

Seiji Kato

List of Publications by Citations

Source: <https://exaly.com/author-pdf/1243260/seiji-kato-publications-by-citations.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

83

papers

5,575

citations

36

h-index

74

g-index

87

ext. papers

6,488

ext. citations

4.7

avg, IF

5.44

L-index

#	Paper	IF	Citations
83	Toward Optimal Closure of the Earth's Top-of-Atmosphere Radiation Budget. <i>Journal of Climate</i> , 2009 , 22, 748-766	4.4	723
82	An update on Earth's energy balance in light of the latest global observations. <i>Nature Geoscience</i> , 2012 , 5, 691-696	18.3	509
81	Clouds and the Earth's Radiant Energy System (CERES) Energy Balanced and Filled (EBAF) Top-of-Atmosphere (TOA) Edition-4.0 Data Product. <i>Journal of Climate</i> , 2018 , 31, 895-918	4.4	319
80	Surface Irradiances Consistent with CERES-Derived Top-of-Atmosphere Shortwave and Longwave Irradiances. <i>Journal of Climate</i> , 2013 , 26, 2719-2740	4.4	316
79	Angular Distribution Models for Top-of-Atmosphere Radiative Flux Estimation from the Clouds and the Earth's Radiant Energy System Instrument on the Terra Satellite. Part I: Methodology. <i>Journal of Atmospheric and Oceanic Technology</i> , 2005 , 22, 338-351	2	217
78	The k-distribution method and correlated-k approximation for a shortwave radiative transfer model. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 1999 , 62, 109-121	2.1	192
77	The energy balance over land and oceans: an assessment based on direct observations and CMIP5 climate models. <i>Climate Dynamics</i> , 2015 , 44, 3393-3429	4.2	185
76	Achieving Climate Change Absolute Accuracy in Orbit. <i>Bulletin of the American Meteorological Society</i> , 2013 , 94, 1519-1539	6.1	183
75	Angular Distribution Models for Top-of-Atmosphere Radiative Flux Estimation from the Clouds and the Earth's Radiant Energy System Instrument on the Tropical Rainfall Measuring Mission Satellite. Part I: Methodology. <i>Journal of Applied Meteorology and Climatology</i> , 2003 , 42, 240-265		175
74	Improvements of top-of-atmosphere and surface irradiance computations with CALIPSO-, CloudSat-, and MODIS-derived cloud and aerosol properties. <i>Journal of Geophysical Research</i> , 2011 , 116,		174
73	Surface Irradiances of Edition 4.0 Clouds and the Earth's Radiant Energy System (CERES) Energy Balanced and Filled (EBAF) Data Product. <i>Journal of Climate</i> , 2018 , 31, 4501-4527	4.4	157
72	The albedo of Earth. <i>Reviews of Geophysics</i> , 2015 , 53, 141-163	23.1	138
71	CERES Synoptic Product: Methodology and Validation of Surface Radiant Flux. <i>Journal of Atmospheric and Oceanic Technology</i> , 2015 , 32, 1121-1143	2	130
70	The Observed State of the Energy Budget in the Early Twenty-First Century. <i>Journal of Climate</i> , 2015 , 28, 8319-8346	4.4	125
69	Relationships among cloud occurrence frequency, overlap, and effective thickness derived from CALIPSO and CloudSat merged cloud vertical profiles. <i>Journal of Geophysical Research</i> , 2010 , 115,		112
68	Angular Distribution Models for Top-of-Atmosphere Radiative Flux Estimation from the Clouds and the Earth's Radiant Energy System Instrument on the Terra Satellite. Part II: Validation. <i>Journal of Atmospheric and Oceanic Technology</i> , 2007 , 24, 564-584	2	109
67	Assessing 1D Atmospheric Solar Radiative Transfer Models: Interpretation and Handling of Unresolved Clouds. <i>Journal of Climate</i> , 2003 , 16, 2676-2699	4.4	109

