECHNOLOGY OF NEAR EASTERN GLASS: OXYGEN ISOTOPES BY LASER FLUORINATION AS A COMPLEMENT TO STRONTIUM*. Archaeometry, 2006, 48, 253-270.	1.3	43
44	First continuous measurements of CO2 mixing ratio in central London using a compact diffusion probe. Atmospheric Environment, 2008, 42, 8943-8953.	4.1	43
45	Real-time analysis of <i>Î´</i>¹³C- and <i>Î´</i>D-CH₄ in ambient air with laser spectroscopy: method development and first intercomparison results. Atmospheric Measurement Techniques, 2016, 9, 263-280.	3.1	43
46	Methane emissions from oil and gas platforms in the North Sea. Atmospheric Chemistry and Physics, 2019, 19, 9787-9796.	4.9	42
47	Quantification of Non-Exhaust Particulate Matter Traffic Emissions and the Impact of COVID-19 Lockdown at London Marylebone Road. Atmosphere, 2021, 12, 190.	2.3	42
48	Eclogites and garnet pyroxenites: Similarities and differences. Journal of Volcanology and Geothermal Research, 2010, 190, 235-247.	2.1	40
49	Methane in underground air in Gibraltar karst. Earth and Planetary Science Letters, 2013, 374, 71-80.	4.4	39
50	Methane and carbon dioxide fluxes and their regional scalability for the European Arctic wetlands during the MAMM project in summer 2012. Atmospheric Chemistry and Physics, 2014, 14, 13159-13174.	4.9	39
51	Isotopic Ratios of Tropical Methane Emissions by Atmospheric Measurement. Global Biogeochemical Cycles, 2017, 31, 1408-1419.	4.9	35
52	A global coupled Eulerian-Lagrangian model and 1 Ã— 1 km CO₂ surface flux dataset for high-resolution atmospheric CO₂ transport simulations. Geoscientific Model Development, 2012, 5, 231-243.	3.6	34
53	Using <i>Î´</i>¹³C-CH₄ and <i>Î´</i>D-CH₄ to constrain Arctic methane emissions. Atmospheric Chemistry and Physics, 2016, 16, 14891-14908.	4.9	34
54	Can diamonds be dead bacteria?. Nature, 1994, 367, 694-694.	27.8	32

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55	Environmental baseline monitoring for shale gas development in the UK: Identification and geochemical characterisation of local source emissions of methane to atmosphere. Science of the Total Environment, 2020, 708, 134600.	8.0	32
56	Stable carbon isotope signatures of methane from a Finnish subarctic wetland. Tellus, Series B: Chemical and Physical Meteorology, 2022, 64, 18818.	1.6	31
57	Diurnal, seasonal, and annual trends in atmospheric CO2 at southwest London during 2000â€“2012: Wind sector analysis and comparison with Mace Head, Ireland. Atmospheric Environment, 2015, 105, 138-147.	4.1	31
58	Interlaboratory comparison of <i>Î´</i>¹³C and <i>Î´</i>D measurements of atmospheric CH₄ for combined use of data sets from different laboratories. Atmospheric Measurement Techniques, 2018, 11, 1207-1231.	3.1	31
59	A new estimation of the recent tropospheric molecular hydrogen budget using atmospheric observations and variational inversion. Atmospheric Chemistry and Physics, 2011, 11, 3375-3392.	4.9	29
60	Atmospheric Sampling on Ascension Island Using Multirotor UAVs. Sensors, 2017, 17, 1189.	3.8	29
61	Estimating the size of a methane emission point source at different scales: from local to landscape. Atmospheric Chemistry and Physics, 2017, 17, 7839-7851.	4.9	27
62	Reassessing the variability in atmospheric H₂ using the twoâ€way nested TM5 model. Journal of Geophysical Research D: Atmospheres, 2013, 118, 3764-3780.	3.3	26
63	Assessing Connectivity Between an Overlying Aquifer and a Coal Seam Gas Resource Using Methane Isotopes, Dissolved Organic Carbon and Tritium. Scientific Reports, 2015, 5, 15996.	3.3	26
64	Evaluation of the boundary layer dynamics of the TM5 model over Europe. Geoscientific Model Development, 2016, 9, 3137-3160.	3.6	25
65	Atmospheric composition in the European Arctic and 30Âyears of the Zeppelin Observatory, Ny-Ã…lesund. Atmospheric Chemistry and Physics, 2022, 22, 3321-3369.	4.9	24
66	Oxygen isotopes of an Early Archaean layered ultramafic body, southern West Greenland: implications for magma source and post-intrusion history. Precambrian Research, 2003, 126, 273-288.	2.7	23
