David C Carslaw

List of Publications by Year
in descending order

71 papers	5,689 citations	101384 36 h-index	98622 67 g-index
76 all docs	76 docs citations	76 times ranked	6025 citing authors

#	Article	IF	Citations
1	Can accurate distance-specific emissions of nitrogen oxide emissions from cars be determined using remote sensing without measuring exhaust flowrate?. Science of the Total Environment, 2022, 816, 151500.	3.9	1
2	Gasoline and diesel passenger car emissions deterioration using on-road emission measurements and measured mileage. Atmospheric Environment: X, 2022, 14, 100162.	0.8	2
3	COVID-19 lockdowns highlight a risk of increasing ozone pollution in European urban areas. Atmospheric Chemistry and Physics, 2021, 21, 4169-4185.	1.9	91
4	Verification of a National Emission Inventory and Influence of On-road Vehicle Manufacturer-Level Emissions. Environmental Science & Technology, 2021, 55, 4452-4461.	4.6	24
5	Application of a mobile laboratory using a selected-ion flow-tube mass spectrometer (SIFT-MS) for characterisation of volatile organic compounds and atmospheric trace gases. Atmospheric Measurement Techniques, 2021, 14, 6083-6100.	1.2	16
6	Characterisation of ammonia emissions from gasoline and gasoline hybrid passenger cars. Atmospheric Environment: X, 2021, 11, 100117.	0.8	6
7	Meteorological Normalisation Using Boosted Regression Trees to Estimate the Impact of COVID-19 Restrictions on Air Quality Levels. International Journal of Environmental Research and Public Health, 2021, 18, 13347.	1.2	5
8	Underestimated Ammonia Emissions from Road Vehicles. Environmental Science & Technology, 2020, 54, 15689-15697.	4.6	62
9	An increasing role for solvent emissions and implications for future measurements of volatile organic compounds. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190328.	1.6	22
10	Post-Dieselgate: Evidence of NO_x Emission Reductions Using On-Road Remote Sensing. Environmental Science and Technology Letters, 2020, 7, 382-387.	3.9	18
11	Distance-based emission factors from vehicle emission remote sensing measurements. Science of the Total Environment, 2020, 739, 139688.	3.9	37
12	Introduction to the special issue â€œIn-depth study of air pollution sources and processes within Beijing and its surrounding region (APHH-Beijing)â€• Atmospheric Chemistry and Physics, 2019, 19, 7519-7546.	1.9	95
13	Strong Temperature Dependence for Light-Duty Diesel Vehicle NO_{<i>x</i>} Emissions. Environmental Science & Technology, 2019, 53, 6587-6596.	4.6	82
14	A trend analysis approach for air quality network data. Atmospheric Environment: X, 2019, 2, 100030.	0.8	19
15	Using meteorological normalisation to detect interventions in air quality time series. Science of the Total Environment, 2019, 653, 578-588.	3.9	172
16	The diminishing importance of nitrogen dioxide emissions from road vehicle exhaust. Atmospheric Environment: X, 2019, 1, 100002.	0.8	33
17	Interinstrument comparison of remote-sensing devices and a new method for calculating on-road nitrogen oxides emissions and validation of vehicle-specific power. Journal of the Air and Waste Management Association, 2018, 68, 111-122.	0.9	12
18	Random forest meteorological normalisation models for Swiss PM₁₀ trend analysis. Atmospheric Chemistry and Physics, 2018, 18, 6223-6239.	1.9	210

