

Martin Wild

List of Publications by Year in descending order

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193
papers

17,290
citations

22548

61
h-index

18400

124
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249
all docs

249
docs citations

249
times ranked

15483
citing authors

#	ARTICLE	IF	CITATIONS
1	Short-wave and long-wave surface radiation budgets in GCMs: a review based on the IPCC-AR4/CMIP3 models. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , 2022, 60, 932.	0.8	99
2	Decadal variations of blocking and storm tracks in centennial reanalyses. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , 2022, 71, 1586236.	0.8	15
3	Internal Variability of All-Sky and Clear-Sky Surface Solar Radiation on Decadal Timescales. <i>Journal of Geophysical Research D: Atmospheres</i> , 2022, 127, .	1.2	4
4	Meteorologically-Informed Spatial Planning of European PV Deployment to Reduce Multiday Generation Variability. <i>Earth's Future</i> , 2022, 10, .	2.4	3
5	Hourly Surface Observations Suggest Stronger Solar Dimming and Brightening at Sunrise and Sunset Over China. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL091422.	1.5	3
6	Potential Driving Factors on Surface Solar Radiation Trends over China in Recent Years. <i>Remote Sensing</i> , 2021, 13, 704.	1.8	10
7	Evidence for Clear-Sky Dimming and Brightening in Central Europe. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL092216.	1.5	25
8	Fifty-six years of surface solar radiation and sunshine duration over São Paulo, Brazil: 1961–2016. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 6593-6603.	1.9	4
9	Quantitative Analysis of Terrain Reflected Solar Radiation in Snow-Covered Mountains: A Case Study in Southeastern Tibetan Plateau. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2020JD034294.	1.2	11
10	Global trends in downward surface solar radiation from spatial interpolated ground observations during 1961-2019. <i>Journal of Climate</i> , 2021, , 1-56.	1.2	5
11	Climate change impacts on solar power generation and its spatial variability in Europe based on CMIP6. <i>Earth System Dynamics</i> , 2021, 12, 1099-1113.	2.7	23
12	Ecological and conceptual consequences of Arctic pollution. <i>Ecology Letters</i> , 2020, 23, 1827-1837.	3.0	31
13	Radiation dimming and decreasing water clarity fuel underwater darkening in lakes. <i>Science Bulletin</i> , 2020, 65, 1675-1684.	4.3	38
14	The global energy balance as represented in CMIP6 climate models. <i>Climate Dynamics</i> , 2020, 55, 553-577.	1.7	99
15	A hybrid method for reconstructing the historical evolution of aerosol optical depth from sunshine duration measurements. <i>Atmospheric Measurement Techniques</i> , 2020, 13, 3061-3079.	1.2	7
16	Changes in atmospheric shortwave absorption as important driver of dimming and brightening. <i>Nature Geoscience</i> , 2020, 13, 110-115.	5.4	35
17	Global Dimming and Brightening Features during the First Decade of the 21st Century. <i>Atmosphere</i> , 2020, 11, 308.	1.0	24
18	Observed and CMIP5-Simulated Radiative Flux Variability Over West Africa. <i>Earth and Space Science</i> , 2020, 7, e2019EA001017.	1.1	5

