

# Odran Sourdeval

## List of Publications by Year in descending order

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Version: 2024-02-01

33  
papers

1,749  
citations

471509

17  
h-index

414414

32  
g-index

73  
all docs

73  
docs citations

73  
times ranked

2085  
citing authors

#	ARTICLE	IF	CITATIONS
1	Bounding Global Aerosol Radiative Forcing of Climate Change. <i>Reviews of Geophysics</i> , 2020, 58, e2019RG000660.	23.0	424
2	Frequency of occurrence of rain from liquid, mixed, and ice-phase clouds derived from A-train satellite retrievals. <i>Geophysical Research Letters</i> , 2015, 42, 6502-6509.	4.0	227
3	Remote Sensing of Droplet Number Concentration in Warm Clouds: A Review of the Current State of Knowledge and Perspectives. <i>Reviews of Geophysics</i> , 2018, 56, 409-453.	23.0	185
4	Large-eddy simulations over Germany using ICON: a comprehensive evaluation. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2017, 143, 69-100.	2.7	175
5	Constraining the aerosol influence on cloud liquid water path. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 5331-5347.	4.9	104
6	The Added Value of Large-eddy and Storm-resolving Models for Simulating Clouds and Precipitation. <i>Journal of the Meteorological Society of Japan</i> , 2020, 98, 395-435.	1.8	93
7	A microphysics guide to cirrus – Part 2: Climatologies of clouds and humidity from observations. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 12569-12608.	4.9	80
8	Ice crystal number concentration estimates from lidar-radar satellite remote sensing – Part 1: Method and evaluation. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 14327-14350.	4.9	61
9	Constraining the Twomey effect from satellite observations: issues and perspectives. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 15079-15099.	4.9	49
10	A methodology for simultaneous retrieval of ice and liquid water cloud properties. Part I: Information content and case study. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2015, 141, 870-882.	2.7	38
11	Ice crystal number concentration estimates from lidar-radar satellite remote sensing – Part 2: Controls on the ice crystal number concentration. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 14351-14370.	4.9	34
12	A methodology for simultaneous retrieval of ice and liquid water cloud properties. Part 2: Near-global retrievals and evaluation against A-train products. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2016, 142, 3063-3081.	2.7	31
13	Satellite Observations of Precipitating Marine Stratocumulus Show Greater Cloud Fraction for Decoupled Clouds in Comparison to Coupled Clouds. <i>Geophysical Research Letters</i> , 2018, 45, 5126-5134.	4.0	28
14	Using CALIOP to estimate cloud-field base height and its uncertainty: the Cloud Base Altitude Spatial Extrapolator (CBASE) algorithm and dataset. <i>Earth System Science Data</i> , 2018, 10, 2279-2293.	9.9	28
15	A variational approach for retrieving ice cloud properties from infrared measurements: application in the context of two IIR validation campaigns. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 8229-8244.	4.9	21
16	Detection and attribution of aerosol-cloud interactions in large-domain large-eddy simulations with the ICOSahedral Non-hydrostatic model. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 5657-5678.	4.9	20
17	Observational Evidence that Radiative Heating Modifies the Life Cycle of Tropical Anvil Clouds. <i>Journal of Climate</i> , 2020, 33, 8621-8640.	3.2	20
18	Cloud base height retrieval from multi-angle satellite data. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 1841-1860.	3.1	18

#	ARTICLE	IF	CITATIONS
19	Validation of IIR/CALIPSO Level 1 Measurements by Comparison with Collocated Airborne Observations during CIRCLE-2 and Biscay 2008 Campaigns. <i>Journal of Atmospheric and Oceanic Technology</i> , 2012, 29, 653-667.	1.3	16
20	Implementation of aerosol-cloud interactions in the regional atmosphere-aerosol model COSMO-MUSCAT(5.0) and evaluation using satellite data. <i>Geoscientific Model Development</i> , 2017, 10, 2231-2246.	3.6	10
21	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. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 4273-4289.	3.1	10
22	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. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2018, 206, 83-100.	2.3	9
23	Addressing the difficulties in quantifying droplet number response to aerosol from satellite observations. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 7353-7372.	4.9	9
24	The applicability of physical optics in the millimetre and sub-millimetre spectral region. Part I: The ray tracing with diffraction on facets method. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2017, 190, 13-25.	2.3	8
25	A new classification of satellite-derived liquid water cloud regimes at cloud scale. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 2407-2418.	4.9	7
26	Cold cloud microphysical process rates in a global chemistry-climate model. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 1485-1505.	4.9	7
27	Cirrus Horizontal Heterogeneity and 3D Radiative Effects on Cloud Optical Property Retrievals From MODIS Near to Thermal Infrared Channels as a Function of Spatial Resolution. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 11,141.	3.3	6
28	Springtime Stratospheric Volcanic Aerosol Impact on Midlatitude Cirrus Clouds. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	4
29	Satellite Observations of the Impact of Individual Aircraft on Ice Crystal Number in Thin Cirrus Clouds. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	4
30	Analysis and quantification of ENSO-linked changes in the tropical Atlantic cloud vertical distribution using 14 years of MODIS observations. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 13535-13546.	4.9	3
31	Strong Ocean/Sea-Ice Contrasts Observed in Satellite-Derived Ice Crystal Number Concentrations in Arctic Ice Boundary-Layer Clouds. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	3
32	Cirrus heterogeneity effects on cloud optical properties retrieved with an optimal estimation method from MODIS VIS to TIR channels. <i>AIP Conference Proceedings</i> , 2017, , .	0.4	2
33	Simultaneous multi-layer retrievals of ice and liquid water cloud properties using passive measurements. , 2013, , .		1