Sarah J Doherty

List of Publications by Year
in descending order

40 papers	8,162 citations	159585 30 h-index	302126 39 g-index
42 all docs	42 docs citations	42 times ranked	7995 citing authors

#	Article	IF	Citations
1	Measurements of black carbon aerosol washout ratio on Svalbard. Tellus, Series B: Chemical and Physical Meteorology, 2022, 63, 891.	1.6	39
2	Black carbon and other light-absorbing impurities in snow in the Chilean Andes. Scientific Reports, 2019, 9, 4008.	3.3	42
3	Measurements of lightâ€absorbing particles in snow across the Arctic, North America, and China: Effects on surface albedo. Journal of Geophysical Research D: Atmospheres, 2017, 122, 10,149.	3.3	47
4	The darkening of the Greenland ice sheet: trends, drivers, and projections (1981â€“2100). Cryosphere, 2016, 10, 477-496.	3.9	152
5	Causes of variability in light absorption by particles in snow at sites in Idaho and Utah. Journal of Geophysical Research D: Atmospheres, 2016, 121, 4751-4768.	3.3	34
6	Interannual variations of lightâ€absorbing particles in snow on Arctic sea ice. Journal of Geophysical Research D: Atmospheres, 2015, 120, 11,391.	3.3	6
7	Light-absorbing particles in snow and ice: Measurement and modeling of climatic and hydrological impact. Advances in Atmospheric Sciences, 2015, 32, 64-91.	4.3	223
8	Black carbon and other lightâ€absorbing particles in snow of central North America. Journal of Geophysical Research D: Atmospheres, 2014, 119, 12,807.	3.3	83
9	Offsetting effects of aerosols on Arctic and global climate in the late 20th century. Atmospheric Chemistry and Physics, 2014, 14, 3969-3975.	4.9	36
10	Bounding the role of black carbon in the climate system: A scientific assessment. Journal of Geophysical Research D: Atmospheres, 2013, 118, 5380-5552.	3.3	4,319
11	Observed vertical redistribution of black carbon and other insoluble lightâ€absorbing particles in melting snow. Journal of Geophysical Research D: Atmospheres, 2013, 118, 5553-5569.	3.3	157
12	Black carbon and other lightâ€absorbing impurities in snow across Northern China. Journal of Geophysical Research D: Atmospheres, 2013, 118, 1471-1492.	3.3	138
13	The influence of snow grain size and impurities on the vertical profiles of actinic flux and associated NO_x emissions on the Antarctic and Greenland ice sheets. Atmospheric Chemistry and Physics, 2013, 13, 3547-3567.	4.9	68
14	Assessing Single Particle Soot Photometer and Integrating Sphere/Integrating Sandwich Spectrophotometer measurement techniques for quantifying black carbon concentration in snow. Atmospheric Measurement Techniques, 2012, 5, 2581-2592.	3.1	96
15	Arctic climate response to forcing from light-absorbing particles in snow and sea ice in CESM. Atmospheric Chemistry and Physics, 2012, 12, 7903-7920.	4.9	37
16	Light absorption from particulate impurities in snow and ice determined by spectrophotometric analysis of filters. Applied Optics, 2011, 50, 2037.	2.1	82
17	Sources of carbonaceous aerosols and deposited black carbon in the Arctic in winter-spring: implications for radiative forcing. Atmospheric Chemistry and Physics, 2011, 11, 12453-12473.	4.9	298
18	Sources of light-absorbing aerosol in arctic snow and their seasonal variation. Atmospheric Chemistry and Physics, 2010, 10, 10923-10938.	4.9	110

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19	Light-absorbing impurities in Arctic snow. Atmospheric Chemistry and Physics, 2010, 10, 11647-11680.	4.9	388
20	Source Attribution of Black Carbon in Arctic Snow. Environmental Science & Technology, 2009, 43, 4016-4021.	10.0	142
21	Lessons Learned from IPCC AR4: Scientific Developments Needed to Understand, Predict, and Respond to Climate Change. Bulletin of the American Meteorological Society, 2009, 90, 497-514.	3.3	47
22	Influence of relative humidity upon pollution and dust during ACE-Asia: Size distributions and implications for optical properties. Journal of Geophysical Research, 2006, 111, .	3.3	59
23	Enhanced water vapor in Asian dust layer: Entrainment processes and implication for aerosol optical properties. Atmospheric Environment, 2006, 40, 2409-2421.	4.1	27
24	A comparison and summary of aerosol optical properties as observed in situ from aircraft, ship, and land during ACE-Asia. Journal of Geophysical Research, 2005, 110, .	3.3	74
25	ACE-ASIA: Regional Climatic and Atmospheric Chemical Effects of Asian Dust and Pollution. Bulletin of the American Meteorological Society, 2004, 85, 367-380.	3.3	330
26	A comparison of similar aerosol measurements made on the NASA P3-B, DC-8, and NSF C-130 aircraft during TRACE-P and ACE-Asia. Journal of Geophysical Research, 2004, 109, .	3.3	33
27	Model simulation and analysis of coarse and fine particle distributions during ACE-Asia. Journal of Geophysical Research, 2004, 109, .	3.3	9
28	Environmental snapshots from ACE-Asia. Journal of Geophysical Research, 2004, 109, .	3.3	42
29	Size distributions and mixtures of dust and black carbon aerosol in Asian outflow: Physiochemistry and optical properties. Journal of Geophysical Research, 2004, 109, .	3.3	342
30	Variability of aerosol optical properties derived from in situ aircraft measurements during ACE-Asia. Journal of Geophysical Research, 2003, 108, ACE 15-1-ACE 15-19.	3.3	173
31	An intercomparison of lidar-derived aerosol optical properties with airborne measurements near Tokyo during ACE-Asia. Journal of Geophysical Research, 2003, 108, .	3.3	60
32	Clear-column closure studies of aerosols and water vapor aboard the NCAR C-130 during ACE-Asia, 2001. Journal of Geophysical Research, 2003, 108, .	3.3	53
33	A global aerosol model forecast for the ACE-Asia field experiment. Journal of Geophysical Research, 2003, 108, .	3.3	78
34	Correction to â€œAn intercomparison of lidar-derived aerosol optical properties with airborne measurements near Tokyo during ACE-Asiaâ€• Journal of Geophysical Research, 2003, 108, .	3.3	0
35	A Study of the Extinction-to-Backscatter Ratio of Marine Aerosol during the Shoreline Environment Aerosol Study*. Journal of Atmospheric and Oceanic Technology, 2003, 20, 1388-1402.	1.3	30
36	Sea-Salt Size Distributions from Breaking Waves: Implications for Marine Aerosol Production and Optical Extinction Measurements during SEAS*. Journal of Atmospheric and Oceanic Technology, 2003, 20, 1362-1374.	1.3	56

#	Article	IF	Citations
37	An intercomparison of aerosol light extinction and 180Â° backscatter as derived using in situ instruments and Raman lidar during the INDOEX field campaign. Journal of Geophysical Research, 2002, 107, INX2 13-1.	3.3	31
38	Gain of the AVHRR visible channel as tracked using bidirectional reflectance of Antarctic and Greenland snow. International Journal of Remote Sensing, 2001, 22, 1495-1520.	2.9	32
39	In situ measurement of the aerosol extinction-to-backscatter ratio at a polluted continental site. Journal of Geophysical Research, 2000, 105, 26907-26915.	3.3	78
40	Measurement of the lidar ratio for atmospheric aerosols with a 180Â° backscatter nephelometer. Applied Optics, 1999, 38, 1823.	2.1	49