66	Characterizing and understanding radiation budget biases in CMIP3/CMIP5 GCMs, contemporary GCM, and reanalysis. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013 , 118, 8166-8184	4.4	107
65	Large Contribution of Supercooled Liquid Clouds to the Solar Radiation Budget of the Southern Ocean. <i>Journal of Climate</i> , 2016 , 29, 4213-4228	4.4	102
64	Advances in Understanding Top-of-Atmosphere Radiation Variability from Satellite Observations. <i>Surveys in Geophysics</i> , 2012 , 33, 359-385	7.6	100
63	The Global Character of the Flux of Downward Longwave Radiation. <i>Journal of Climate</i> , 2012 , 25, 2329-2340	7.4	83
62	Intercomparison of shortwave radiative transfer codes and measurements. <i>Journal of Geophysical Research</i> , 2005 , 110,		74
61	Measuring Global Ocean Heat Content to Estimate the Earth Energy Imbalance. <i>Frontiers in Marine Science</i> , 2019 , 6,	4.5	69
60	Shortwave radiative closure studies for clear skies during the Atmospheric Radiation Measurement 2003 Aerosol Intensive Observation Period. <i>Journal of Geophysical Research</i> , 2006 , 111,		67
59	Uncertainty Estimate of Surface Irradiances Computed with MODIS-, CALIPSO-, and CloudSat-Derived Cloud and Aerosol Properties. <i>Surveys in Geophysics</i> , 2012 , 33, 395-412	7.6	61
58	Computation of Domain-Averaged Irradiance Using Satellite-Derived Cloud Properties. <i>Journal of Atmospheric and Oceanic Technology</i> , 2005 , 22, 146-164	2	61
57	Covariance between Arctic sea ice and clouds within atmospheric state regimes at the satellite footprint level. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015 , 120, 12656-12678	4.4	60
56	Determination of the thermal offset of the Eppley precision spectral pyranometer. <i>Applied Optics</i> , 2001 , 40, 472-84	1.7	53
55	A 3D cloud-construction algorithm for the EarthCARE satellite mission. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2011 , 137, 1042-1058	6.4	51
54	Solar zenith and viewing geometry-dependent errors in satellite retrieved cloud optical thickness: Marine stratocumulus case. <i>Journal of Geophysical Research</i> , 2009 , 114,		46
53	Estimate of satellite-derived cloud optical thickness and effective radius errors and their effect on computed domain-averaged irradiances. <i>Journal of Geophysical Research</i> , 2006 , 111,		44
52	Radiative effects of global MODIS cloud regimes. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016 , 121, 2299-2317	4.4	42
51	Observational constraints on atmospheric and oceanic cross-equatorial heat transports: revisiting the precipitation asymmetry problem in climate models. <i>Climate Dynamics</i> , 2016 , 46, 3239-3257	4.2	41
50	Boundary layer regulation in the southeast Atlantic cloud microphysics during the biomass burning season as seen by the A-train satellite constellation. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014 , 119, 11,288	4.4	38
49	Seasonal and interannual variations of top-of-atmosphere irradiance and cloud cover over polar regions derived from the CERES data set. <i>Geophysical Research Letters</i> , 2006 , 33,	4.9	37