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19	A Revisit of Direct and Diffuse Solar Radiation in China Based on Homogeneous Surface Observations: Climatology, Trends, and Their Probable Causes. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2020JD032634.	1.2	10
20	European multidecadal solar variability badly captured in all centennial reanalyses except CERA20C. <i>Environmental Research Letters</i> , 2020, 15, 104021.	2.2	9
21	Bias in CMIP6 models as compared to observed regional dimming and brightening. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 16023-16040.	1.9	25
22	Estimating Shortwave Clear-Sky Fluxes From Hourly Global Radiation Records by Quantile Regression. <i>Earth and Space Science</i> , 2019, 6, 1532-1546.	1.1	7
23	Estimation of losses in solar energy production from air pollution in China since 1960 using surface radiation data. <i>Nature Energy</i> , 2019, 4, 657-663.	19.8	88
24	Causes of Dimming and Brightening in China Inferred from Homogenized Daily Clear-Sky and All-Sky in situ Surface Solar Radiation Records (1958–2016). <i>Journal of Climate</i> , 2019, 32, 5901-5913.	1.2	51
25	The Annual Cycle of Fractional Atmospheric Shortwave Absorption in Observations and Models: Spatial Structure, Magnitude, and Timing. <i>Journal of Climate</i> , 2019, 32, 6729-6748.	1.2	3
26	CMIP-5 models project photovoltaics are a no-regrets investment in Europe irrespective of climate change. <i>Energy</i> , 2019, 171, 135-148.	4.5	34
27	Numerical simulation of surface solar radiation over Southern Africa. Part 2: projections of regional and global climate models. <i>Climate Dynamics</i> , 2019, 53, 2197-2227.	1.7	7
28	Ground-Based Radiation Observational Method in Mountainous Areas. , 2019, , .		1
29	Improvement of Air Pollution in China Inferred from Changes between Satellite-Based and Measured Surface Solar Radiation. <i>Remote Sensing</i> , 2019, 11, 2910.	1.8	8
30	The cloud-free global energy balance and inferred cloud radiative effects: an assessment based on direct observations and climate models. <i>Climate Dynamics</i> , 2019, 52, 4787-4812.	1.7	39
31	Inter-hemispheric differences in energy budgets and cross-equatorial transport anomalies during the 20th century. <i>Climate Dynamics</i> , 2019, 53, 115-135.	1.7	13
32	Numerical simulation of surface solar radiation over Southern Africa. Part 1: Evaluation of regional and global climate models. <i>Climate Dynamics</i> , 2019, 52, 457-477.	1.7	23
33	A Revisit of Global Dimming and Brightening Based on the Sunshine Duration. <i>Geophysical Research Letters</i> , 2018, 45, 4281-4289.	1.5	74
34	Dimming in Iran since the 2000s and the potential underlying causes. <i>International Journal of Climatology</i> , 2018, 38, 1543-1559.	1.5	19
35	From Point to Area: Worldwide Assessment of the Representativeness of Monthly Surface Solar Radiation Records. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 13,857.	1.2	15
36	Validation of CM SAF CLARA-A2 and SARAHE Surface Solar Radiation Datasets over China. <i>Remote Sensing</i> , 2018, 10, 1977.	1.8	22

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37	Global Radiative Flux and Cloudiness Variability for the Period 1959–2010 in Belgium: A Comparison between Reanalyses and the Regional Climate Model MAR. <i>Atmosphere</i> , 2018, 9, 262.	1.0	11
38	Solar “brightening” impact on summer surface ozone between 1990 and 2010 in Europe – a model sensitivity study of the influence of the aerosol–radiation interactions. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 9741-9765.	1.9	6
39	Lethargic Response to Aerosol Emissions in Current Climate Models. <i>Geophysical Research Letters</i> , 2018, 45, 9814-9823.	1.5	19
40	Homogenization and Trend Analysis of the 1958–2016 In Situ Surface Solar Radiation Records in China. <i>Journal of Climate</i> , 2018, 31, 4529-4541.	1.2	61
41	Trends of surface solar radiation in unforced CMIP5 simulations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 469-484.	1.2	9
42	Towards Global Estimates of the Surface Energy Budget. <i>Current Climate Change Reports</i> , 2017, 3, 87-97.	2.8	18
43	Sunshine duration and global radiation trends in Italy (1959–2013): To what extent do they agree?. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 4312-4331.	1.2	21
44	Trends in downward surface solar radiation from satellites and ground observations over Europe during 1983–2010. <i>Remote Sensing of Environment</i> , 2017, 189, 108-117.	4.6	68
45	New estimates of the Earth radiation budget under cloud-free conditions and cloud radiative effects. <i>AIP Conference Proceedings</i> , 2017, , .	0.3	3
46	Fewer clouds in the Mediterranean: consistency of observations and climate simulations. <i>Scientific Reports</i> , 2017, 7, 41475.	1.6	47
47	Impact of climate change on future concentrated solar power (CSP) production. <i>AIP Conference Proceedings</i> , 2017, , .	0.3	10
48	Projected changes in surface solar radiation in CMIP5 global climate models and in EURO-CORDEX regional climate models for Europe. <i>Climate Dynamics</i> , 2017, 49, 2665-2683.	1.7	82
49	Changes in shortwave and longwave radiative fluxes as observed at BSRN sites and simulated with CMIP5 models. <i>AIP Conference Proceedings</i> , 2017, , .	0.3	4
50	The Global Energy Balance Archive (GEBA): A database for the worldwide measured surface energy fluxes. <i>AIP Conference Proceedings</i> , 2017, , .	0.3	5
51	Progress and challenges in the estimation of the global energy balance. <i>AIP Conference Proceedings</i> , 2017, , .	0.3	3
52	Spatial Representativeness of Surface-Measured Variations of Downward Solar Radiation. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 13,319.	1.2	20
53	Energy budgets and transports: global evolution and spatial patterns during the twentieth century as estimated in two AMIP-like experiments. <i>Climate Dynamics</i> , 2017, 48, 1793-1812.	1.7	7
54	Homogenization of a surface solar radiation dataset over Italy. <i>AIP Conference Proceedings</i> , 2017, , .	0.3	6

