Joanna Joiner

List of Publications by Year in Descending Order

173 papers	12,919 citations	51 h-index	112 g-index
213 ext. papers	15,012 ext. citations	6.6 avg, IF	6.22 L-index

#	Paper	IF	Citations
173	A new method for inferring city emissions and lifetimes of nitrogen oxides from high-resolution nitrogen dioxide observations: a model study. *Atmospheric Chemistry and Physics*, **2022**, 22, 1333-1349	6.8	0
172	Skillful Seasonal Forecasts of Land Carbon Uptake in Northern Mid- and High Latitudes. *Geophysical Research Letters*, **2022**, 49,	4.9	1
171	Using Machine Learning for Timely Estimates of Ocean Color Information From Hyperspectral Satellite Measurements in the Presence of Clouds, Aerosols, and Sunglint. *Frontiers in Remote Sensing*, **2022**, 3,	1	1
170	Estimates of Hyperspectral Surface and Underwater UV Planar and Scalar Irradiances from OMI Measurements and Radiative Transfer Computations. *Remote Sensing*, **2022**, 14, 2278	5	
169	The Carbon Cycle of Southeast Australia During 2019–2020: Drought, Fires, and Subsequent Recovery. *AGU Advances*, **2021**, 2,	5.4	5
168	The TROPOSIF global sun-induced fluorescence dataset from the Sentinel-5P TROPOMI mission. *Earth System Science Data*, **2021**, 13, 5423-5440	10.5	9
167	New observations of NO₂ in the upper troposphere from TROPOMI. *Atmospheric Measurement Techniques*, **2021**, 14, 2389-2408	4	5
166	Modulation of Land Photosynthesis by the Indian Ocean Dipole: Satellite-Based Observations and CMIP6 Future Projections. *Earth's Future*, **2021**, 9, e2020EF001942	7.9	9
165	Explicit and consistent aerosol correction for visible wavelength satellite cloud and nitrogen dioxide retrievals based on optical properties from a global aerosol analysis. *Atmospheric Measurement Techniques*, **2021**, 14, 2857-2871	4	
164	Carbon Monitoring System Flux Net Biosphere Exchange 2020 (CMS-Flux NBE 2020). *Earth System Science Data*, **2021**, 13, 299-330	10.5	10
163	Detection of anomalies in the UV–vis reflectances from the Ozone Monitoring Instrument. *Atmospheric Measurement Techniques*, **2021**, 14, 961-974	4	1
162	Use of Hyper-Spectral Visible and Near-Infrared Satellite Data for Timely Estimates of the Earth's Surface Reflectance in Cloudy Conditions: Part 2- Image Restoration With HICO Satellite Data in Overcast Conditions. *Frontiers in Remote Sensing*, **2021**, 2,	1	1
161	Ozone Monitoring Instrument (OMI) Aura nitrogen dioxide standard product version 4.0 with improved surface and cloud treatments. *Atmospheric Measurement Techniques*, **2021**, 14, 455-479	4	27
160	Tracking aerosols and SO₂ clouds from the Raikoke eruption: 3D view from satellite observations. *Atmospheric Measurement Techniques*, **2021**, 14, 7545-7563	4	4
159	Abrupt decline in tropospheric nitrogen dioxide over China after the outbreak of COVID-19. *Science Advances*, **2020**, 6, eabc2992	14.3	132
158	High-resolution mapping of SO2 using airborne observations from the GeoTASO instrument during the KORUS-AQ field study: PCA-based vertical column retrievals. *Remote Sensing of Environment*, **2020**, 241, 111725	13.2	6
157	Satellite-based reflectances capture large fraction of variability in global gross primary production (GPP) at weekly time scales. *Agricultural and Forest Meteorology*, **2020**, 291, 108092	5.8	10

156	Assessment of NO observations during DISCOVER-AQ and KORUS-AQ field campaigns. *Atmospheric Measurement Techniques*, **2020**, 13,	4	14
155	Reduction of structural impacts and distinction of photosynthetic pathways in a global estimation of GPP from space-borne solar-induced chlorophyll fluorescence. *Remote Sensing of Environment*, **2020**, 240, 111722	13.2	47
154	Improved SIFTER v2 algorithm for long-term GOME-2A satellite retrievals of fluorescence with a correction for instrument degradation. *Atmospheric Measurement Techniques*, **2020**, 13, 4295-4315	4	8