#	Article	IF	Citations
19	Lower vehicular primary emissions of NO2 in Europe than assumed in policy projections. Nature Geoscience, 2017, 10, 914-918.	5.4	72
20	Have vehicle emissions of primary NO₂ peaked?. Faraday Discussions, 2016, 189, 439-454.	1.6	72
21	Analysis of longâ€term observations of NO_x and CO in megacities and application to constraining emissions inventories. Geophysical Research Letters, 2016, 43, 9920-9930.	1.5	69
22	Source apportionment advances using polar plots of bivariate correlation and regression statistics. Atmospheric Environment, 2016, 145, 128-134.	1.9	72
23	Urban case studies: general discussion. Faraday Discussions, 2016, 189, 473-514.	1.6	1
24	Spatially resolved flux measurements of NO_xfrom London suggest significantly higher emissions than predicted by inventories. Faraday Discussions, 2016, 189, 455-472.	1.6	45
25	Measurement of NO_{<i>x</i>} Fluxes from a Tall Tower in Central London, UK and Comparison with Emissions Inventories. Environmental Science & Technology, 2015, 49, 1025-1034.	4.6	32
26	Performance of optimised SCR retrofit buses under urban driving and controlled conditions. Atmospheric Environment, 2015, 105, 70-77.	1.9	17
27	Crucial Role for Outdoor Chemistry in Ultrafine Particle Formation in Modern Office Buildings. Environmental Science & Technology, 2015, 49, 11011-11018.	4.6	12
28	Evaluation of the performance of different atmospheric chemical transport models and inter-comparison of nitrogen and sulphur deposition estimates for the UK. Atmospheric Environment, 2015, 119, 131-143.	1.9	61
29	Diesel pollution long under-reported. Nature, 2015, 526, 195-195.	13.7	13
30	Occupant exposure to indoor air pollutants in modern European offices: An integrated modelling approach. Atmospheric Environment, 2014, 82, 9-16.	1.9	32
31	Conditional bivariate probability function for source identification. Environmental Modelling and Software, 2014, 59, 1-9.	1.9	251
32	Air pollution dispersion models for human exposure predictions in London. Journal of Exposure Science and Environmental Epidemiology, 2013, 23, 647-653.	1.8	78
33	New insights from comprehensive on-road measurements of NOx, NO2 and NH3 from vehicle emission remote sensing in London, UK. Atmospheric Environment, 2013, 81, 339-347.	1.9	179
34	Characterising and understanding emission sources using bivariate polar plots and k-means clustering. Environmental Modelling and Software, 2013, 40, 325-329.	1.9	150
35	The importance of high vehicle power for passenger car emissions. Atmospheric Environment, 2013, 68, 8-16.	1.9	34
36	openair â€" An R package for air quality data analysis. Environmental Modelling and Software, 2012, 27-28, 52-61.	1.9	1,262

#	Article	IF	Citations
37	A short-term intervention study â€" Impact of airport closure due to the eruption of EyjafjallajÃ¶kull on near-field air quality. Atmospheric Environment, 2012, 54, 328-336.	1.9	28
38	Trends in NOx and NO2 emissions from road traffic in Great Britain. Atmospheric Environment, 2012, 54, 107-116.	1.9	80
39	One way coupling of CMAQ and a road source dispersion model for fine scale air pollution predictions. Atmospheric Environment, 2012, 59, 47-58.	1.9	75
40	New Directions: Science and policy â€" Out of step on NOx and NO2?. Atmospheric Environment, 2011, 45, 3911-3912.	1.9	54
41	Recent evidence concerning higher NO emissions from passenger cars and light duty vehicles. Atmospheric Environment, 2011, 45, 7053-7063.	1.9	223
42	Comprehensive analysis of the carbon impacts of vehicle intelligent speed control. Atmospheric Environment, 2010, 44, 2674-2680.	1.9	15
43	Analysis of air pollution data at a mixed source location using boosted regression trees. Atmospheric Environment, 2009, 43, 3563-3570.	1.9	96
44	Erratum to â€œApplication of non-linear time-alignment and integration methods to environmental time seriesâ€•[Trends Anal. Chem. 28 (2009) 373â€"391]. TrAC - Trends in Analytical Chemistry, 2009, 28, 923.	5.8	0
45	Modelling trends in OH radical concentrations using generalized additive models. Atmospheric Chemistry and Physics, 2009, 9, 2021-2033.	1.9	22
46	Near-Field Commercial Aircraft Contribution to Nitrogen Oxides by Engine, Aircraft Type, and Airline by Individual Plume Sampling. Environmental Science & Technology, 2008, 42, 1871-1876.	4.6	28
47	Free radical modelling studies during the UK TORCH Campaign in Summer 2003. Atmospheric Chemistry and Physics, 2007, 7, 167-181.	1.9	151
48	Motor traffic and the pollution of the air: 100 years on. Lancet, The, 2007, 370, 936.	6.3	0
49	Risks of exceeding the hourly EU limit value for nitrogen dioxide resulting from increased road transport emissions of primary nitrogen dioxide. Atmospheric Environment, 2007, 41, 2073-2082.	1.9	81
50	Modelling and assessing trends in traffic-related emissions using a generalised additive modelling approach. Atmospheric Environment, 2007, 41, 5289-5299.	1.9	96
51	Detecting and characterising small changes in urban nitrogen dioxide concentrations. Atmospheric Environment, 2007, 41, 4723-4733.	1.9	41
52	Analysis of air quality within a street canyon using statistical and dispersion modelling techniques. Atmospheric Environment, 2007, 41, 9195-9205.	1.9	73
53	Change-Point Detection of Gaseous and Particulate Traffic-Related Pollutants at a Roadside Location. Environmental Science & Technology, 2006, 40, 6912-6918.	4.6	47
54	New Directions: A heavy burden for heavy vehicles: Increasing vehicle weight and air pollution. Atmospheric Environment, 2006, 40, 1561-1562.	1.9	9