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55	Cloud effects on atmospheric solar absorption in light of most recent surface and satellite measurements. AIP Conference Proceedings, 2017, , .	0.3	4
56	Causes of the sharp increase in the time series of surface solar radiation in China between 1990 and 1993. AIP Conference Proceedings, 2017, , .	0.3	0
57	Urbanization effect on trends in sunshine duration in China. Annales Geophysicae, 2017, 35, 839-851.	0.6	18
58	Revising shortwave and longwave radiation archives in view of possible revisions of the WSG and WISG reference scales: methods and implications. Atmospheric Measurement Techniques, 2017, 10, 3057-3071.	1.2	9
59	The Global Energy Balance Archive (GEBA) version 2017: a database for worldwide measured surface energy fluxes. Earth System Science Data, 2017, 9, 601-613.	3.7	91
60	Evaluation of Radiation Components in a Global Freshwater Model with Station-Based Observations. Water (Switzerland), 2016, 8, 450.	1.2	16
61	Mixed-layer ocean responses to anthropogenic aerosol dimming from 1870 to 2000. Journal of Geophysical Research D: Atmospheres, 2016, 121, 49-66.	1.2	8
62	A new look at solar dimming and brightening in China. Geophysical Research Letters, 2016, 43, 11,777.	1.5	53
63	Decadal changes in radiative fluxes at land and ocean surfaces and their relevance for global warming. Wiley Interdisciplinary Reviews: Climate Change, 2016, 7, 91-107.	3.6	124
64	The solar dimming/brightening effect over the Mediterranean Basin in the period 1979–2012. Journal of Atmospheric and Solar-Terrestrial Physics, 2016, 150-151, 31-46.	0.6	37
65	Is global dimming and brightening in Japan limited to urban areas?. Atmospheric Chemistry and Physics, 2016, 16, 13969-14001.	1.9	20
66	Detection of dimming/brightening in Italy from homogenized all-sky and clear-sky surface solar radiation records and underlying causes (1959–2013). Atmospheric Chemistry and Physics, 2016, 16, 11145-11161.	1.9	50
67	Global dimming and urbanization: did stronger negative SSR trends collocate with regions of population growth?. Atmospheric Chemistry and Physics, 2016, 16, 2719-2725.	1.9	12
68	Interannual variation of global net radiation flux as measured from space. Journal of Geophysical Research D: Atmospheres, 2016, 121, 6877-6891.	1.2	10
69	On the Zonal Near-Constancy of Fractional Solar Absorption in the Atmosphere. Journal of Climate, 2016, 29, 3423-3440.	1.2	16
70	An imperative to monitor Earth's energy imbalance. Nature Climate Change, 2016, 6, 138-144.	8.1	284
71	Comparison of Radiative Energy Flows in Observational Datasets and Climate Modeling. Journal of Applied Meteorology and Climatology, 2016, 55, 93-117.	0.6	12
72	Disentangling greenhouse warming and aerosol cooling to reveal Earth's climate sensitivity. Nature Geoscience, 2016, 9, 286-289.	5.4	86