153	Version 2 Ozone Monitoring Instrument SO₂ product (OMSO2 V2): new anthropogenic SO₂ vertical column density dataset. *Atmospheric Measurement Techniques*, **2020**, 13, 6175-6191	4	14
152	Contrasting Regional Carbon Cycle Responses to Seasonal Climate Anomalies Across the East-West Divide of Temperate North America. *Global Biogeochemical Cycles*, **2020**, 34, e2020GB006598	5.9	6
151	Global Retrievals of Solar-Induced Chlorophyll Fluorescence at Red Wavelengths With TROPOMI. *Geophysical Research Letters*, **2020**, 47, e2020GL087541	4.9	18
150	Systematic Orbital Geometry-Dependent Variations in Satellite Solar-Induced Fluorescence (SIF) Retrievals. *Remote Sensing*, **2020**, 12, 2346	5	12
149	Spatial pattern and seasonal dynamics of the photosynthesis activity across Australian rainfed croplands. *Ecological Indicators*, **2020**, 108, 105669	5.8	3
148	Differences Between OCO-2 and GOME-2 SIF Products From a Model-Data Fusion Perspective. *Journal of Geophysical Research G: Biogeosciences*, **2019**, 124, 3143-3157	3.7	9
147	A geometry-dependent surface Lambertian-equivalent reflectivity product for UV Vis retrievals Part 1: Evaluation over land surfaces using measurements from OMI at 466 nm. *Atmospheric Measurement Techniques*, **2019**, 12, 3997-4017	4	9
146	Cloud Products from the Earth Polychromatic Imaging Camera (EPIC): Algorithms and Initial Evaluation. *Atmospheric Measurement Techniques*, **2019**, 12, 2019-2031	4	13
145	Remote sensing of solar-induced chlorophyll fluorescence (SIF) in vegetation: 50 years of progress. *Remote Sensing of Environment*, **2019**, 231, 111177-111177	13.2	190
144	Towards a Harmonized Long-Term Spaceborne Record of Far-Red Solar-Induced Fluorescence. *Journal of Geophysical Research G: Biogeosciences*, **2019**, 124, 2518-2539	3.7	25
143	Diverse photosynthetic capacity of global ecosystems mapped by satellite chlorophyll fluorescence measurements. *Remote Sensing of Environment*, **2019**, 232, 111344-111344	13.2	33
142	Using satellite observations of tropospheric NO₂ columns to infer long-term trends in US NO_{<i>x</i>} emissions: the importance of accounting for the free tropospheric NO₂ background. *Atmospheric Chemistry and Physics*, **2019**, 19, 8863-8878	6.8	55
141	Widespread increase of boreal summer dry season length over the Congo rainforest. *Nature Climate Change*, **2019**, 9, 617-622	21.4	42
140	TEMPO Green Paper: Chemistry, physics, and meteorology experiments with the Tropospheric Emissions: monitoring of pollution instrument **2019**,		8
139	A geometry-dependent surface Lambertian-equivalent reflectivity product for UV Vis retrievals Part 2: Evaluation over open ocean. *Atmospheric Measurement Techniques*, **2019**, 12, 6749-6769	4	5

138	Spatially-explicit monitoring of crop photosynthetic capacity through the use of space-based chlorophyll fluorescence data. *Remote Sensing of Environment*, **2018**, 210, 362-374	13.2	52
137	Reduced solar-induced chlorophyll fluorescence from GOME-2 during Amazon drought caused by dataset artifacts. *Global Change Biology*, **2018**, 24, 2229-2230	11.4	54
136	Overview of Solar-Induced chlorophyll Fluorescence (SIF) from the Orbiting Carbon Observatory-2: Retrieval, cross-mission comparison, and global monitoring for GPP. *Remote Sensing of Environment* , **2018**, 209, 808-823	13.2	199
135	Angle matters: Bidirectional effects impact the slope of relationship between gross primary productivity and sun-induced chlorophyll fluorescence from Orbiting Carbon Observatory-2 across biomes. *Global Change Biology*, **2018**, 24, 5017-5020	11.4	49
134	On the relationship between sub-daily instantaneous and daily total gross primary production: Implications for interpreting satellite-based SIF retrievals. *Remote Sensing of Environment*, **2018**, 205, 276-289	13.2	68
