

# Pascal Hedelt

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3234354/publications.pdf>

Version: 2024-02-01

23  
papers

1,098  
citations

471509

17  
h-index

677142

22  
g-index

50  
all docs

50  
docs citations

50  
times ranked

1536  
citing authors

#	ARTICLE	IF	CITATIONS
1	Sulfur dioxide retrievals from TROPOMI onboard Sentinel-5 Precursor: algorithm theoretical basis. <i>Atmospheric Measurement Techniques</i> , 2017, 10, 119-153.	3.1	130
2	Potential biosignatures in super-Earth atmospheres. <i>Astronomy and Astrophysics</i> , 2011, 529, A8.	5.1	126
3	Global monitoring of volcanic SO <sub>2</sub> degassing with unprecedented resolution from TROPOMI onboard Sentinel-5 Precursor. <i>Scientific Reports</i> , 2019, 9, 2643.	3.3	126
4	Support to Aviation Control Service (SACS): an online service for near-real-time satellite monitoring of volcanic plumes. <i>Natural Hazards and Earth System Sciences</i> , 2014, 14, 1099-1123.	3.6	85
5	Detectability of atmospheric features of Earth-like planets in the habitable zone around M dwarfs. <i>Astronomy and Astrophysics</i> , 2019, 624, A49.	5.1	84
6	Volcanic SO <sub>2</sub> plume height retrieval from UV sensors using a full-physics inverse learning machine algorithm. <i>International Journal of Remote Sensing</i> , 2017, 38, 1-27.	2.9	68
7	Sulfur dioxide layer height retrieval from Sentinel-5 Precursor/TROPOMI using FP_ILM. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 5503-5517.	3.1	58
8	Comparative assessment of TROPOMI and OMI formaldehyde observations and validation against MAX-DOAS network column measurements. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 12561-12593.	4.9	57
9	GARLIC – A general purpose atmospheric radiative transfer line-by-line infrared-microwave code: Implementation and evaluation. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2014, 137, 29-50.	2.3	55
10	Spectral features of Earth-like planets and their detectability at different orbital distances around F, G, and K-type stars. <i>Astronomy and Astrophysics</i> , 2013, 553, A9.	5.1	51
11	Overview of the O3M SAF GOME-2 operational atmospheric composition and UV radiation data products and data availability. <i>Atmospheric Measurement Techniques</i> , 2016, 9, 383-407.	3.1	44
12	Anthropogenic and volcanic point source SO <sub>2</sub> emissions derived from TROPOMI on board Sentinel-5 Precursor: first results. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 5591-5607.	4.9	39
13	Anthropogenic sulphur dioxide load over China as observed from different satellite sensors. <i>Atmospheric Environment</i> , 2016, 145, 45-59.	4.1	33
14	Venus transit 2004: Illustrating the capability of exoplanet transmission spectroscopy. <i>Astronomy and Astrophysics</i> , 2011, 533, A136.	5.1	23
15	Transmission spectroscopy with the ACE-FTS infrared spectral atlas of Earth: A model validation and feasibility study. <i>Molecular Astrophysics</i> , 2018, 11, 1-22.	1.6	22
16	The Earth as an extrasolar transiting planet. <i>Astronomy and Astrophysics</i> , 2014, 564, A58.	5.1	21
17	A sulfur dioxide Covariance-Based Retrieval Algorithm (COBRA): application to TROPOMI reveals new emission sources. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 16727-16744.	4.9	19
18	Inconsistencies in sulfur dioxide emissions from the Canadian oil sands and potential implications. <i>Environmental Research Letters</i> , 2021, 16, 014012.	5.2	11

#	ARTICLE	IF	CITATIONS
19	Evaluating the assimilation of S5P/TROPOMI near real-time SO <sub>2</sub> columns and layer height data into the CAMS integrated forecasting system (CY47R1), based on a case study of the 2019 Raikoke eruption. <i>Geoscientific Model Development</i> , 2022, 15, 971-994.	3.6	9
20	EUNADICS-AV early warning system dedicated to supporting aviation in the case of a crisis from natural airborne hazards and radionuclide clouds. <i>Natural Hazards and Earth System Sciences</i> , 2021, 21, 3367-3405.	3.6	8
21	Volcanic SO <sub>2</sub> effective layer height retrieval for the Ozone Monitoring Instrument (OMI) using a machine-learning approach. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 3673-3691.	3.1	5
22	Volcanic SO <sub>2</sub> layer height by TROPOMI/S5P: evaluation against IASI/MetOp and CALIOP/CALIPSO observations. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 5665-5683.	4.9	5
23	Global Monitoring of Volcanic SO <sub>2</sub> Degassing Using Sentinel-5 Precursor Tropomi. , 2021, , .		2