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73	Impact of geolocations of validation data on the evaluation of surface incident shortwave radiation from <sc>Earth System Models</sc>. Journal of Geophysical Research D: Atmospheres, 2015, 120, 6825-6844.	1.2	39
74	Evaluation of the radiation budget with a regional climate model over Europe and inspection of dimming and brightening. Journal of Geophysical Research D: Atmospheres, 2015, 120, 1951-1971.	1.2	25
75	Relationship between sunshine duration and temperature trends across Europe since the second half of the twentieth century. Journal of Geophysical Research D: Atmospheres, 2015, 120, 10,823-10,836.	1.2	31
76	Dimming over the oceans: Transient anthropogenic aerosol plumes in the twentieth century. Journal of Geophysical Research D: Atmospheres, 2015, 120, 3465-3484.	1.2	11
77	Reassessment and update of long-term trends in downward surface shortwave radiation over Europe (1939-2012). Journal of Geophysical Research D: Atmospheres, 2015, 120, 9555-9569.	1.2	116
78	Particulate matter, air quality and climate: lessons learned and future needs. Atmospheric Chemistry and Physics, 2015, 15, 8217-8299.	1.9	641
79	New evidence on the dimming/brightening phenomenon and decreasing diurnal temperature range in Iran (1961-2009). International Journal of Climatology, 2015, 35, 2065-2079.	1.5	10
80	An observation-constrained multi-physics WRF ensemble for simulating European mega heat waves. Geoscientific Model Development, 2015, 8, 2285-2298.	1.3	44
81	The impact of climate change on photovoltaic power generation in Europe. Nature Communications, 2015, 6, 10014.	5.8	236
82	The effect of aerosols and sea surface temperature on China's climate in the late twentieth century from ensembles of global climate simulations. Journal of Geophysical Research D: Atmospheres, 2015, 120, 2261-2279.	1.2	26
83	The energy balance over land and oceans: an assessment based on direct observations and CMIP5 climate models. Climate Dynamics, 2015, 44, 3393-3429.	1.7	239
84	Analysis of surface incident shortwave radiation from four satellite products. Remote Sensing of Environment, 2015, 165, 186-202.	4.6	111
85	Projections of long-term changes in solar radiation based on CMIP5 climate models and their influence on energy yields of photovoltaic systems. Solar Energy, 2015, 116, 12-24.	2.9	165
86	The CLIMIX model: A tool to create and evaluate spatially-resolved scenarios of photovoltaic and wind power development. Renewable and Sustainable Energy Reviews, 2015, 42, 1-15.	8.2	47
87	Direct and semi-direct aerosol radiative effect on the Mediterranean climate variability using a coupled regional climate system model. Climate Dynamics, 2015, 44, 1127-1155.	1.7	110
88	Pollution trends over Europe constrain global aerosol forcing as simulated by climate models. Geophysical Research Letters, 2014, 41, 2176-2181.	1.5	75
89	Spatial representativeness of ground-based solar radiation measurements-Extension to the full Meteosat disk. Journal of Geophysical Research D: Atmospheres, 2014, 119, 11,760-11,771.	1.2	26
90	Cloud radiative forcing intercomparison between fully coupled CMIP5 models and CERES satellite data. Annales Geophysicae, 2014, 32, 793-807.	0.6	34

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91	Rethinking solar resource assessments in the context of global dimming and brightening. Solar Energy, 2014, 99, 272-282.	2.9	64
92	Global observations of aerosol-cloud-precipitation-climate interactions. Reviews of Geophysics, 2014, 52, 750-808.	9.0	316
93	Quantifying the respective roles of aerosols and clouds in the strong brightening since the early 2000s over the Iberian Peninsula. Journal of Geophysical Research D: Atmospheres, 2014, 119, 10,382.	1.2	48
94	Urban impacts on mean and trend of surface incident solar radiation. Geophysical Research Letters, 2014, 41, 4664-4668.	1.5	30
95	Global Dimming and Brightening. , 2014, , 39-47.		7
96	Contribution of anthropogenic sulfate aerosols to the changing Euro-Mediterranean climate since 1980. Geophysical Research Letters, 2014, 41, 5605-5611.	1.5	110
97	Solar absorption over Europe from collocated surface and satellite observations. Journal of Geophysical Research D: Atmospheres, 2014, 119, 3420-3437.	1.2	19
98	Isoprene emissions over Asia 1979-2012: impact of climate and land-use changes. Atmospheric Chemistry and Physics, 2014, 14, 4587-4605.	1.9	114
99	Effect of water vapor on the determination of aerosol direct radiative effect based on the AERONET fluxes. Atmospheric Chemistry and Physics, 2014, 14, 6103-6110.	1.9	11
100	Evaluations of atmospheric downward longwave radiation from 44 coupled general circulation models of CMIP5. Journal of Geophysical Research D: Atmospheres, 2014, 119, 4486-4497.	1.2	32
101	Evaporation trends in Spain: a comparison of Class A pan and Piche atmometer measurements. Climate Research, 2014, 61, 277-288.	0.4	6
102	Decadal variation of surface solar radiation in the Tibetan Plateau from observations, reanalysis and model simulations. Climate Dynamics, 2013, 40, 2073-2086.	1.7	61
103	Validation and stability assessment of the monthly mean CM SAF surface solar radiation dataset over Europe against a homogenized surface dataset (1983-2005). Remote Sensing of Environment, 2013, 134, 355-366.	4.6	73
104	Spatial representativeness of ground-based solar radiation measurements. Journal of Geophysical Research D: Atmospheres, 2013, 118, 8585-8597.	1.2	81
105	Long-term changes in the radiative effects of aerosols and clouds in a mid-latitude region (1985-2010). Global and Planetary Change, 2013, 111, 288-295.	1.6	39
106	Global and diffuse solar radiation in Spain: Building a homogeneous dataset and assessing their trends. Global and Planetary Change, 2013, 100, 343-352.	1.6	93
107	The global energy balance from a surface perspective. Climate Dynamics, 2013, 40, 3107-3134.	1.7	368
108	Measurement Methods Affect the Observed Global Dimming and Brightening. Journal of Climate, 2013, 26, 4112-4120.	1.2	33