133	Link Between Arctic Tropospheric BrO Explosion Observed From Space and Sea-Salt Aerosols From Blowing Snow Investigated Using Ozone Monitoring Instrument BrO Data and GEOS-5 Data Assimilation System. *Journal of Geophysical Research D: Atmospheres*, **2018**, 123, 6954-6983	4.4	17
132	Nitrogen oxides in the global upper troposphere: interpreting cloud-sliced NO₂ observations from the OMI satellite instrument. *Atmospheric Chemistry and Physics*, **2018**, 18, 17017-17027	6.8	15
131	A new global anthropogenic SO₂ emission inventory for the last decade: a mosaic of satellite-derived and bottom-up emissions. *Atmospheric Chemistry and Physics*, **2018**, 18, 16571-16586	6.8	45
130	A cloud algorithm based on the O₂-O₂ 477 nm absorption band featuring an advanced spectral fitting method and the use of surface geometry-dependent Lambertian-equivalent reflectivity. *Atmospheric Measurement Techniques*, **2018**, 11, 4093-4107	4	13
129	Evaluating GPP and Respiration Estimates Over Northern Midlatitude Ecosystems Using Solar-Induced Fluorescence and Atmospheric CO2 Measurements. *Journal of Geophysical Research G: Biogeosciences*, **2018**, 123, 2976-2997	3.7	14
128	Global retrievals of solar induced chlorophyll fluorescence with TROPOMI: first results and inter-sensor comparison to OCO-2. *Geophysical Research Letters*, **2018**, 45, 10456-10463	4.9	160
127	A global spatially contiguous solar-induced fluorescence (CSIF) dataset using neural networks. *Biogeosciences*, **2018**, 15, 5779-5800	4.6	95
126	Global relationships among traditional reflectance vegetation indices (NDVI and NDII), evapotranspiration (ET), and soil moisture variability on weekly timescales. *Remote Sensing of Environment*, **2018**, 219, 339-352	13.2	53
125	Estimation of Terrestrial Global Gross Primary Production (GPP) with Satellite Data-Driven Models and Eddy Covariance Flux Data. *Remote Sensing*, **2018**, 10, 1346	5	67
124	The Ozone Monitoring Instrument: overview of 14 years in space. *Atmospheric Chemistry and Physics*, **2018**, 18, 5699-5745	6.8	163
123	Tundra photosynthesis captured by satellite-observed solar-induced chlorophyll fluorescence. *Geophysical Research Letters*, **2017**, 44, 1564-1573	4.9	47
122	Angular normalization of GOME-2 Sun-induced chlorophyll fluorescence observation as a better proxy of vegetation productivity. *Geophysical Research Letters*, **2017**, 44, 5691-5699	4.9	62
121	High sensitivity of gross primary production in the Rocky Mountains to summer rain. *Geophysical Research Letters*, **2017**, 44, 3643-3652	4.9	19

120	New data-driven estimation of terrestrial CO2 fluxes in Asia using a standardized database of eddy covariance measurements, remote sensing data, and support vector regression. *Journal of Geophysical Research G: Biogeosciences*, **2017**, 122, 767-795	3.7	58
119	Application of satellite solar-induced chlorophyll fluorescence to understanding large-scale variations in vegetation phenology and function over northern high latitude forests. *Remote Sensing of Environment*, **2017**, 190, 178-187	13.2	100
118	Temporal consistency between gross primary production and solar-induced chlorophyll fluorescence in the ten most populous megacity areas over years. *Scientific Reports*, **2017**, 7, 14963	4.9	18
117	A Cloud-Ozone Data Product from Aura OMI and MLS Satellite Measurements. *Atmospheric Measurement Techniques*, **2017**, 10, 4067-4078	4	5
116	The Ozone Monitoring Instrument: Overview of twelve years in space **2017**,		2
115	New-generation NASA Aura Ozone Monitoring Instrument (OMI) volcanic SO₂ dataset: algorithm description, initial results, and continuation with the Suomi-NPP Ozone Mapping and Profiler Suite (OMPS). *Atmospheric Measurement Techniques*, **2017**, 10, 445-458	4	55
