Fred G Rose

List of Publications by Year
in descending order

56 papers	3,215 citations	304743 22 h-index	168389 53 g-index
57 all docs	57 docs citations	57 times ranked	3534 citing authors

#	Article	IF	Citations
1	Clouds and the Earthâ€™s Radiant Energy System (CERES) Energy Balanced and Filled (EBAF) Top-of-Atmosphere (TOA) Edition-4.0 Data Product. Journal of Climate, 2018, 31, 895-918.	3.2	514
2	Surface Irradiances Consistent with CERES-Derived Top-of-Atmosphere Shortwave and Longwave Irradiances. Journal of Climate, 2013, 26, 2719-2740.	3.2	363
3	Surface Irradiances of Edition 4.0 Clouds and the Earthâ€™s Radiant Energy System (CERES) Energy Balanced and Filled (EBAF) Data Product. Journal of Climate, 2018, 31, 4501-4527.	3.2	275
4	Achieving Climate Change Absolute Accuracy in Orbit. Bulletin of the American Meteorological Society, 2013, 94, 1519-1539.	3.3	239
5	Improvements of top-of-atmosphere and surface irradiance computations with CALIPSO-, CloudSat-, and MODIS-derived cloud and aerosol properties. Journal of Geophysical Research, 2011, 116, .	3.3	208
6	CERES Synoptic Product: Methodology and Validation of Surface Radiant Flux. Journal of Atmospheric and Oceanic Technology, 2015, 32, 1121-1143.	1.3	200
7	Relationships among cloud occurrence frequency, overlap, and effective thickness derived from CALIPSO and CloudSat merged cloud vertical profiles. Journal of Geophysical Research, 2010, 115, .	3.3	134
8	Advances in Understanding Top-of-Atmosphere Radiation Variability from Satellite Observations. Surveys in Geophysics, 2012, 33, 359-385.	4.6	117
9	The Continual Intercomparison of Radiation Codes: Results from Phase I. Journal of Geophysical Research, 2012, 117, .	3.3	112
10	Intercomparison of shortwave radiative transfer schemes in global aerosol modeling: results from the AeroCom Radiative Transfer Experiment. Atmospheric Chemistry and Physics, 2013, 13, 2347-2379.	4.9	94
11	Satellite and Ocean Data Reveal Marked Increase in Earthâ€™s Heating Rate. Geophysical Research Letters, 2021, 48, e2021GL093047.	4.0	93
12	Development and assessment of broadband surface albedo from Clouds and the Earth's Radiant Energy System Clouds and Radiation Swath data product. Journal of Geophysical Research, 2009, 114, .	3.3	75
13	Computation of Domain-Averaged Irradiance Using Satellite-Derived Cloud Properties. Journal of Atmospheric and Oceanic Technology, 2005, 22, 146-164.	1.3	71
14	Uncertainty Estimate of Surface Irradiances Computed with MODIS-, CALIPSO-, and CloudSat-Derived Cloud and Aerosol Properties. Surveys in Geophysics, 2012, 33, 395-412.	4.6	68
15	ACCOUNTING FOR MOLECULAR ABSORPTION WITHIN THE SPECTRAL RANGE OF THE CERES WINDOW CHANNEL. Journal of Quantitative Spectroscopy and Radiative Transfer, 1999, 61, 83-95.	2.3	61
16	Global allâ€sky shortwave direct radiative forcing of anthropogenic aerosols from combined satellite observations and GOCART simulations. Journal of Geophysical Research D: Atmospheres, 2013, 118, 655-669.	3.3	43
17	An Algorithm for the Constraining of Radiative Transfer Calculations to CERES-Observed Broadband Top-of-Atmosphere Irradiance. Journal of Atmospheric and Oceanic Technology, 2013, 30, 1091-1106.	1.3	41
18	Variability in global top-of-atmosphere shortwave radiation between 2000 and 2005. Geophysical Research Letters, 2007, 34, .	4.0	38

