Philippe Blanc

List of Publications by Year
in descending order

93 papers	2,835 citations	218677 26 h-index	206112 48 g-index
120 all docs	120 docs citations	120 times ranked	2248 citing authors

#	ARTICLE	IF	CITATIONS
1	Validation and Bias Correction of Monthly δ18O Precipitation Time Series from ECHAM5-Wiso Model in Central Europe. Oxygen, 2022, 2, 109-124.	5.0	1
2	Statistical learning for NWP post-processing: A benchmark for solar irradiance forecasting. Solar Energy, 2022, 238, 132-149.	6.1	13
3	An alternative cloud index for estimating downwelling surface solar irradiance from various satellite imagers in the framework of a Heliosat-V method. Atmospheric Measurement Techniques, 2022, 15, 3683-3704.	3.1	2
4	Site adaptation of global horizontal irradiance from the Copernicus Atmospheric Monitoring Service for radiation using supervised machine learning techniques. Renewable Energy, 2022, 195, 92-106.	8.9	6
5	A Visual Support of Standard Procedures for Solar Radiation Quality Control. International Journal of Renewable Energy Development, 2021, 10, 401-414.	2.4	14
6	Synergy between Low Earth Orbit (LEO)—MODIS and Geostationary Earth Orbit (GEO)—GOES Sensors for Sargassum Monitoring in the Atlantic Ocean. Remote Sensing, 2021, 13, 1444.	4.0	8
7	Using Copernicus Atmosphere Monitoring Service (CAMS) Products to Assess Illuminances at Ground Level under Cloudless Conditions. Atmosphere, 2021, 12, 643.	2.3	1
8	Ground-based validation of aerosol optical depth from CAMS reanalysis project: An uncertainty input on direct normal irradiance under cloud-free conditions. Renewable Energy, 2021, 170, 847-857.	8.9	13
9	A New Approach for Satellite-Based Probabilistic Solar Forecasting with Cloud Motion Vectors. Energies, 2021, 14, 4951.	3.1	9
10	The evaluation of reanalysis and analysis products of solar radiation for Sindh province, Pakistan. Renewable Energy, 2020, 145, 347-362.	8.9	25
11	Beyond quadratic error: Case-study of a multiple criteria approach to the performance assessment of numerical forecasts of solar irradiance in the tropics. Renewable and Sustainable Energy Reviews, 2020, 117, 109471.	16.4	10
12	Evaluation of 24-Hours forecasts of global solar irradiation from IFS, GFS and McClear models. AIP Conference Proceedings, 2020, , .	0.4	5
13	Short-Term Forecasting of Large-Scale Clouds Impact on Downwelling Surface Solar Irradiation. Energies, 2020, 13, 6555.	3.1	10
14	A way to increase parabolic trough plant yield by roughly 2% using all sky imager derived DNI maps. AIP Conference Proceedings, 2020, , .	0.4	4
15	Evaluation of an all sky imager based nowcasting system for distinct conditions and five sites. AIP Conference Proceedings, 2020, , .	0.4	8
16	Benchmarking on improvement and site-adaptation techniques for modeled solar radiation datasets. Solar Energy, 2020, 201, 469-479.	6.1	42
17	Estimation of global horizontal irradiance using satellite-derived data across Middle East-North Africa: The role of aerosol optical properties and site-adaptation methodologies. Renewable Energy, 2020, 157, 312-331.	8.9	8
18	Validation of surface solar irradiances estimates and forecast under clear-sky conditions from the CAMS McClear model in Benguerir, Morocco. AIP Conference Proceedings, 2019, , .	0.4	6

