Philipp Weihs

List of Publications by Year
in descending order

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81	1,699	257357	330025
papers	citations	24 h-index	37 g-index

83	83	83	1727
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Experimental assessment of the Sentinel-2 band setting for RTM-based LAI retrieval of sugar beet and maize. Canadian Journal of Remote Sensing, 2009, 35, 230-247.	1.1	106
2	SUSPEN intercomparison of ultraviolet spectroradiometers. Journal of Geophysical Research, 2001, 106, 12509-12525.	3.3	99
3	From model intercomparison toward benchmark UV spectra for six real atmospheric cases. Journal of Geophysical Research, 2000, 105, 4915-4925.	3.3	77
4	A new approach to correct for absorbing aerosols in OMI UV. Geophysical Research Letters, 2009, 36, .	1.5	71
5	The uncertainty of UTCI due to uncertainties in the determination of radiation fluxes derived from measured and observed meteorological data. International Journal of Biometeorology, 2012, 56, 537-555.	1.3	67
6	Spectral UV Irradiance on Vertical Surfaces: A Case Study. Photochemistry and Photobiology, 1999, 69, 464-470.	1.3	57
7	Accuracy of spectral UV model calculations: 1. Consideration of uncertainties in input parameters. Journal of Geophysical Research, 1997, 102, 1541-1550.	3.3	54
8	Inversion Breakup in Small Rocky Mountain and Alpine Basins. Journal of Applied Meteorology and Climatology, 2004, 43, 1069-1082.	1.7	52
9	On the relationship between total ozone and atmospheric dynamics and chemistry at mid-latitudes â€“ Part 2: The effects of the El NiÃ±o/Southern Oscillation, volcanic eruptions and contributions of atmospheric dynamics and chemistry to long-term total ozone changes. Atmospheric Chemistry and Physics, 2013, 13, 165-179.	1.9	52
10	Measurements of UV irradiance within the area of one satellite pixel. Atmospheric Chemistry and Physics, 2008, 8, 5615-5626.	1.9	51
11	Can riparian vegetation shade mitigate the expected rise in stream temperatures due to climate change during heat waves in a human-impacted pre-alpine river?. Hydrology and Earth System Sciences, 2018, 22, 437-461.	1.9	49
12	Novel method for the improvement in the evaluation of outdoor performance loss rate in different PV technologies and comparison with two other methods. Solar Energy, 2015, 117, 139-152.	2.9	48
13	Accuracy of spectral UV model calculations: 2. Comparison of UV calculations with measurements. Journal of Geophysical Research, 1997, 102, 1551-1560.	3.3	42
14	Variability of spectral solar ultraviolet irradiance in an Alpine environment. Journal of Geophysical Research, 2000, 105, 26991-27003.	3.3	42
15	A Sinkhole Field Experiment in the Eastern Alps. Bulletin of the American Meteorological Society, 2007, 88, 701-716.	1.7	38
16	Chronological refinement of an ice core record at Upper Fremont Glacier in south central North America. Journal of Geophysical Research, 2000, 105, 4657-4666.	3.3	37
17	Modeling the effect of an inhomogeneous surface albedo on incident UV radiation in mountainous terrain: Determination of an effective surface albedo. Geophysical Research Letters, 2001, 28, 3111-3114.	1.5	37
18	Measurements of the diffuse UV sky radiance during broken cloud conditions. Journal of Geophysical Research, 2000, 105, 4937-4944.	3.3	35