114	Continuation of long-term global SO₂ pollution monitoring from OMI to OMPS. *Atmospheric Measurement Techniques*, **2017**, 10, 1495-1509	4	36
113	India Is Overtaking China as the World's Largest Emitter of Anthropogenic Sulfur Dioxide. *Scientific Reports*, **2017**, 7, 14304	4.9	182
112	The impact of alternative trait-scaling hypotheses for the maximum photosynthetic carboxylation rate (V) on global gross primary production. *New Phytologist*, **2017**, 215, 1370-1386	9.8	82
111	Tropospheric Emissions: Monitoring of Pollution (TEMPO). *Journal of Quantitative Spectroscopy and Radiative Transfer*, **2017**, 186, 17-39	2.1	163
110	Multi-source SO₂ emission retrievals and consistency of satellite and surface measurements with reported emissions. *Atmospheric Chemistry and Physics*, **2017**, 17, 12597-12616	6.8	37
109	Accounting for the effects of surface BRDF on satellite cloud and trace-gas retrievals: a new approach based on geometry-dependent Lambertian equivalent reflectivity applied to OMI algorithms. *Atmospheric Measurement Techniques*, **2017**, 10, 333-349	4	30
108	Aura OMI observations of regional SO₂ and NO₂ pollution changes from 2005 to 2015. *Atmospheric Chemistry and Physics*, **2016**, 16, 4605-4629	6.8	428
107	A global catalogue of large SO₂ sources and emissions derived from the Ozone Monitoring Instrument. *Atmospheric Chemistry and Physics*, **2016**, 16, 11497-11519	6.8	148
106	Improving the monitoring of crop productivity using spaceborne solar-induced fluorescence. *Global Change Biology*, **2016**, 22, 716-26	11.4	180
105	Space-based detection of missing sulfur dioxide sources of global air pollution. *Nature Geoscience*, **2016**, 9, 496-500	18.3	105
104	New methods for the retrieval of chlorophyll red fluorescence from hyperspectral satellite instruments: simulations and application to GOME-2 and SCIAMACHY. *Atmospheric Measurement Techniques*, **2016**, 9, 3939-3967	4	146
103	Top-of-the-atmosphere shortwave flux estimation from satellite observations: an empirical neural network approach applied with data from the A-train constellation. *Atmospheric Measurement Techniques*, **2016**, 9, 2813-2826	4	10

102	Combining livestock production information in a process-based vegetation model to reconstruct the history of grassland management. *Biogeosciences*, **2016**, 13, 3757-3776	4.6	23
101	A global catalogue of large SO₂ sources and emissions derived from the Ozone Monitoring Instrument **2016**,		5
100	Spaceborne Sun-Induced Vegetation Fluorescence Time Series from 2007 to 2015 Evaluated with Australian Flux Tower Measurements. *Remote Sensing*, **2016**, 8, 895	5	32
99	Regional atmospheric CO2 inversion reveals seasonal and geographic differences in Amazon net biome exchange. *Global Change Biology*, **2016**, 22, 3427-43	11.4	39
98	Drought rapidly diminishes the large net CO uptake in 2011 over semi-arid Australia. *Scientific Reports*, **2016**, 6, 37747	4.9	58
97	Can we retrieve vegetation photosynthetic capacity paramter from solar-induced fluorescence? **2016**,		3
96	Precipitation and carbon-water coupling jointly control the interannual variability of global land gross primary production. *Scientific Reports*, **2016**, 6, 39748	4.9	44
95	Consistency between sun-induced chlorophyll fluorescence and gross primary production of vegetation in North America. *Remote Sensing of Environment*, **2016**, 183, 154-169	13.2	139
94	Photosynthetic seasonality of global tropical forests constrained by hydroclimate. *Nature Geoscience*, **2015**, 8, 284-289	18.3	251
93	Potential of the TROPOspheric Monitoring Instrument (TROPOMI) onboard the Sentinel-5 Precursor for the monitoring of terrestrial chlorophyll fluorescence. *Atmospheric Measurement Techniques*, **2015**, 8, 1337-1352	4	123