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19	Shadow-camera based solar nowcasting system for shortest-term forecasts. Meteorologische Zeitschrift, 2019, 28, 255-270.	1.0	6
20	A New Clear-Sky Method for Assessing Photosynthetically Active Radiation at the Surface Level. Atmosphere, 2019, 10, 219.	2.3	8
21	Real-Time Uncertainty Specification of All Sky Imager Derived Irradiance Nowcasts. Remote Sensing, 2019, 11, 1059.	4.0	29
22	Monitoring aerosols over Europe: an assessment of the potential benefit of assimilating the VIS04 measurements from the future MTG/FCI geostationary imager. Atmospheric Measurement Techniques, 2019, 12, 1251-1275.	3.1	10
23	Benchmarking three low-cost, low-maintenance cloud height measurement systems and ECMWF cloud heights against a ceilometer. Solar Energy, 2018, 168, 140-152.	6.1	16
24	A fast and simple model to estimate the contribution of the circumsolar irradiance to measured broadband beam irradiance under cloud-free conditions in desert environment. Solar Energy, 2018, 163, 497-509.	6.1	14
25	Validation of an all‑sky imager‑based nowcasting system for industrial <scp>PV</scp> plants. Progress in Photovoltaics: Research and Applications, 2018, 26, 608-621.	8.1	51
26	Nowcasting of DNI maps for the solar field based on voxel carving and individual 3D cloud objects from all sky images. AIP Conference Proceedings, 2018, , .	0.4	31
27	Downwelling surface solar irradiance in the tropical Atlantic Ocean: a comparison of re-analyses and satellite-derived data sets to PIRATA measurements. Ocean Science, 2018, 14, 1021-1056.	3.4	30
28	On the intrinsic timescales of temporal variability in measurements of the surface solar radiation. Nonlinear Processes in Geophysics, 2018, 25, 19-37.	1.3	6
29	A database of 10 min average measurements of solar radiation and meteorological variables in Ostrava, Czech Republic. Earth System Science Data, 2018, 10, 837-846.	9.9	5
30	Towards a standardized procedure to assess solar forecast accuracy: A new ramp and time alignment metric. Solar Energy, 2017, 150, 408-422.	6.1	52
31	Shadow camera system for the generation of solar irradiance maps. Solar Energy, 2017, 157, 157-170.	6.1	39
32	Validation of spatially resolved all sky imager derived DNI nowcasts. AIP Conference Proceedings, 2017, , .	0.4	16
33	LCA of emerging technologies: addressing high uncertainty on inputs' variability when performing global sensitivity analysis. Science of the Total Environment, 2017, 578, 268-280.	8.0	71
34	ENVI‑PV: an interactive Web Client for multi‑criteria life cycle assessment of photovoltaic systems worldwide. Progress in Photovoltaics: Research and Applications, 2017, 25, 484-498.	8.1	15
35	Short-term forecasting based on all-sky cameras. , 2017, , 153-178.		10
36	Short-term forecasting of high resolution local DNI maps with multiple fish-eye cameras in stereoscopic mode. AIP Conference Proceedings, 2017, , .	0.4	29