48	An Algorithm for the Constraining of Radiative Transfer Calculations to CERES-Observed Broadband Top-of-Atmosphere Irradiance. <i>Journal of Atmospheric and Oceanic Technology</i> , 2013 , 30, 1091-1106	2	36
47	Defining Top-of-the-Atmosphere Flux Reference Level for Earth Radiation Budget Studies. <i>Journal of Climate</i> , 2002 , 15, 3301-3309	4.4	36
46	An examination of the nature of global MODIS cloud regimes. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014 , 119, 8362-8383	4.4	34
45	Regional Apparent Boundary Layer Lapse Rates Determined from CALIPSO and MODIS Data for Cloud-Height Determination. <i>Journal of Applied Meteorology and Climatology</i> , 2014 , 53, 990-1011	2.7	34
44	A study of subvisual clouds and their radiation effect with a synergy of CERES, MODIS, CALIPSO, and AIRS data. <i>Journal of Geophysical Research</i> , 2011 , 116, n/a-n/a		30
43	Interannual Variability of the Global Radiation Budget. <i>Journal of Climate</i> , 2009 , 22, 4893-4907	4.4	28
42	West Antarctic Ice Sheet Cloud Cover and Surface Radiation Budget from NASA A-Train Satellites. <i>Journal of Climate</i> , 2017 , 30, 6151-6170	4.4	23
41	Space-Based Observations for Understanding Changes in the Arctic-Boreal Zone. <i>Reviews of Geophysics</i> , 2020 , 58, e2019RG000652	23.1	23
40	Net radiative effects of dust in the tropical North Atlantic based on integrated satellite observations and in situ measurements. <i>Atmospheric Chemistry and Physics</i> , 2018 , 18, 11303-11322	6.8	21
39	Computation of Solar Radiative Fluxes by 1D and 3D Methods Using Cloudy Atmospheres Inferred from A-train Satellite Data. <i>Surveys in Geophysics</i> , 2012 , 33, 657-676	7.6	18
38	Cloud Effects on the Meridional Atmospheric Energy Budget Estimated from Clouds and the Earth's Radiant Energy System (CERES) Data. <i>Journal of Climate</i> , 2008 , 21, 4223-4241	4.4	18
37	Satellite and Ocean Data Reveal Marked Increase in Earth's Heating Rate. <i>Geophysical Research Letters</i> , 2021 , 48, e2021GL093047	4.9	18
36	Detection of Atmospheric Changes in Spatially and Temporally Averaged Infrared Spectra Observed from Space. <i>Journal of Climate</i> , 2011 , 24, 6392-6407	4.4	17
35	Evaluating Arctic cloud radiative effects simulated by NICAM with A-train. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016 , 121, 7041-7063	4.4	17
34	Effects of 3-D clouds on atmospheric transmission of solar radiation: Cloud type dependencies inferred from A-train satellite data. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014 , 119, 943-963	4.4	16
33	Observing Interannual Variations in Hadley Circulation Atmospheric Diabatic Heating and Circulation Strength. <i>Journal of Climate</i> , 2014 , 27, 4139-4158	4.4	15
32	Twilight Irradiance Reflected by the Earth Estimated from Clouds and the Earth's Radiant Energy System (CERES) Measurements. <i>Journal of Climate</i> , 2003 , 16, 2646-2650	4.4	15
31	Using observations of deep convective systems to constrain atmospheric column absorption of solar radiation in the optically thick limit. <i>Journal of Geophysical Research</i> , 2008 , 113,		14

