

Stephan Havemann

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3955979/publications.pdf>

Version: 2024-02-01

50
papers

688
citations

567281

15
h-index

580821

25
g-index

51
all docs

51
docs citations

51
times ranked

598
citing authors

#	ARTICLE	IF	CITATIONS
1	A new parametrization for the radiative properties of ice crystals: Comparison with existing schemes and impact in a GCM. <i>Atmospheric Research</i> , 2007, 83, 19-35.	4.1	91
2	Extension of T-matrix to scattering of electromagnetic plane waves by non-axisymmetric dielectric particles: application to hexagonal ice cylinders. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2001, 70, 139-158.	2.3	78
3	Calculation of the single-scattering properties of randomly oriented hexagonal ice columns: a comparison of the T-matrix and the finite-difference time-domain methods. <i>Applied Optics</i> , 2001, 40, 4376.	2.1	49
4	A case study of observations of volcanic ash from the Eyjafjallajökull eruption: 2. Airborne and satellite radiative measurements. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	47
5	A self-consistent scattering model for cirrus. II: The high and low frequencies. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2014, 140, 1039-1057.	2.7	46
6	The boundary element method for light scattering by ice crystals and its implementation in BEM++. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2015, 167, 40-52.	2.3	29
7	Evaluation of Radiative Transfer Models With Clouds. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 6142-6157.	3.3	28
8	Rapid computation of the optical properties of hexagonal columns using complex angular momentum theory. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 1999, 63, 499-519.	2.3	27
9	A study of the absorption and extinction properties of hexagonal ice columns and plates in random and preferred orientation, using exact T-matrix theory and aircraft observations of cirrus. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2001, 70, 505-518.	2.3	27
10	A consistent set of single-scattering properties for cirrus cloud: tests using radiance measurements from a dual-viewing multi-wavelength satellite-based instrument. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2003, 79-80, 549-567.	2.3	27
11	Microphysical properties of mixed-phase & Ice clouds retrieved from In Situ airborne ice polar nephelometer measurements. <i>Geophysical Research Letters</i> , 2000, 27, 209-212.	4.0	23
12	Photon tunneling contributions to extinction for laboratory grown hexagonal columns. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2001, 70, 761-776.	2.3	22
13	The development of a fast radiative transfer model based on an empirical orthogonal functions (EOF) technique. , 2006, , .		19
14	On the relationship between the scattering phase function of cirrus and the atmospheric state. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 1105-1127.	4.9	18
15	Light scattering on hexagonal ice columns. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2001, 18, 2512.	1.5	16
16	Comparison of microwave radiative transfer calculations obtained with three different approximations of hydrometeor shape. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 1999, 63, 545-558.	2.3	15
17	Modelling diffraction by faceted particles. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2012, 113, 342-347.	2.3	15
18	Hyperspectral retrieval of land surface emissivities using ARIES. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2009, 135, 2110-2124.	2.7	12