92	The 2010 Russian drought impact on satellite measurements of solar-induced chlorophyll fluorescence: Insights from modeling and comparisons with parameters derived from satellite reflectances. *Remote Sensing of Environment*, **2015**, 166, 163-177	13.2	142
91	Solar-induced chlorophyll fluorescence that correlates with canopy photosynthesis on diurnal and seasonal scales in a temperate deciduous forest. *Geophysical Research Letters*, **2015**, 42, 2977-2987	4.9	303
90	A new method for global retrievals of HCHO total columns from the Suomi National Polar-orbiting Partnership Ozone Mapping and Profiler Suite. *Geophysical Research Letters*, **2015**, 42, 2515-2522	4.9	23
89	Drought onset mechanisms revealed by satellite solar-induced chlorophyll fluorescence: Insights from two contrasting extreme events. *Journal of Geophysical Research G: Biogeosciences*, **2015**, 120, 2427-2440	3.7	155
88	A linear method for the retrieval of sun-induced chlorophyll fluorescence from GOME-2 and SCIAMACHY data. *Atmospheric Measurement Techniques*, **2015**, 8, 2589-2608	4	158
87	<i>Editorial Note</i> "A novel Whole Air Sample Profiler (WASP) for the quantification of volatile organic compounds in the boundary layer" published in Atmos. Meas. Tech., 6, 2703–2712, 2013. *Atmospheric Measurement Techniques*, **2015**, 8, 3405-3406	4	
86	Global and time-resolved monitoring of crop photosynthesis with chlorophyll fluorescence. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, E1327-33	11.5	577
85	The seasonal cycle of satellite chlorophyll fluorescence observations and its relationship to vegetation phenology and ecosystem atmosphere carbon exchange. *Remote Sensing of Environment*, **2014**, 152, 375-391	13.2	231

84	Prospects for chlorophyll fluorescence remote sensing from the Orbiting Carbon Observatory-2. *Remote Sensing of Environment*, **2014**, 147, 1-12	13.2	274
83	First estimates of global free-tropospheric NO₂ abundances derived using a cloud-slicing technique applied to satellite observations from the Aura Ozone Monitoring Instrument (OMI). *Atmospheric Chemistry and Physics*, **2014**, 14, 10565-10588	6.8	23
82	First results from a rotational Raman scattering cloud algorithm applied to the Suomi National Polar-orbiting Partnership (NPP) Ozone Mapping and Profiler Suite (OMPS) Nadir Mapper. *Atmospheric Measurement Techniques*, **2014**, 7, 2897-2906	4	5
81	A linear method for the retrieval of sun-induced chlorophyll fluorescence from GOME-2 and SCIAMACHY data **2014**,		11
80	Potential of the TROPOspheric Monitoring Instrument (TROPOMI) onboard the Sentinel-5 Precursor for the monitoring of terrestrial chlorophyll fluorescence **2014**,		4
79	Reply to Magnani et al.: Linking large-scale chlorophyll fluorescence observations with cropland gross primary production. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, E2511	11.5	11
78	Estimation of vegetation photosynthetic capacity from space-based measurements of chlorophyll fluorescence for terrestrial biosphere models. *Global Change Biology*, **2014**, 20, 3727-42	11.4	208
77	Using field spectroscopy to assess the potential of statistical approaches for the retrieval of sun-induced chlorophyll fluorescence from ground and space. *Remote Sensing of Environment*, **2013** , 133, 52-61	13.2	103
76	Note on rotational-Raman scattering in the O₂ A- and B-bands. *Atmospheric Measurement Techniques*, **2013**, 6, 981-990	4	25
75	Global monitoring of terrestrial chlorophyll fluorescence from moderate spectral resolution near-infrared satellite measurements: methodology, simulations, and application to GOME-2 **2013**,		43
74	Global monitoring of terrestrial chlorophyll fluorescence from moderate-spectral-resolution near-infrared satellite measurements: methodology, simulations, and application to GOME-2. *Atmospheric Measurement Techniques*, **2013**, 6, 2803-2823	4	378