67	Methane emissions from contrasting production regions within Alberta, Canada: Implications under incoming federal methane regulations. Elementa, 2019, 7, .	3.2	23
68	Quantification and assessment of methane emissions from offshore oil and gas facilities on the Norwegian continental shelf. Atmospheric Chemistry and Physics, 2022, 22, 4303-4322.	4.9	23
69	Stable isotopes in the Archaean Belingwe belt, Zimbabwe: evidence for a diverse microbial mat ecology. Geological Society Special Publication, 2002, 199, 309-328.	1.3	22
70	Petroleum Migration, Fluid Mixing, and Halokinesis as the Main Ore-Forming Processes at the Peridiapiric Jbel Tirremi Fluorite-Barite Hydrothermal Deposit, Northeastern Morocco. Economic Geology, 2014, 109, 1223-1256.	3.8	22
71	Measurements of Î´¹³C in CH₄ and using particle dispersion modeling to characterize sources of Arctic methane within an air mass. Journal of Geophysical Research D: Atmospheres, 2016, 121, 14257-14270.	3.3	22
72	A cautionary tale: A study of a methane enhancement over the North Sea. Journal of Geophysical Research D: Atmospheres, 2017, 122, 7630-7645.	3.3	22

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73	Comment on 'The Origins of Yakutian Eclogite Xenoliths' by G. A. Snyder,L. A. Taylor, G. Crozaz, A. N. Halliday, B. L. Beard, V. N. Sobolev and N. V. Sobolev. Journal of Petrology, 1998, 39, 1527-1533.	2.8	21
74	Facility level measurement of offshore oil and gas installations from a medium-sized airborne platform: method development for quantification and source identification of methane emissions. Atmospheric Measurement Techniques, 2021, 14, 71-88.	3.1	21
75	Distinguishing the diets of coexisting fossil theridomyid and glirid rodents using carbon isotopes. Palaeogeography, Palaeoclimatology, Palaeoecology, 2004, 208, 103-119.	2.3	19
76	Early life signatures in sulfur and carbon isotopes from Isua, Barberton, Wabigoon (Steep Rock), and Belingwe Greenstone Belts (3.8 to 2.7 Ga). , 2006, , .		19
77	Methane at Svalbard and over the European Arctic Ocean. Atmospheric Chemistry and Physics, 2018, 18, 17207-17224.	4.9	19
78	Early basic magmatism in the evolution of the northern marginal zone of the archean limpopo belt. Precambrian Research, 1992, 55, 33-45.	2.7	18
79	The dispersion of the Buncefield oil fire plume: An extreme accident without air quality consequences. Atmospheric Environment, 2007, 41, 9506-9517.	4.1	17
80	Anthropogenic methane plume detection from point sources in the Paris megacity area and characterization of their Î´13C signature. Atmospheric Environment, 2020, 222, 117055.	4.1	17
81	Atmospheric methane and nitrous oxide: challenges alongthe path to Net Zero. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200457.	3.4	16
82	Methane mole fraction and Î´¹³C above and below the trade wind inversion at Ascension Island in air sampled by aerial robotics. Geophysical Research Letters, 2016, 43, 11,893.	4.0	14
83	Isotopic signatures of major methane sources in the coal seam gas fields and adjacent agricultural districts, Queensland, Australia. Atmospheric Chemistry and Physics, 2021, 21, 10527-10555.	4.9	14
84	Large Methane Emission Fluxes Observed From Tropical Wetlands in Zambia. Global Biogeochemical Cycles, 2022, 36, .	4.9	14
85	Methane emissions in Kuwait: Plume identification, isotopic characterisation and inventory verification. Atmospheric Environment, 2022, 268, 118763.	4.1	13
86	Oxygen isotope heterogeneity of the mantle beneath the Canary Islands: a discussion of the paper of Gurenko et al.. Contributions To Mineralogy and Petrology, 2012, 164, 177-183.	3.1	12
87	A baseline of atmospheric greenhouse gases for prospective UK shale gas sites. Science of the Total Environment, 2019, 684, 1-13.	8.0	12
88	A sulphur isotopic investigation of the potential sulphur sources for Lower Palaeozoic-hosted vein mineralization in the English Lake District. Journal of the Geological Society, 1991, 148, 993-1004.	2.1	12