30	Cloud Occurrences and Cloud Radiative Effects (CREs) from CCCM and CloudSat Radar-Lidar Products. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017 , 122, 8852-8884	4.4	13
29	Arctic Radiation-IceBridge Sea and Ice Experiment: The Arctic Radiant Energy System during the Critical Seasonal Ice Transition. <i>Bulletin of the American Meteorological Society</i> , 2017 , 98, 1399-1426	6.1	13
28	Impact of a cloud thermodynamic phase parameterization based on CALIPSO observations on climate simulation. <i>Journal of Geophysical Research</i> , 2012 , 117, n/a-n/a		13
27	Understanding Climate Feedbacks and Sensitivity Using Observations of Earth's Energy Budget. <i>Current Climate Change Reports</i> , 2016 , 2, 170-178	9	11
26	On the Lessons Learned from the Operations of the ERBE Nonscanner Instrument in Space and the Production of the Nonscanner TOA Radiation Budget Dataset. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2018 , 56, 5936-5947	8.1	11
25	Determining the Shortwave Radiative Flux From Earth Polychromatic Imaging Camera. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 11,479-11,491	4.4	10
24	Observation-Based Decomposition of Radiative Perturbations and Radiative Kernels.. <i>Journal of Climate</i> , 2018 , 31, 10039-10058	4.4	10
23	Investigation of the Residual in Column-Integrated Atmospheric Energy Balance Using Cloud Objects. <i>Journal of Climate</i> , 2016 , 29, 7435-7452	4.4	9
22	The link between outgoing longwave radiation and the altitude at which a spaceborne lidar beam is fully attenuated. <i>Atmospheric Measurement Techniques</i> , 2017 , 10, 4659-4685	4	8
21	Improving the modelling of short-wave radiation through the use of a 3D scene construction algorithm. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2015 , 141, 1870-1883	6.4	8
20	Cloud Object Analysis of CERES Aqua Observations of Tropical and Subtropical Cloud Regimes: Four-Year Climatology. <i>Journal of Climate</i> , 2016 , 29, 1617-1638	4.4	8
19	Radiative Heating Rates Computed With Clouds Derived From Satellite-Based Passive and Active Sensors and their Effects on Generation of Available Potential Energy. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019 , 124, 1720-1740	4.4	6
18	A Supplementary Clear-Sky Snow and Ice Recognition Technique for CERES Level 2 Products. <i>Journal of Atmospheric and Oceanic Technology</i> , 2013 , 30, 557-568	2	5
17	Unfiltering Earth Radiation Budget Experiment (ERBE) Scanner Radiances Using the CERES Algorithm and Its Evaluation with Nonscanner Observations. <i>Journal of Atmospheric and Oceanic Technology</i> , 2014 , 31, 843-859	2	4
16	Examining Impacts of Mass-Diameter (m-D) and Area-Diameter (A-D) Relationships of Ice Particles on Retrievals of Effective Radius and Ice Water Content from Radar and Lidar Measurements. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017 , 122, 3396-3420	4.4	3
15	Uncertainty in Satellite-Derived Surface Irradiances and Challenges in Producing Surface Radiation Budget Climate Data Record. <i>Remote Sensing</i> , 2020 , 12, 1950	5	3
14	Global and Regional Entropy Production by Radiation Estimated from Satellite Observations. <i>Journal of Climate</i> , 2020 , 33, 2985-3000	4.4	3
13	Toward a Better Surface Radiation Budget Analysis Over Sea Ice in the High Arctic Ocean: A Comparative Study Between Satellite, Reanalysis, and local-scale Observations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021 , 126, e2020JD032555	4.4	3

12	Cloud object analysis of CERES Aqua observations of tropical and subtropical cloud regimes: Evolution of cloud object size distributions during the Madden-Julian Oscillation. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2017 , 188, 148-158	2.1	2
11	Advances in Understanding Top-of-Atmosphere Radiation Variability from Satellite Observations. <i>Space Sciences Series of ISSI</i> , 2012 , 27-53	0.1	2
10	Using AIRS and ARM SGP Clear-Sky Observations to Evaluate Meteorological Reanalyses: A Hyperspectral Radiance Closure Approach. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 11,720-11,734	4.4	2
9	Effects of electromagnetic wave interference on observations of the Earth radiation budget. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2020 , 253, 107157	2.1	1
8	Correction of ocean hemispherical spectral reflectivity for longwave irradiance computations. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2016 , 171, 57-65	2.1	1
7	Examining Biases in Diurnally Integrated Shortwave Irradiances due to Two- and Four-Stream Approximations in a Cloudy Atmosphere. <i>Journals of the Atmospheric Sciences</i> , 2020 , 77, 551-581	2.1	1
6	Regional Energy and Water Budget of a Precipitating Atmosphere over Ocean. <i>Journal of Climate</i> , 2021 , 34, 4189-4205	4.4	1
5	An Algorithm to Derive Temperature and Humidity Profile Changes Using Spatially and Temporally Averaged Spectral Radiance Differences. <i>Journal of Atmospheric and Oceanic Technology</i> , 2020 , 37, 1173 ² -1187		
4	Computation of Solar Radiative Fluxes by 1D and 3D Methods Using Cloudy Atmospheres Inferred from A-train Satellite Data. <i>Space Sciences Series of ISSI</i> , 2011 , 325-344	0.1	
3	Uncertainty Estimate of Surface Irradiances Computed with MODIS-, CALIPSO-, and CloudSat-Derived Cloud and Aerosol Properties. <i>Space Sciences Series of ISSI</i> , 2012 , 63-80	0.1	
2	Representativity of cloud-profiling radar observations for data assimilation in numerical weather prediction. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2021 , 147, 1801-1822	6.4	
1	Global Aerosol Direct Radiative Effect from CALIOP and C3M. <i>EPJ Web of Conferences</i> , 2016 , 119, 21001	0.3	