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37	Short-term solar power forecasting based on satellite images. , 2017, , 179-198.		17
38	Performance Evaluation of Radiation Sensors for the Solar Energy Sector. Meteorologische Zeitschrift, 2017, 26, 485-505.	1.0	17
39	Improving direct normal irradiance retrieval in cloud-free, but high aerosol load conditions by using aerosol optical depth. Meteorologische Zeitschrift, 2017, 26, 475-483.	1.0	5
40	A new method for estimating UV fluxes at ground level in cloud-free conditions. Atmospheric Measurement Techniques, 2017, 10, 4965-4978.	3.1	10
41	Fast radiative transfer parameterisation for assessing the surface solar irradiance: The Heliosatâ€'4 method. Meteorologische Zeitschrift, 2017, 26, 33-57.	1.0	141
42	Characterizing Temporal Variability in Measurements of Surface Solar Radiation and its Dependence on Climate. Energy Procedia, 2016, 97, 164-171.	1.8	5
43	Analysis of the Long-term Evolution of the Solar Resource in China and Its Main Contributors. Energy Procedia, 2016, 91, 1041-1052.	1.8	0
44	The Solar Forecast Similarity Method: A New Method to Compute Solar Radiation Forecasts for the Next Day. Energy Procedia, 2016, 91, 1018-1023.	1.8	8
45	Validation of HelioClim-3 Version 4, HelioClim-3 Version 5 and MACC-RAD Using 14 BSRN Stations. Energy Procedia, 2016, 91, 1059-1069.	1.8	27
46	Preliminary survey on site-adaptation techniques for satellite-derived and reanalysis solar radiation datasets. Solar Energy, 2016, 132, 25-37.	6.1	136
47	A database of multi-year (2004â€"2010) quality-assured surface solar hourly irradiation measurements for the Egyptian territory. Earth System Science Data, 2016, 8, 105-113.	9.9	22
48	Interoperable Exchange of Surface Solar Irradiance Observations: A Challenge. Energy Procedia, 2015, 76, 113-120.	1.8	4
49	Technical Note: A novel parameterization of the transmissivity due to ozone absorption in the &lt;i&gt;k&lt;/i&gt;-distribution method and correlated-&lt;i&gt;k&lt;/i&gt; approximation of Kato et al. (1999) over the UV band. Atmospheric Chemistry and Physics, 2015, 15, 7449-7456.	4.9	9
50	Can AERONET data be used to accurately model the monochromatic beam and circumsolar irradiances under cloud-free conditions in desert environment?. Atmospheric Measurement Techniques, 2015, 8, 5099-5112.	3.1	8
51	Validation of the Surface Downwelling Solar Irradiance Estimates of the HelioClim-3 Database in Egypt. Remote Sensing, 2015, 7, 9269-9291.	4.0	44
52	Yearly changes in surface solar radiation in New Caledonia. Advances in Science and Research, 2015, 12, 1-4.	1.0	6
53	Validating surface downwelling solar irradiances estimated by the McClear model under cloud-free skies in the United Arab Emirates. Solar Energy, 2015, 114, 17-31.	6.1	27
54	Estimating the photosynthetically active radiation under clear skies by means of a new approach. Advances in Science and Research, 2015, 12, 5-10.	1.0	16

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55	Ensemble forecast of solar radiation using TIGGE weather forecasts and HelioClim database. Solar Energy, 2015, 120, 232-243.	6.1	23
56	Solar irradiances measured using SPN1 radiometers: uncertainties and clues for development. Atmospheric Measurement Techniques, 2014, 7, 4267-4283.	3.1	29
57	How close to detailed spectral calculations is the k-distribution method and correlated-k approximation of Kato etâ€‰al. (1999) in each spectral interval?. Meteorologische Zeitschrift, 2014, 23, 547-556.	1.0	13
58	Review of Satellite-based Surface Solar Irradiation Databases for the Engineering, the Financing and the Operating of Photovoltaic Systems. Energy Procedia, 2014, 57, 1383-1391.	1.8	26
59	Estimation of the Circumsolar Ratio in a Turbid Atmosphere. Energy Procedia, 2014, 57, 1169-1178.	1.8	7
60	Twelve monthly maps of ground Albedo parameters derived from MODIS data sets. , 2014, , .		12
61	Corrigendum to "Decoupling the effects of clear atmosphere and clouds to simplify calculations of the broadband solar irradiance at ground level" published in Geosci. Model Dev., 7, 1661â€"1669, 2014. Geoscientific Model Development, 2014, 7, 2409-2409.	3.6	4
62	Direct normal irradiance related definitions and applications: The circumsolar issue. Solar Energy, 2014, 110, 561-577.	6.1	150
63	Very short term forecasting of the Global Horizontal Irradiance through Helioclim maps. , 2014, , .		1
64	Very short term forecasting of the Global Horizontal Irradiance using a spatio-temporal autoregressive model. Renewable Energy, 2014, 72, 291-300.	8.9	79
65	Thermodynamic properties of chlorite and berthierine derived from calorimetric measurements. Physics and Chemistry of Minerals, 2014, 41, 603-615.	0.8	12
66	The HelioClim-1 Database of Daily Solar Radiation at Earth Surface: An Example of the Benefits of GEOSS Data-CORE. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 1745-1753.	4.9	28
67	Accuracy of ground surface broadband shortwave radiation monitoring. Journal of Geophysical Research D: Atmospheres, 2014, 119, 13,838.	3.3	37
68	Decoupling the effects of clear atmosphere and clouds to simplify calculations of the broadband solar irradiance at ground level. Geoscientific Model Development, 2014, 7, 1661-1669.	3.6	32
69	Characterizing measurements campaigns for an innovative calibration approach of the global horizontal irradiation estimated by HelioClim-3. Renewable Energy, 2013, 57, 339-347.	8.9	25
70	McClear: a new model estimating downwelling solar radiation at ground level in clear-sky conditions. Atmospheric Measurement Techniques, 2013, 6, 2403-2418.	3.1	272
71	Thermodynamic properties of saponite, nontronite, and vermiculite derived from calorimetric measurements. American Mineralogist, 2013, 98, 1834-1847.	1.9	21
72	Benefit of GEOSS Interoperability in Assessment of Environmental Impacts Illustrated by the Case of Photovoltaic Systems. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2012, 5, 1722-1728.	4.9	9