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19	Extreme events in total ozone over Arosa â€“ Part 1: Application of extreme value theory. Atmospheric Chemistry and Physics, 2010, 10, 10021-10031.	1.9	35
20	Measurements of Personal <scp>UV</scp> Exposure on Different Parts of the Body During Various Activities. Photochemistry and Photobiology, 2013, 89, 1004-1007.	1.3	35
21	Reconstruction of erythemal UV-doses for two stations in Austria: a comparison between alpine and urban regions. Atmospheric Chemistry and Physics, 2008, 8, 6309-6323.	1.9	34
22	European intercomparison of ultraviolet spectroradiometers. Environmental Technology (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 6	1.2	33
23	Relationship between high daily erythemal UV doses, total ozone, surface albedo and cloudiness: An analysis of 30years of data from Switzerland and Austria. Atmospheric Research, 2010, 98, 9-20.	1.8	31
24	Extreme events in total ozone over Arosa â€“ Part 2: Fingerprints of atmospheric dynamics and chemistry and effects on mean values and long-term changes. Atmospheric Chemistry and Physics, 2010, 10, 10033-10045.	1.9	30
25	Albedo Influences on Surface UV Irradiance at the Sonnblick High-Mountain Observatory (3106-m) Tj ETQq1 1 0.784314 rgBT /Overlo	1.7	29
26	The influence of riparian vegetation shading on water temperature during low flow conditions in a medium sized river. Knowledge and Management of Aquatic Ecosystems, 2017, , 5.	0.5	23
27	Influence of ground reflectivity and topography on erythemal UV radiation on inclined planes. International Journal of Biometeorology, 2002, 46, 95-104.	1.3	22
28	Ozone column retrieval from solar UV measurements at ground level: Effects of clouds and results from six European sites. Journal of Geophysical Research, 2005, 110, .	3.3	22
29	UV Exposition During Typical Lifestyle Behavior in an Urban Environment. Photochemistry and Photobiology, 2010, 86, 711-715.	1.3	21
30	Modelling solar UV radiation in the past: comparison of algorithms and input data. , 2006, 6362, 274.		20
31	The Austrian radiation monitoring network ARAD â€“Âbest practice and added value. Atmospheric Measurement Techniques, 2016, 9, 1513-1531.	1.2	20
32	Factors affecting UV irradiance at selected wavelengths at Hoher Sonnblick. Atmospheric Research, 2011, 101, 869-878.	1.8	19
33	Microclimatic conditions of â€˜Green Wallsâ€™, a new restoration technique for steep slopes based on a steel grid construction. Ecological Engineering, 2017, 101, 39-45.	1.6	19
34	Spectral UV measurements in Austria from 1994 to 2006: investigations of short- and long-term changes. Atmospheric Chemistry and Physics, 2008, 8, 7033-7043.	1.9	18
35	Dual ground-based MAX-DOAS observations in Vienna, Austria: Evaluation of horizontal and temporal NO2, HCHO, and CHOCHO distributions and comparison with independent data sets. Atmospheric Environment: X, 2020, 5, 100059.	0.8	18
36	Comparison of Green and Lowtran Radiation Schemes with a Discrete Ordinate Method UV Model. Photochemistry and Photobiology, 1996, 64, 642-648.	1.3	15

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37	The uncertainty of UTCI due to uncertainties in the determination of radiation fluxes derived from numerical weather prediction and regional climate model simulations. International Journal of Biometeorology, 2013, 57, 207-223.	1.3	14
38	Effect of topography on average surface albedo in the ultraviolet wavelength range. Applied Optics, 2000, 39, 3592.	2.1	12
39	Plant growth monitoring and potential drought risk assessment by means of Earth observation data. International Journal of Remote Sensing, 2008, 29, 4943-4960.	1.3	12
40	Potential increase of solar irradiation and its influence on PV facades inside an urban canyon by increasing the ground-albedo. Solar Energy, 2018, 174, 7-15.	2.9	12
41	Use of the Shade-a-lator 6.2 model to assess the shading potential of riparian purple willow (Salix) Tj ETQq1 1 0.784314 rgBT /Overlock	1.6	11
42	Influence of low ozone episodes on erythemal UV-B radiation in Austria. Theoretical and Applied Climatology, 2018, 133, 319-329.	1.3	11
43	Changes of Photovoltaic Performance as a Function of Positioning Relative to the Focus Points of a Concentrator PV Module: Case Study. Applied Sciences (Switzerland), 2019, 9, 3392.	1.3	11
44	Preprocessing of total ozone content as an input parameter to UV Index forecast calculations. Journal of Geophysical Research, 2003, 108, .	3.3	9
45	Comparison of surface UV irradiance in mountainous regions derived from satellite observations and model calculations with ground-based measurements. Meteorologische Zeitschrift, 2010, 19, 481-490.	0.5	9
46	Comparison of Thermal Models for Ground-Mounted South-Facing Photovoltaic Technologies: A Practical Case Study. Energies, 2018, 11, 1114.	1.6	9
47	Modelling of radiative PAR transfer in a tunnel greenhouse. Mathematics and Computers in Simulation, 2001, 56, 357-368.	2.4	8
48	Sensitivity of UV Erythemally Effective Irradiance and Daily Dose to Spatial Variability in Total Ozone. Photochemistry and Photobiology, 2008, 84, 1149-1163.	1.3	8
49	Sensitivity of Erythemally Effective UV Irradiance and Daily Exposure to Temporal Variability in Total Ozone. Photochemistry and Photobiology, 2009, 85, 261-271.	1.3	7
50	Investigation of the 3-D actinic flux field in mountainous terrain. Atmospheric Research, 2011, 102, 300-310.	1.8	7
51	The Impacts of Tracking System Inaccuracy on CPV Module Power. Processes, 2020, 8, 1278.	1.3	7
52	Calibration of sunphotometer for measurements of turbidity. Theoretical and Applied Climatology, 1995, 51, 97-104.	1.3	6
53	Albedo Measurement System for UVA and the Visible Wavelength. Radiation Protection Dosimetry, 2000, 91, 197-199.	0.4	6
54	Sensitivity of Erythemally Effective UV Irradiance and Daily Exposure to Uncertainties in Measured Total Ozone. Photochemistry and Photobiology, 2007, 83, 433-444.	1.3	6