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109	Validation of monthly surface solar radiation over Europe derived from the CM SAF dataset against homogenized GEBA series (1983-2005). , 2013, , .		0
110	A new diagram of the global energy balance. AIP Conference Proceedings, 2013, , .	0.3	9
111	Testing the homogeneity of short-term surface solar radiation series in Europe. , 2013, , .		18
112	Feasibility of sunshine duration records to detect changes in atmospheric turbidity: A case study in Valencia (Spain). AIP Conference Proceedings, 2013, , .	0.3	2
113	Relevance of decadal variations in surface radiative fluxes for climate change. AIP Conference Proceedings, 2013, , .	0.3	5
114	The sensitivity of the modeled energy budget and hydrological cycle to CO ₂ and solar forcing. Earth System Dynamics, 2013, 4, 253-266.	2.7	14
115	Evaluation of multidecadal variability in CMIP5 surface solar radiation and inferred underestimation of aerosol direct effects over Europe, China, Japan, and India. Journal of Geophysical Research D: Atmospheres, 2013, 118, 6311-6336.	1.2	69
116	New insights into the history of the Campbellâ€”Stokes sunshineâ€”recorder. Weather, 2013, 68, 327-331.	0.6	24
117	Impact of volcanic stratospheric aerosols on diurnal temperature range in Europe over the past 200â€”years: Observations versus model simulations. Journal of Geophysical Research D: Atmospheres, 2013, 118, 9064-9077.	1.2	7
118	Decadal variations in estimated surface solar radiation over Switzerland since the late 19th century. Atmospheric Chemistry and Physics, 2012, 12, 8635-8644.	1.9	77
119	Atmospheric impacts on climatic variability of surface incident solar radiation. Atmospheric Chemistry and Physics, 2012, 12, 9581-9592.	1.9	116
120	An update on Earth's energy balance in light of the latest global observations. Nature Geoscience, 2012, 5, 691-696.	5.4	703
121	Impact of Greenland's topographic height on precipitation and snow accumulation in idealized simulations. Journal of Geophysical Research, 2012, 117, .	3.3	27
122	Enlightening Global Dimming and Brightening. Bulletin of the American Meteorological Society, 2012, 93, 27-37.	1.7	381
123	The Global Character of the Flux of Downward Longwave Radiation. Journal of Climate, 2012, 25, 2329-2340.	1.2	99
124	Increasing cloud cover in the 20th century: review and new findings in Spain. Climate of the Past, 2012, 8, 1199-1212.	1.3	40
125	Multi-decadal variation of the net downward shortwave radiation over south Asia: The solar dimming effect. Atmospheric Environment, 2012, 50, 360-372.	1.9	55
126	New Directions: A facelift for the picture of the global energy balance. Atmospheric Environment, 2012, 55, 366-367.	1.9	29

