Odran Sourdeval

List of Publications by Year
in descending order

33	1,749	471509 17	414414 32
papers	citations	h-index	g-index

73	73	73	2085
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Springtime Stratospheric Volcanic Aerosol Impact on Midlatitude Cirrus Clouds. Geophysical Research Letters, 2022, 49, .	4.0	4
2	Satellite Observations of the Impact of Individual Aircraft on Ice Crystal Number in Thin Cirrus Clouds. Geophysical Research Letters, 2022, 49, .	4.0	4
3	Addressing the difficulties in quantifying droplet number response to aerosol from satellite observations. Atmospheric Chemistry and Physics, 2022, 22, 7353-7372.	4.9	9
4	Strong Ocean/Seaâ€Ice Contrasts Observed in Satelliteâ€Derived Ice Crystal Number Concentrations in Arctic Ice Boundaryâ€Layer Clouds. Geophysical Research Letters, 2022, 49, .	4.0	3
5	Cold cloud microphysical process rates in a global chemistryâ€“climate model. Atmospheric Chemistry and Physics, 2021, 21, 1485-1505.	4.9	7
6	Bounding Global Aerosol Radiative Forcing of Climate Change. Reviews of Geophysics, 2020, 58, e2019RG000660.	23.0	424
7	A new classification of satellite-derived liquid water cloud regimes at cloud scale. Atmospheric Chemistry and Physics, 2020, 20, 2407-2418.	4.9	7
8	Detection and attribution of aerosolâ€“cloud interactions in large-domain large-eddy simulations with the ICOsahedral Non-hydrostatic model. Atmospheric Chemistry and Physics, 2020, 20, 5657-5678.	4.9	20
9	Observational Evidence that Radiative Heating Modifies the Life Cycle of Tropical Anvil Clouds. Journal of Climate, 2020, 33, 8621-8640.	3.2	20
10	The Added Value of Large-eddy and Storm-resolving Models for Simulating Clouds and Precipitation. Journal of the Meteorological Society of Japan, 2020, 98, 395-435.	1.8	93
11	A microphysics guide to cirrus â€“ Part 2: Climatologies of clouds and humidity from observations. Atmospheric Chemistry and Physics, 2020, 20, 12569-12608.	4.9	80
12	Constraining the Twomey effect from satellite observations: issues and perspectives. Atmospheric Chemistry and Physics, 2020, 20, 15079-15099.	4.9	49
13	Analysis and quantification of ENSO-linked changes in the tropical Atlantic cloud vertical distribution using 14 years of MODIS observations. Atmospheric Chemistry and Physics, 2019, 19, 13535-13546.	4.9	3
14	Constraining the aerosol influence on cloud liquid water path. Atmospheric Chemistry and Physics, 2019, 19, 5331-5347.	4.9	104
15	Cloud base height retrieval from multi-angle satellite data. Atmospheric Measurement Techniques, 2019, 12, 1841-1860.	3.1	18
16	The applicability of physical optics in the millimetre and sub-millimetre spectral region. Part II: Application to a three-component model of ice cloud and its evaluation against the bulk single-scattering properties of various other aggregate models. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 206, 83-100.	2.3	9
17	Ice crystal number concentration estimates from lidarâ€“radar satellite remote sensing â€“ PartÂ2: Controls on the ice crystal number concentration. Atmospheric Chemistry and Physics, 2018, 18, 14351-14370.	4.9	34
18	Remote Sensing of Droplet Number Concentration in Warm Clouds: A Review of the Current State of Knowledge and Perspectives. Reviews of Geophysics, 2018, 56, 409-453.	23.0	185

#	Article	IF	Citations
19	Cirrus Horizontal Heterogeneity and 3â€Ð Radiative Effects on Cloud Optical Property Retrievals From MODIS Near to Thermal Infrared Channels as a Function of Spatial Resolution. Journal of Geophysical Research D: Atmospheres, 2018, 123, 11,141.	3.3	6
20	Parameterizing cloud top effective radii from satellite retrieved values, accounting for vertical photon transport: quantification and correction of the resulting bias in droplet concentration and liquid water path retrievals. Atmospheric Measurement Techniques, 2018, 11, 4273-4289.	3.1	10
21	Ice crystal number concentration estimates from lidarâ€“radar satellite remote sensing â€“ Part 1: Method and evaluation. Atmospheric Chemistry and Physics, 2018, 18, 14327-14350.	4.9	61
22	Satellite Observations of Precipitating Marine Stratocumulus Show Greater Cloud Fraction for Decoupled Clouds in Comparison to Coupled Clouds. Geophysical Research Letters, 2018, 45, 5126-5134.	4.0	28
23	Using CALIOP to estimate cloud-field base height and its uncertainty: the Cloud Base Altitude Spatial Extrapolator (CBASE) algorithm and dataset. Earth System Science Data, 2018, 10, 2279-2293.	9.9	28
24	The applicability of physical optics in the millimetre and sub-millimetre spectral region. Part I: The ray tracing with diffraction on facets method. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 190, 13-25.	2.3	8
25	Largeâ€eddy simulations over Germany using ICON: a comprehensive evaluation. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 69-100.	2.7	175
26	Cirrus heterogeneity effects on cloud optical properties retrieved with an optimal estimation method from MODIS VIS to TIR channels. AIP Conference Proceedings, 2017, , .	0.4	2
27	Implementation of aerosolâ€“cloud interactions in the regional atmosphereâ€“aerosol model COSMO-MUSCAT(5.0) and evaluation using satellite data. Geoscientific Model Development, 2017, 10, 2231-2246.	3.6	10
28	A methodology for simultaneous retrieval of ice and liquid water cloud properties. Part 2: Nearâ€global retrievals and evaluation against Aâ€Train products. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 3063-3081.	2.7	31
29	A methodology for simultaneous retrieval of ice and liquid water cloud properties. Part I: Information content and case study. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 870-882.	2.7	38
30	Frequency of occurrence of rain from liquidâ€, mixedâ€, and iceâ€phase clouds derived from Aâ€Train satellite retrievals. Geophysical Research Letters, 2015, 42, 6502-6509.	4.0	227
31	Simultaneous multi-layer retrievals of ice and liquid water cloud properties using passive measurements. , 2013, , .		1
32	A variational approach for retrieving ice cloud properties from infrared measurements: application in the context of two IIR validation campaigns. Atmospheric Chemistry and Physics, 2013, 13, 8229-8244.	4.9	21
33	Validation of IIR/CALIPSO Level 1 Measurements by Comparison with Collocated Airborne Observations during CIRCLE-2 and Biscay â€˜08 Campaigns. Journal of Atmospheric and Oceanic Technology, 2012, 29, 653-667.	1.3	16