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73	The SG2 algorithm for a fast and accurate computation of the position of the Sun for multi-decadal time period. Solar Energy, 2012, 86, 3072-3083.	6.1	95
74	A Method to Better Account for Modulation Transfer Functions in ARSIS-Based Pansharpening Methods. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 800-808.	6.3	32
75	The HelioClim Project: Surface Solar Irradiance Data for Climate Applications. Remote Sensing, 2011, 3, 343-361.	4.0	130
76	Study of the MLB parameterisation for change in surface solar irradiance with sun zenith angle in clear sky. Advances in Science and Research, 2011, 6, 233-236.	1.0	3
77	High Spatial Resolution Solar Atlas in Provence-Alpes-CÃ´te d'Azur. , 2011, , .		4
78	Solar Atlas for the Southern and Eastern Mediterranean. , 2011, , .		4
79	The Performances of the Helioclim Databases in Mozambique. , 2011, , .		1
80	Resolution enhancement of input parameters in a demand side management model. , 2010, , .		0
81	Estimate of clay minerals amounts from XRD pattern modeling: The Arquant model. Physics and Chemistry of the Earth, 2007, 32, 135-144.	2.9	29
82	Cement/clay interactions â€" A review: Experiments, natural analogues, and modeling. Waste Management, 2006, 26, 776-788.	7.4	222
83	Solar radiation climate in Africa. Solar Energy, 2004, 76, 733-744.	6.1	73
84	Modeling diffusion of an alkaline plume in a clay barrier. Applied Geochemistry, 2004, 19, 1505-1515.	3.0	99
85	The Operational Calibration of Images Taken in the Visible Channel of the Meteosat Series of Satellites. Journal of Atmospheric and Oceanic Technology, 2002, 19, 1285-1293.	1.3	23
86	Using iterated rational filter banks within the ARSIS concept for producing 10m Landsat multispectral images. International Journal of Remote Sensing, 1998, 19, 2331-2343.	2.9	46
87	Pupil Configuration for Extended Source Imaging with Optical Interferometry: a Computational Geometry Approach. , 0, , .		0
88	On the effective solar zenith and azimuth angles to use with measurements of hourly irradiation. Advances in Science and Research, 0, 13, 1-6.	1.0	7
89	On the temporal variability of the surface solar radiation by means of spectral representations. Advances in Science and Research, 0, 13, 121-127.	1.0	6
90	Validation of the new HelioClim-3 version 4 real-time and short-term forecast service using 14 BSRN stations. Advances in Science and Research, 0, 13, 129-136.	1.0	13

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91	Validation of three satellite-derived databases of surface solar radiation using measurements performed at 42 stations in Brazil. Advances in Science and Research, 0, 13, 81-86.	1.0	26
92	Do modelled or satellite-based estimates of surface solar irradiance accurately describe its temporal variability?. Advances in Science and Research, 0, 14, 35-48.	1.0	13
93	Applications of a shadow camera system for energy meteorology. Advances in Science and Research, 0, 15, 11-14.	1.0	8