#	ARTICLE	IF	CITATIONS
19	The dependence of retrieved cirrus ice-crystal effective dimension on assumed ice-crystal geometry and size-distribution function at solar wavelengths. Quarterly Journal of the Royal Meteorological Society, 2004, 130, 2153-2167.	2.7	11
20	Calculation of the phase matrix elements of elongated hexagonal ice columns using the T-matrix method. Journal of Quantitative Spectroscopy and Radiative Transfer, 2004, 89, 87-96.	2.3	11
21	The Havemann-Taylor Fast Radiative Transfer Code: Exact fast radiative transfer for scattering atmospheres using Principal Components (PCs). , 2009, , .		11
22	Scattering of Plane Waves on Finite Cylinders with Non-circular Cross-Sections. Progress in Electromagnetics Research, 1999, 23, 79-105.	4.4	10
23	Comparison of electromagnetic theory and various approximations for computing the absorption efficiency and single-scattering albedo of hexagonal columns. Applied Optics, 2000, 39, 5560.	2.1	10
24	Implementation of the T-matrix method on a massively parallel machine: a comparison of hexagonal ice cylinder single-scattering properties using the T-matrix and improved geometric optics methods. Journal of Quantitative Spectroscopy and Radiative Transfer, 2003, 79-80, 707-720.	2.3	10
25	Evaluation of laser heterodyne radiometry for numerical weather prediction applications. Quarterly Journal of the Royal Meteorological Society, 2018, 144, 1831-1850.	2.7	9
26	The Havemann-Taylor Fast Radiative Transfer Code (HT-FRTC): A multipurpose code based on principal components. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 220, 180-192.	2.3	8
27	A case study of sulphur dioxide identification in three different volcanic eruptions, using Infrared satellite observations (<scp>IASI</scp>). Meteorological Applications, 2016, 23, 477-490.	2.1	5
28	Shortwave Spectral Radiative Signatures and Their Physical Controls. Journal of Climate, 2019, 32, 4805-4828.	3.2	5
29	Atmospheric correction of short-wave hyperspectral imagery using a fast, full-scattering 1DVar retrieval scheme. , 2012, , .		4
30	Remote sounding of cirrus mean effective particle size from AVHRR radiances. , 1997, 3220, 48.		1
31	Microwave radiative transfer with nonspherical particles. , 1997, 3220, 174.		1
32	Scattering of Plane Waves On Finite Cylinders With Non-Circular Cross-Sections - Abstract. Journal of Electromagnetic Waves and Applications, 1999, 13, 1037-1038.	1.6	1
33	Surface retrievals from Hyperion EO1 using a new, fast, 1D-Var based retrieval code. , 2015, , .		1
34	Scattering of plane waves on hexagonal cylinders within the framework of the discretized Mie formalism (DMF). , 1997, , .		0
35	Hyperspectral Retrieval of Surface Emissivities. , 2009, , .		0
36	Hyperspectral retrieval of surface reflectances: A new scheme. , 2013, , .		0

#	ARTICLE	IF	CITATIONS
37	A self-consistent high- and low-frequency scattering model for cirrus. , 2013, , .		0
38	The Havemann-Taylor Fast Radiative Transfer Code: A line-by-line sensor independent radiative transfer code. , 2014, , .		0
39	HT-FRTC: A fast radiative transfer code using kernel regression. , 2015, , .		0
40	The Havemann-Taylor Fast Radiative Transfer Code (HT-FRTC) and its applications. Proceedings of SPIE, 2015, , .	0.8	0
41	The Havemann-Taylor Fast Radiative Transfer Code (HT-FRTC) and its application within Tactical Decision Aids (TDAs). Proceedings of SPIE, 2015, , .	0.8	0
42	The Havemann-Taylor Fast Radiative Transfer Code: A line-by-line sensor independent Radiative Transfer Code. , 2016, , .		0
43	The prediction of the optical contrast of air-borne targets against the night-sky background for Photopic and NVG sensors. , 2016, , .		0
44	HT-FRTC: a fast radiative transfer code using kernel regression. Proceedings of SPIE, 2016, , .	0.8	0
45	UK met office capabilities in defense meteorology, oceanography and tactical decision aids (Neon and) Tj ETQq1 1 0.784314 ggBT /Ov	0.8	0
46	End-to-End Instrument Performance Simulation System (EIPS) Framework: Application to Satellite Microwave Atmospheric Sounding Systems. Remote Sensing, 2019, 11, 1412.	4.0	0
47	Full-Scene Surface Reflectance Retrievals.. , 2011, , .		0
48	HT-FRTC: a fast radiative transfer code using Gaussian processes. , 2017, , .		0
49	Information content analysis for a novel TES-based hyperspectral microwave atmospheric sounding instrument. , 2018, , .		0
50	Retrieval of Tropospheric Water Vapor From Airborne Farâ€œInfrared Measurements: A Case Study. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	0