#	Article	IF	Citations
55	Detecting and quantifying aircraft and other on-airport contributions to ambient nitrogen oxides in the vicinity of a large international airport. Atmospheric Environment, 2006, 40, 5424-5434.	1.9	212
56	On the changing seasonal cycles and trends of ozone at Mace Head, Ireland. Atmospheric Chemistry and Physics, 2005, 5, 3441-3450.	1.9	62
57	Estimations of road vehicle primary NO exhaust emission fractions using monitoring data in London. Atmospheric Environment, 2005, 39, 167-177.	1.9	94
58	The impact of congestion charging on vehicle emissions in London. Atmospheric Environment, 2005, 39, 1-5.	1.9	194
59	Development of an urban inventory for road transport emissions of NO and comparison with estimates derived from ambient measurements. Atmospheric Environment, 2005, 39, 2049-2059.	1.9	46
60	Evidence of an increasing NO/NO emissions ratio from road traffic emissions. Atmospheric Environment, 2005, 39, 4793-4802.	1.9	284
61	The impact of congestion charging on vehicle speed and its implications for assessing vehicle emissions. Atmospheric Environment, 2005, 39, 6875-6884.	1.9	44
62	New Directions: Should road vehicle emissions legislation consider primary NO2?. Atmospheric Environment, 2004, 38, 1233-1234.	1.9	31
63	Investigating the potential importance of primary NO2 emissions in a street canyon. Atmospheric Environment, 2004, 38, 3585-3594.	1.9	94
64	Investigating the potential importance of primary NO2 emissions in a street canyon. Atmospheric Environment, 2004, 38, 3585-3585.	1.9	5
65	An empirical approach for the prediction of daily mean PM10 concentrations. Atmospheric Environment, 2002, 36, 1431-1441.	1.9	48
66	Dispersion modelling considerations for transient emissions from elevated point sources. Atmospheric Environment, 2002, 36, 3021-3029.	1.9	5
67	New Directions: Use of vehicle position information provides a novel tool for emissions inventory development. Atmospheric Environment, 2002, 36, 4849-4850.	1.9	0
68	The efficacy of low emission zones in central London as a means of reducing nitrogen dioxide concentrations. Transportation Research, Part D: Transport and Environment, 2002, 7, 49-64.	3.2	29
69	The Gas-Phase Chemistry Of Urban Atmospheres. Surveys in Geophysics, 2001, 22, 31-53.	2.1	17
70	An empirical approach for the prediction of annual mean nitrogen dioxide concentrations in London. Atmospheric Environment, 2001, 35, 1505-1515.	1.9	23
71	Traffic management strategies for emissions reduction: recent experience in London. Energy and Emission Control Technologies, 0, , 27.	0.5	13