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127	Recent regional surface solar radiation dimming and brightening patterns: inter-hemispherical asymmetry and a dimming in the Southern Hemisphere. <i>Atmospheric Science Letters</i> , 2012, 13, 43-48.	0.8	28
128	Decadal variability of aerosol optical depth in Europe and its relationship to the temporal shift of the North Atlantic Oscillation in the realm of dimming and brightening. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	31
129	Implementation and evaluation of aerosol and cloud microphysics in a regional climate model. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	43
130	Simulation of dimming and brightening in Europe from 1958 to 2001 using a regional climate model. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	26
131	The roles of aerosol, water vapor and cloud in future global dimming/brightening. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	56
132	Global precipitation response to changing forcings since 1870. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 9961-9970.	1.9	18
133	Aerosol emissions and dimming/brightening in Europe: Sensitivity studies with ECHAM5-HAM. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	69
134	Assessment of global dimming and brightening in IPCC-AR4/CMIP3 models and ERA40. <i>Climate Dynamics</i> , 2011, 37, 1671-1688.	1.7	46
135	Constraints on Climate Sensitivity from Radiation Patterns in Climate Models. <i>Journal of Climate</i> , 2011, 24, 1034-1052.	1.2	40
136	Assessment of BSRN radiation records for the computation of monthly means. <i>Atmospheric Measurement Techniques</i> , 2011, 4, 339-354.	1.2	138
137	Review on Estimation of Land Surface Radiation and Energy Budgets From Ground Measurement, Remote Sensing and Model Simulations. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2010, 3, 225-240.	2.3	277
138	The Earth radiation balance as driver of the global hydrological cycle. <i>Environmental Research Letters</i> , 2010, 5, 025203.	2.2	81
139	Influence of NAO and clouds on long-term seasonal variations of surface solar radiation in Europe. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	68
140	Influence of climate shifts on decadal variations of surface solar radiation in Alaska. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	19
141	Introduction to special section on Global Dimming and Brightening. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	11
142	Evidence for decadal variation in global terrestrial evapotranspiration between 1982 and 2002: 1. Model development. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	103
143	Consistency of global satellite-derived aerosol and cloud data sets with recent brightening observations. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	49
144	Evidence for decadal variation in global terrestrial evapotranspiration between 1982 and 2002: 2. Results. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	97

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145	Surface radiative fluxes over the pan-Arctic land region: Variability and trends. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	16
146	Atmospheric composition change: Climate-Chemistry interactions. <i>Atmospheric Environment</i> , 2009, 43, 5138-5192.	1.9	243
147	Impact of changes in diffuse radiation on the global land carbon sink. <i>Nature</i> , 2009, 458, 1014-1017.	13.7	858
148	On the relationship between diurnal temperature range and surface solar radiation in Europe. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	73
149	Significant decadal brightening of downwelling shortwave in the continental United States. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	106
150	How well do IPCC-AR4/CMIP3 climate models simulate global dimming/brightening and twentieth-century daytime and nighttime warming?. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	44
151	Trends in aerosol radiative effects over China and Japan inferred from observed cloud cover, solar dimming, and solar brightening. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	135
152	Global dimming and brightening: An update beyond 2000. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	177
153	Decadal changes in shortwave irradiance at the surface in the period from 1960 to 2000 estimated from Global Energy Balance Archive Data. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	51
154	Global dimming and brightening: A review. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	802
155	Anthropogenic and natural contributions to regional trends in aerosol optical depth, 1980-2006. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	200
156	A regional perspective on trends in continental evaporation. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	273
157	Global Dimming and Brightening: International Workshop of the Israel Science Foundation on Global Dimming and Brightening; Ein Gedi, Israel, 10-14 February 2008. <i>Eos</i> , 2008, 89, 212-212.	0.1	10
158	Combined surface solar brightening and increasing greenhouse effect support recent intensification of the global land-based hydrological cycle. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	168
159	Diurnal temperature range over Europe between 1950 and 2005. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 6483-6498.	1.9	122
160	Decadal Changes in Surface Radiative Fluxes and Their Role in Global Climate Change. , 2008, , 155-167.		3
161	Impact of global dimming and brightening on global warming. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	283
162	Evaluation of Intergovernmental Panel on Climate Change Fourth Assessment soil moisture simulations for the second half of the twentieth century. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	40