89	Marked long-term decline in ambient CO mixing ratio in SE England, 1997â€“2014: evidence of policy success in improving air quality. Scientific Reports, 2016, 6, 25661.	3.3	11
90	Flow rate and source reservoir identification from airborne chemical sampling of the uncontrolled Elgin platform gas release. Atmospheric Measurement Techniques, 2018, 11, 1725-1739.	3.1	11

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91	Carbon isotopic characterisation and oxidation of UK landfill methane emissions by atmospheric measurements. Waste Management, 2021, 132, 162-175.	7.4	11
92	Terrane and basement discrimination in northern Britain using sulphur isotopes and mineralogy of ore deposits. Geological Society Special Publication, 2005, 248, 133-151.	1.3	10
93	Is the destruction or removal of atmospheric methane a worthwhile option?. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2022, 380, 20210108.	3.4	10
94	Street-level methane emissions of Bucharest, Romania and the dominance of urban wastewater.. Atmospheric Environment: X, 2022, 13, 100153.	1.4	8
95	Î´ ¹³ C methane source signatures from tropical wetland and rice field emissions. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2022, 380, 20200449.	3.4	8
96	Testing for ocean acidification during the Early Toarcian using Î´44/40Ca and Î´88/86Sr. Chemical Geology, 2021, 574, 120228.	3.3	7
97	Stable isotopic signatures of methane from waste sources through atmospheric measurements. Atmospheric Environment, 2022, 276, 119021.	4.1	7
98	Genesis of porphyry and plutonic mineralisation systems in metaluminous granitoids of the Grampian Terrane, Scotland. Transactions of the Royal Society of Edinburgh: Earth Sciences, 1994, 85, 221-237.	0.7	6
99	Methane flux from flowback operations at a shale gas site. Journal of the Air and Waste Management Association, 2020, 70, 1324-1339.	1.9	6
100	Boreas: A Sample Preparation-Coupled Laser Spectrometer System for Simultaneous High-Precision In Situ Analysis of Î´¹³C and Î´²H from Ambient Air Methane. Analytical Chemistry, 2021, 93, 10141-10151.	6.5	6
101	Evidence for Stable Isotope and Chemical Disequilibrium Associated with Diamond Formation in the Mantle. Mineralogical Magazine, 1994, 58A, 535-536.	1.4	6
102	Isotopic signatures of methane emissions from tropical fires, agriculture and wetlands: the MOYA and ZWAMPS flights. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2022, 380, 20210112.	3.4	6
103	Identification of Potential Methane Source Regions in Europe Using Î´ 13 C CH4 Measurements and Trajectory Modeling. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033963.	3.3	5
104	Bismuth sulphosalts within quartz veining hosted by the Loch Shin monzogranite, Scotland. Mineralogical Magazine, 1994, 58, 39-47.	1.4	5
105	Are the Fenno-Scandinavian Arctic Wetlands a Significant Regional Source of Formic Acid?. Atmosphere, 2017, 8, 112.	2.3	4
106	The Use of a High-Resolution Emission Data Set in a Global Eulerian-Lagrangian Coupled Model. Geophysical Monograph Series, 2013, , 173-184.	0.1	3
107	Diurnal, seasonal, and annual trends in tropospheric CO in Southwest London during 2000â€“2015: Wind sector analysis and comparisons with urban and remote sites. Atmospheric Environment, 2018, 177, 262-274.	4.1	3
108	The Roc Blanc orogenic Pb-Zn-Ag-Au deposit (Morocco): a product of metamorphic dehydration and CO2 devolatilization during exhumation of the Variscan Jebilet massif. Mineralium Deposita, 2019, 54, 437-458.	4.1	3

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109	Observations of molecular hydrogen mixing ratio and stable isotopic composition at the Cabauw tall tower in the Netherlands. Atmospheric Environment, 2016, 147, 98-108.	4.1	2
110	First occurrences of matildite (AgBiS2) associated with Caledonian intrusives in Scotland. Mineralogical Magazine, 1993, 57, 751-754.	1.4	2
111	Î´18O of Igneous Chromites: An Indicator of Syn- and Post-Magmatic Hydrothermal Interaction. Mineralogical Magazine, 1998, 62A, 911-912.	1.4	1
112	Use of Isotopes. Advances in Global Change Research, 2004, , 361-426.	1.6	0