Aku RiihelÃ¤

List of Publications by Year
in descending order

46 papers	1,284 citations	471371 17 h-index	377752 34 g-index
63 all docs	63 docs citations	63 times ranked	1989 citing authors

#	Article	IF	Citations
1	Operational climate monitoring from space: the EUMETSAT Satellite Application Facility on Climate Monitoring (CM-SAF). Atmospheric Chemistry and Physics, 2009, 9, 1687-1709.	1.9	225
2	CLARA-SAL: a global 28 yr timeseries of Earth's black-sky surface albedo. Atmospheric Chemistry and Physics, 2013, 13, 3743-3762.	1.9	146
3	CLARA-A1: a cloud, albedo, and radiation dataset from 28 yr of global AVHRR data. Atmospheric Chemistry and Physics, 2013, 13, 5351-5367.	1.9	122
4	Extensive validation of CM SAF surface radiation products over Europe. Remote Sensing of Environment, 2017, 199, 171-186.	4.6	80
5	Observed changes in the albedo of the Arctic sea-ice zone for the period 1982â€“2009. Nature Climate Change, 2013, 3, 895-898.	8.1	68
6	Quality control of global solar radiation data with satellite-based products. Solar Energy, 2017, 158, 49-62.	2.9	60
7	Spectral albedo of seasonal snow during intensive melt period at SodankylÃ, beyond the Arctic Circle. Atmospheric Chemistry and Physics, 2013, 13, 3793-3810.	1.9	54
8	Validation of CM SAF Surface Solar Radiation Datasets over Finland and Sweden. Remote Sensing, 2015, 7, 6663-6682.	1.8	39
9	An intercomparison and validation of satelliteâ€based surface radiative energy flux estimates over the Arctic. Journal of Geophysical Research D: Atmospheres, 2017, 122, 4829-4848.	1.2	39
10	Global horizontal irradiance forecast for Finland based on geostationary weather satellite data. Solar Energy, 2020, 198, 68-80.	2.9	38
11	Analysis of current validation practices in Europe for space-based climate data records of essential climate variables. International Journal of Applied Earth Observation and Geoinformation, 2015, 42, 150-161.	1.4	35
12	Quantifying the amplified bias of PV system simulations due to uncertainties in solar radiation estimates. Solar Energy, 2018, 176, 663-677.	2.9	35
13	Validation of the Climate-SAF surface broadband albedo product: Comparisons with in situ observations over Greenland and the ice-covered Arctic Ocean. Remote Sensing of Environment, 2010, 114, 2779-2790.	4.6	27
14	An Overview of European Efforts in Generating Climate Data Records. Bulletin of the American Meteorological Society, 2018, 99, 349-359.	1.7	26
15	Recent strengthening of snow and ice albedo feedback driven by Antarctic sea-ice loss. Nature Geoscience, 2021, 14, 832-836.	5.4	25
16	Validation of the SARAH-E Satellite-Based Surface Solar Radiation Estimates over India. Remote Sensing, 2018, 10, 392.	1.8	24
17	The surface albedo of the Greenland Ice Sheet between 1982 and 2015 from the CLARA-A2 dataset and its relationship to the ice sheet's surface mass balance. Cryosphere, 2019, 13, 2597-2614.	1.5	24
18	Atmospheric effect on the ground-based measurements of broadband surface albedo. Atmospheric Measurement Techniques, 2012, 5, 2675-2688.	1.2	17