#	Article	IF	Citations
19	Impact of Ice Cloud Microphysics on Satellite Cloud Retrievals and Broadband Flux Radiative Transfer Model Calculations. Journal of Climate, 2018, 31, 1851-1864.	3.2	36
20	Photosynthetically active radiation from Clouds and the Earth's Radiant Energy System (CERES) products. Journal of Geophysical Research, 2007, 112, .	3.3	32
21	Deriving surface ultraviolet radiation from CERES surface and atmospheric radiation budget: Methodology. Journal of Geophysical Research, 2005, 110, n/a-n/a.	3.3	28
22	Cloud Effects on the Meridional Atmospheric Energy Budget Estimated from Clouds and the Earthâ€™s Radiant Energy System (CERES) Data. Journal of Climate, 2008, 21, 4223-4241.	3.2	26
23	Contrail radiative forcing over the Northern Hemisphere from 2006 Aqua MODIS data. Geophysical Research Letters, 2013, 40, 595-600.	4.0	26
24	Cloud occurrences and cloud radiative effects (CREs) from CERESâ€CALIPSOâ€CloudSatâ€MODIS (CCCM) and CloudSat radarâ€lidar (RL) products. Journal of Geophysical Research D: Atmospheres, 2017, 122, 8852-8884.	3.3	24
25	Effects of 3â€D clouds on atmospheric transmission of solar radiation: Cloud type dependencies inferred from Aâ€train satellite data. Journal of Geophysical Research D: Atmospheres, 2014, 119, 943-963.	3.3	23
26	Toward a Consistent Definition between Satellite and Model Clear-Sky Radiative Fluxes. Journal of Climate, 2020, 33, 61-75.	3.2	22
27	Determining the Shortwave Radiative Flux From Earth Polychromatic Imaging Camera. Journal of Geophysical Research D: Atmospheres, 2018, 123, 11,479.	3.3	20
28	Detection of Atmospheric Changes in Spatially and Temporally Averaged Infrared Spectra Observed from Space. Journal of Climate, 2011, 24, 6392-6407.	3.2	19
29	Radiative Transfer Modeling for the CLAMS Experiment. Journals of the Atmospheric Sciences, 2005, 62, 1053-1071.	1.7	17
30	Radiative forcing due to enhancements in tropospheric ozone and carbonaceous aerosols caused by Asian fires during spring 2008. Journal of Geophysical Research, 2012, 117, .	3.3	17
31	Observation-Based Decomposition of Radiative Perturbations and Radiative Kernels. Journal of Climate, 2018, 31, 10039-10058.	3.2	16
32	Radiative Heating Rates Computed With Clouds Derived From Satelliteâ€Based Passive and Active Sensors and their Effects on Generation of Available Potential Energy. Journal of Geophysical Research D: Atmospheres, 2019, 124, 1720-1740.	3.3	15
33	Using observations of deep convective systems to constrain atmospheric column absorption of solar radiation in the optically thick limit. Journal of Geophysical Research, 2008, 113, .	3.3	14
34	A radiation closure study of Arctic stratus cloud microphysical properties using the collocated satellite-surface data and Fu-Liou radiative transfer model. Journal of Geophysical Research D: Atmospheres, 2016, 121, 10,175-10,198.	3.3	14
35	Improving the modelling of shortâ€wave radiation through the use of a 3D scene construction algorithm. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 1870-1883.	2.7	13
36	Investigation of the Residual in Column-Integrated Atmospheric Energy Balance Using Cloud Objects. Journal of Climate, 2016, 29, 7435-7452.	3.2	13

#	Article	IF	Citations
37	Decomposing Shortwave Top-of-Atmosphere and Surface Radiative Flux Variations in Terms of Surface and Atmospheric Contributions. Journal of Climate, 2019, 32, 5003-5019.	3.2	12
38	Clouds and the Earth’s Radiant Energy System (CERES) Data Products for Climate Research. Journal of the Meteorological Society of Japan, 2015, 93, 597-612.	1.8	11
39	Global and Regional Entropy Production by Radiation Estimated from Satellite Observations. Journal of Climate, 2020, 33, 2985-3000.	3.2	8
40	Retrieval of Atmospheric and Cloud Property Anomalies and Their Trend from Temporally and Spatially Averaged Infrared Spectra Observed from Space. Journal of Climate, 2014, 27, 4403-4420.	3.2	7
41	Toward a more realistic representation of surface albedo in NASA CERES-derived surface radiative fluxes. Elementa, 2022, 10, .	3.2	7
42	Examining impacts of massâ€diameter (mâ€Ð) and areaâ€diameter (Aâ€Ð) relationships of ice particles on retrievals of effective radius and ice water content from radar and lidar measurements. Journal of Geophysical Research D: Atmospheres, 2017, 122, 3396-3420.	3.3	6
43	Regional Energy and Water Budget of a Precipitating Atmosphere over Ocean. Journal of Climate, 2021, 34, 4189-4205.	3.2	6
44	Surface energy budget changes over Central Australia during the early 21st century drought. International Journal of Climatology, 2017, 37, 159-168.	3.5	5
45	Evaluation of a General Circulation Model by the CERES Fluxâ€byâ€Cloud Type Simulator. Journal of Geophysical Research D: Atmospheres, 2017, 122, 10655-10668.	3.3	5
46	Uncertainty in Satellite-Derived Surface Irradiances and Challenges in Producing Surface Radiation Budget Climate Data Record. Remote Sensing, 2020, 12, 1950.	4.0	5
47	Unfiltering Earth Radiation Budget Experiment (ERBE) Scanner Radiances Using the CERES Algorithm and Its Evaluation with Nonscanner Observations. Journal of Atmospheric and Oceanic Technology, 2014, 31, 843-859.	1.3	4
48	Impacts of Partly Cloudy Pixels on Shortwave Broadband Irradiance Computations. Journal of Atmospheric and Oceanic Technology, 2019, 36, 369-386.	1.3	4
49	Examining Biases in Diurnally Integrated Shortwave Irradiances due to Two- and Four-Stream Approximations in a Cloudy Atmosphere. Journals of the Atmospheric Sciences, 2020, 77, 551-581.	1.7	3
50	Effects of electromagnetic wave interference on observations of the Earth radiation budget. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 253, 107157.	2.3	2
51	Evaluation of Regional Surface Energy Budget Over Ocean Derived From Satellites. Frontiers in Marine Science, 2021, 8, .	2.5	2
52	Advances in Understanding Top-of-Atmosphere Radiation Variability from Satellite Observations. Space Sciences Series of ISSI, 2012, , 27-53.	0.0	2
53	Correction of ocean hemispherical spectral reflectivity for longwave irradiance computations. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 171, 57-65.	2.3	1
54	Real-time mesoscale forecast support during the CLAMS field campaign. Advances in Atmospheric Sciences, 2007, 24, 599-605.	4.3	0

#	Article	IF	Citations
55	Uncertainty Estimate of Surface Irradiances Computed with MODIS-, CALIPSO-, and CloudSat-Derived Cloud and Aerosol Properties. Space Sciences Series of ISSI, 2012, , 63-80.	0.0	0
56	An Algorithm to Derive Temperature and Humidity Profile Changes Using Spatially and Temporally Averaged Spectral Radiance Differences. Journal of Atmospheric and Oceanic Technology, 2020, 37, 1173-1187.	1.3	0