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55	The influence of the spatial resolution of topographic input data on the accuracy of 3-D UV actinic flux and irradiance calculations. Atmospheric Chemistry and Physics, 2012, 12, 2297-2312.	1.9	6
56	Potential impact of contrails on solar energy gain. Atmospheric Measurement Techniques, 2015, 8, 1089-1096.	1.2	6
57	Uncertainty analysis of a radiative transfer model using Monte Carlo method within 280â€“2500 nm region. Solar Energy, 2016, 132, 558-569.	2.9	6
58	SEBEpv â€“ New digital surface model based method for estimating the ground reflected irradiance in an urban environment. Solar Energy, 2020, 199, 400-410.	2.9	5
59	Evaluation of UVâ€“visible MAX-DOAS aerosol profiling products by comparison with ceilometer, sun photometer, and in situ observations in Vienna, Austria. Atmospheric Measurement Techniques, 2021, 14, 5299-5318.	1.2	5
60	Application of the model â€˜Heat Sourceâ€™ to assess the influence of meteorological components on stream temperature and simulation accuracy under heat wave conditions. Meteorologische Zeitschrift, 2016, 25, 389-406.	0.5	5
61	Mineral composition and growth of tomato and cucumber affected by imidazolium-based ionic liquids. Plant Physiology and Biochemistry, 2021, 167, 132-139.	2.8	4
62	Measurements of the Reflectivity in the Ultraviolet and Visible Wavelength Range in a Mountainous Region. Radiation Protection Dosimetry, 2000, 91, 193-195.	0.4	3
63	Validation of forward and inverse modes of a homogeneous canopy reflectance model. International Journal of Remote Sensing, 2008, 29, 1317-1338.	1.3	3
64	Coupling of urban energy balance model with 3-D radiation model to derive human thermal (dis)comfort. International Journal of Biometeorology, 2019, 63, 711-722.	1.3	3
65	Investigation of the effect of contrails on direct and diffuse irradiance. AIP Conference Proceedings, 2013, , .	0.3	2
66	Pyranometer offsets triggered by ambient meteorology: insights from laboratory and field experiments. Atmospheric Measurement Techniques, 2017, 10, 1169-1179.	1.2	2
67	Investigating the topographic influence on short-wave irradiance measurements: A case study for KanzelhÃ¶he Observatory, Austria. Atmospheric Research, 2019, 219, 106-113.	1.8	2
68	Factors affecting changes of spectral UV irradiance at the Sonnblick Observatory (3106 m, Austria). , 2005, , .		2
69	Leaf area index determination of wheat indicating heterogeneous soil conditions. , 2006, 6359, 120.		1
70	Empirical model for estimating daily erythemal UV radiation in the Central European region. Meteorologische Zeitschrift, 2007, 16, 183-190.	0.5	1
71	Abiotic and biotic data of the rivers Pinka and Lafnitz 2012 - 2014. Freshwater Metadata Journal, 0, , 1-12.	0.0	1
72	Concept for Intra-Hour PV Generation Forecast based on Distributed PV Inverter Data - An Approach Considering Machine Learning Techniques and Distributed Data. , 2018, , .		1

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73	<title>Total ozone content as input parameter for the prediction of the biologically effective UV radiation: analysis of the temporal and spatial variability over Austria</title>. , 2002, , .		0
74	<title>Comparison of different methods for the determination of the average UV albedo in a mountainous terrain</title>. , 2002, 4482, 424.		0
75	<title>Effective surface albedo due to snow cover of the surrounding area</title>. , 2002, 4482, 152.		0
76	Determination of the received daily visible and UV radiation dose as a function of weather, environment, and activity. , 2003, , .		0
77	Changes in spectral reflectance of crop canopies due to drought stress. , 2005, , .		0
78	Validation of OMI UV products: first results of comparisons with an Austrian ground station. , 2006, 6362, 605.		0
79	Changes In Spectral Reflectance Of Crop Canopies Due To Drought Stress. AIP Conference Proceedings, 2006, , .	0.3	0
80	Requirements for the spatial resolution, temporal resolution, and measuring uncertainties of total ozone measurements to calculate the erythemally effective UV radiation with a pre-selected accuracy. , 2006, , .		0
81	Ozone monitoring instrument satellite UV irradiance product correction using a global aerosol climatology. , 2009, , .		0