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163	Trends in aerosol radiative effects over Europe inferred from observed cloud cover, solar "dimming," and solar "brightening". Journal of Geophysical Research, 2007, 112, .	3.3	230
164	Comment on "A perspective on global warming, dimming, and brightening". Eos, 2007, 88, 473-473.	0.1	3
165	Evaluation of clear-sky solar fluxes in GCMs participating in AMIP and IPCC-AR4 from a surface perspective. Journal of Geophysical Research, 2006, 111, .	3.3	64
166	Radiative Fluxes in the ECHAM5 General Circulation Model. Journal of Climate, 2006, 19, 3792-3809.	1.2	61
167	Cloud effects on the radiation budget based on ISCCP data (1991 to 1995). International Journal of Climatology, 2005, 25, 1103-1125.	1.5	47
168	From Dimming to Brightening: Decadal Changes in Solar Radiation at Earth's Surface. Science, 2005, 308, 847-850.	6.0	1,096
169	Solar radiation budgets in atmospheric model intercomparisons from a surface perspective. Geophysical Research Letters, 2005, 32, n/a-n/a.	1.5	57
170	A multi-data comparison of shortwave climate forcing changes. Geophysical Research Letters, 2005, 32, .	1.5	23
171	How accurate did GCMs compute the insolation at TOA for AMIP-2?. Geophysical Research Letters, 2005, 32, .	1.5	5
172	Atmospheric brown clouds: Impacts on South Asian climate and hydrological cycle. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 5326-5333.	3.3	1,234
173	Radiative forcing - measured at Earth's surface - corroborate the increasing greenhouse effect. Geophysical Research Letters, 2004, 31, .	1.5	78
174	On the consistency of trends in radiation and temperature records and implications for the global hydrological cycle. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	129
175	CLIMATE CHANGE: Is the Hydrological Cycle Accelerating?. Science, 2002, 298, 1345-1346.	6.0	220
176	Simulated turbulent fluxes over land from general circulation models and reanalyses compared with observations. International Journal of Climatology, 2002, 22, 1235-1247.	1.5	7
177	Evaluation of Downward Longwave Radiation in General Circulation Models. Journal of Climate, 2001, 14, 3227-3239.	1.2	110
178	Absorption of solar energy in cloudless and cloudy atmospheres over Germany and in GCMs. Geophysical Research Letters, 2000, 27, 959-962.	1.5	22
179	Assessment of GCM simulated snow albedo using direct observations. Climate Dynamics, 1999, 15, 405-418.	1.7	35
180	Discrepancies between model-calculated and observed shortwave atmospheric absorption in areas with high aerosol loadings. Journal of Geophysical Research, 1999, 104, 27361-27371.	3.3	46

#	ARTICLE	IF	CITATIONS
181	The disposition of radiative energy in the global climate system: GCM-calculated versus observational estimates. <i>Climate Dynamics</i> , 1998, 14, 853-869.	1.7	87
182	The radiative impact of a simple aerosol climatology on the Hadley Centre atmospheric GCM. <i>Quarterly Journal of the Royal Meteorological Society</i> , 1998, 124, 2517-2526.	1.0	56
183	The distribution of solar energy at the Earth's surface as calculated in the ECMWF re-analysis. <i>Geophysical Research Letters</i> , 1998, 25, 4373-4376.	1.5	26
184	Excessive transmission of solar radiation through the cloud-free atmosphere in GCMs. <i>Geophysical Research Letters</i> , 1998, 25, 2165-2168.	1.5	14
185	Baseline Surface Radiation Network (BSRN/WCRP): New Precision Radiometry for Climate Research. <i>Bulletin of the American Meteorological Society</i> , 1998, 79, 2115-2136.	1.7	778
186	Means and Trends of Shortwave Irradiance at the Surface Estimated from Global Energy Balance Archive Data. <i>Journal of Climate</i> , 1998, 11, 2042-2061.	1.2	282
187	The radiative impact of a simple aerosol climatology on the Hadley Centre atmospheric. <i>Quarterly Journal of the Royal Meteorological Society</i> , 1998, 124, 2517-2526.	1.0	52
188	GCM-Simulated Surface Energy Fluxes in Climate Change Experiments. <i>Journal of Climate</i> , 1997, 10, 3093-3110.	1.2	76
189	Regional climate simulation with a high resolution GCM: surface hydrology. <i>Climate Dynamics</i> , 1996, 12, 755-774.	1.7	34
190	Validation of General Circulation Model Radiative Fluxes Using Surface Observations. <i>Journal of Climate</i> , 1995, 8, 1309-1324.	1.2	183
191	Regional climate simulation with a high resolution GCM: surface radiative fluxes. <i>Climate Dynamics</i> , 1995, 11, 469-486.	1.7	45
192	Cloud "shrinking" and "optical thinning" in the "dimming" period and a subsequent recovery in the "brightening" period over China. <i>Environmental Research Letters</i> , 0, , .	2.2	1
193	Global dimming and brightening - evidence and agricultural implications.. <i>CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources</i> , 0, , 1-7.	0.6	24