73	A fast and sensitive new satellite SO2 retrieval algorithm based on principal component analysis: Application to the ozone monitoring instrument. *Geophysical Research Letters*, **2013**, 40, 6314-6318	4.9	142
72	Filling-in of far-red and near-Infrared solar lines by terrestrial and atmospheric effects: simulations and space-based observations from SCIAMACHY and GOSAT **2012**,		10
71	Fast simulators for satellite cloud optical centroid pressure retrievals; evaluation of OMI cloud retrievals. *Atmospheric Measurement Techniques*, **2012**, 5, 529-545	4	36
70	Filling-in of near-infrared solar lines by terrestrial fluorescence and other geophysical effects: simulations and space-based observations from SCIAMACHY and GOSAT. *Atmospheric Measurement Techniques*, **2012**, 5, 809-829	4	123
69	Note on rotational-Raman scattering in the O₂ A- and B-bands: implications for retrieval of trace-gas concentrations and terrestrial chlorophyll fluorescence **2012**,		2
68	Analysis of satellite-derived Arctic tropospheric BrO columns in conjunction with aircraft measurements during ARCTAS and ARCPAC. *Atmospheric Chemistry and Physics*, **2012**, 12, 1255-1285	6.8	55
67	MERRA: NASA Modern-Era Retrospective Analysis for Research and Applications. *Journal of Climate*, **2011**, 24, 3624-3648	4.4	3548

66	First observations of global and seasonal terrestrial chlorophyll fluorescence from space. *Biogeosciences*, **2011**, 8, 637-651	4.6	385
65	Fast simulators for satellite cloud optical centroid pressure retrievals, 1. evaluation of OMI cloud retrievals **2011**,		3
64	Detection of multi-layer and vertically-extended clouds using A-train sensors. *Atmospheric Measurement Techniques*, **2010**, 3, 233-247	4	44
63	What do satellite backscatter ultraviolet and visible spectrometers see over snow and ice? A study of clouds and ozone using the A-train. *Atmospheric Measurement Techniques*, **2010**, 3, 619-629	4	16
62	Surface reflectivity from the Ozone Monitoring Instrument using the Moderate Resolution Imaging Spectroradiometer to eliminate clouds: Effects of snow on ultraviolet and visible trace gas retrievals. *Journal of Geophysical Research*, **2010**, 115,		21
61	Convective distribution of tropospheric ozone and tracers in the Central American ITCZ region: Evidence from observations during TC4. *Journal of Geophysical Research*, **2010**, 115,		30
60	The impact of the 2005 Gulf hurricanes on pollution emissions as inferred from Ozone Monitoring Instrument (OMI) nitrogen dioxide. *Atmospheric Environment*, **2010**, 44, 1443-1448	5.3	5
59	Accurate satellite-derived estimates of the tropospheric ozone impact on the global radiation budget. *Atmospheric Chemistry and Physics*, **2009**, 9, 4447-4465	6.8	32
58	Ozone mixing ratios inside tropical deep convective clouds from OMI satellite measurements. *Atmospheric Chemistry and Physics*, **2009**, 9, 573-583	6.8	40
57	Impact of tropospheric nitrogen dioxide on the regional radiation budget. *Atmospheric Chemistry and Physics*, **2009**, 9, 6389-6400	6.8	33
56	Evaluation of the OMI cloud pressures derived from rotational Raman scattering by comparisons with other satellite data and radiative transfer simulations. *Journal of Geophysical Research*, **2008**, 113,		81
55	Three-way comparison between OMI and PARASOL cloud pressure products. *Journal of Geophysical Research*, **2008**, 113,		88
54	Introduction to special section on Aura Validation. *Journal of Geophysical Research*, **2008**, 113,		9
53	Errors induced by ozone field horizontal inhomogeneities into simulated nadir-viewing orbital backscatter UV measurements. *Journal of Geophysical Research*, **2007**, 112,		1
52	Effects of data selection and error specification on the assimilation of AIRS data. *Quarterly Journal of the Royal Meteorological Society*, **2007**, 133, 181-196	6.4	8