#	Article	IF	Citations
19	Land Surface Albedos Computed from BRF Measurements with a Study of Conversion Formulae. Remote Sensing, 2010, 2, 1918-1940.	1.8	16
20	Effect of small-scale snow surface roughness on snow albedo and reflectance. Cryosphere, 2021, 15, 793-820.	1.5	15
21	The Role of Climate and Land Use in the Changes in Surface Albedo Prior to Snow Melt and the Timing of Melt Season of Seasonal Snow in Northern Land Areas of 40Â°Nâ€“80Â°N during 1982â€“2015. Remote Sensing, 2018, 10, 1619.	1.8	14
22	The Atmospheric Imaging Mission for Northern Regions: AIM-North. Canadian Journal of Remote Sensing, 2019, 45, 423-442.	1.1	14
23	Hemispherical-directional reflectance factor measurements of snow on the Greenland Ice Sheet during the Radiation, Snow Characteristics and Albedo at Summit (RASCALS) campaign. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 146, 280-289.	1.1	12
24	Evaluation of Northern Hemisphere snow water equivalent in CMIP6 models during 1982â€“2014. Cryosphere, 2022, 16, 1007-1030.	1.5	11
25	Black and White-Sky Albedo Values of Snow: In Situ Relationships for AVHRR-Based Estimation Using CLARA-A2 SAL. Canadian Journal of Remote Sensing, 2019, 45, 350-367.	1.1	9
26	Measuring the vertical albedo profile of a subarctic boreal forest canopy. Silva Fennica, 2008, 42, .	0.5	8
27	SNORTEX (Snow Reflectance Transition Experiment): Remote sensing measurement of the dynamic properties of the boreal snow-forest in support to climate and weather forecast: Report of IOP-2008. , 2009, , .		7
28	The temporal and spatial variability in submeter scale surface roughness of seasonal snow in SodankylÃ Finnish Lapland in 2009â€“2010. Journal of Geophysical Research D: Atmospheres, 2014, 119, 9236-9252.	1.2	7
29	High temporal resolution estimations of the Arctic sea ice albedo during the melting and refreezing periods of the years 2003-2011. Remote Sensing of Environment, 2014, 140, 604-613.	4.6	7
30	Airborne Measurements of Surface Albedo and Leaf Area Index of Snowâ€Covered Boreal Forest. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	6
31	Evaluation of North Eurasian snow-off dates in the ECHAM5.4 atmospheric general circulation model. Geoscientific Model Development, 2014, 7, 3037-3057.	1.3	5
32	Intercomparison of Snow Melt Onset Date Estimates From Optical and Microwave Satellite Instruments Over the Northern Hemisphere for the Period 1982â€“2015. Journal of Geophysical Research D: Atmospheres, 2019, 124, 11205-11219.	1.2	5
33	Diurnal Black-Sky Surface Albedo Parameterization of Snow. Journal of Applied Meteorology and Climatology, 2020, 59, 1415-1428.	0.6	5
34	Shortwave broadband black-sky surface albedo estimation for Arctic sea ice using passive microwave radiometer data. Journal of Geophysical Research, 2011, 116, .	3.3	4
35	On the Land-Sea Contrast in the Surface Solar Radiation (SSR) in the Baltic Region. Remote Sensing, 2020, 12, 3509.	1.8	4
36	Comparison of irradiance forecasts from operational <scp>NWP</scp> model and satelliteâ€based estimates over Fennoscandia. Meteorological Applications, 2022, 29, .	0.9	4

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37	Detection of snow surface roughness and hoar at Summit, Greenland, using RADARSAT data. International Journal of Remote Sensing, 2016, 37, 2860-2880.	1.3	3
38	A Multisensor Approach to Global Retrievals of Land Surface Albedo. Remote Sensing, 2018, 10, 848.	1.8	3
39	Boreal forest albedo and LAI in SNORTEX 2008–2010. , 2012, , .		2
40	Comparative Validation of Clear Sky Irradiance Models over Finland. , 2018, , .		2
41	Cloud-probability-based estimation of black-sky surface albedo from AVHRR data. Atmospheric Measurement Techniques, 2022, 15, 879-893.	1.2	2
42	Estimation of the bidirectional reflectance distribution function of subarctic boreal forest using C-band SAR. , 2007, , .		1
43	Surface Albedo of the inner Arctic: Validation of the Climate-SAF satellite Albedo Product with in-situ observations. , 2010, , .		1
44	Intercalibration of Polar-Orbiting Spectral Radiometers Without Simultaneous Observations. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 1507-1519.	2.7	1
45	The change of seasonal snow surface roughness in Sodankylä finnish lapland during winters 2009 and 2010. , 2012, , .		0
46	About UV albedo of seasonal snow at Sodankyla including Arctic - Antarctic comparison aspects. , 2013, , .		0