51	First results from the OMI rotational Raman scattering cloud pressure algorithm. *IEEE Transactions on Geoscience and Remote Sensing*, **2006**, 44, 1272-1282	8.1	77
50	Improving Global Analysis and Forecasting with AIRS. *Bulletin of the American Meteorological Society*, **2006**, 87, 891-895	6.1	153
49	Observations over hurricanes from the ozone monitoring instrument. *Geophysical Research Letters*, **2006**, 33,	4.9	15

48	Note on the effect of horizontal gradients for nadir-viewing microwave and infrared sounders. *Quarterly Journal of the Royal Meteorological Society*, **2005**, 131, 1783-1792	6.4	5
47	Effects of horizontal gradients on GPS radio occultation observation operators. I: Ray tracing. *Quarterly Journal of the Royal Meteorological Society*, **2004**, 130, 2787-2805	6.4	26
46	Detection of cloud-affected AIRS channels using an adjacent-pixel approach. *Quarterly Journal of the Royal Meteorological Society*, **2004**, 130, 1469-1487	6.4	8
45	Retrieval of cloud pressure and oceanic chlorophyll content using Raman scattering in GOME ultraviolet spectra. *Journal of Geophysical Research*, **2004**, 109,		48
44	Improving total column ozone retrievals by using cloud pressures derived from Raman scattering in the UV. *Geophysical Research Letters*, **2004**, 31,	4.9	21
43	Evaluation of Refractivity Profiles from CHAMP and SAC-C GPS Radio Occultation **2004**, 375-382		
42	The Mars Atmospheric Constellation Observatory (MACO) Concept **2004**, 393-405		8
41	High-Frequency Planetary Waves in the Polar Middle Atmosphere as Seen in a Data Assimilation System. *Journals of the Atmospheric Sciences*, **2003**, 60, 2975-2992	2.1	10
40	Tangent linear analysis of the Mosaic land surface model. *Journal of Geophysical Research*, **2003**, 108,		3
39	Mineral aerosol contamination of TIROS Operational Vertical Sounder (TOVS) temperature and moisture retrievals. *Journal of Geophysical Research*, **2003**, 108,		12
38	Evaluation of CHAMP radio occultation refractivity using data assimilation office analyses and radiosondes. *Geophysical Research Letters*, **2003**, 30,	4.9	7
37	Assimilation Experiments of One-dimensional Variational Analyses with GPS/MET Refractivity **2003**, 515-520		9
36	Radiative Forcing of Saharan Dust: GOCART Model Simulations Compared with ERBE Data. *Journals of the Atmospheric Sciences*, **2002**, 59, 736-747	2.1	51
35	1DVAR analysis of temperature and humidity using GPS radio occultation refractivity data. *Journal of Geophysical Research*, **2002**, 107, ACL 14-1		49
34	Ocean Raman scattering in satellite backscatter UV measurements. *Geophysical Research Letters*, **2002**, 29, 18-1-18-4	4.9	41
33	Radiance and Jacobian intercomparison of radiative transfer models applied to HIRS and AMSU channels. *Journal of Geophysical Research*, **2001**, 106, 24017-24031		90
32	Assimilation of SSM/I-Derived Surface Rainfall and Total Precipitable Water for Improving the GEOS Analysis for Climate Studies. *Monthly Weather Review*, **2000**, 128, 509-537	2.4	54
31	NOAA NASA DoD Workshop on Satellite Data Assimilation. *Bulletin of the American Meteorological Society*, **2000**, 81, 2457-2462	6.1	13

30	Variational cloud-clearing with TOVS data. *Quarterly Journal of the Royal Meteorological Society*, **2000**, 126, 725-748	6.4	25
29	An error analysis of radiance and suboptimal retrieval assimilation. *Quarterly Journal of the Royal Meteorological Society*, **2000**, 126, 1495-1514	6.4	11
28	An error analysis of radiance and suboptimal retrieval assimilation **2000**, 126, 1495		5
27	Assimilating TOVS Humidity into the GEOS-2 Data Assimilation System. *Journal of Climate*, **1999**, 12, 2983-2995	4.4	9
26	Efficient methods to assimilate remotely sensed data based on information content. *Quarterly Journal of the Royal Meteorological Society*, **1998**, 124, 1669-1694	6.4	39
25	Radiative transfer in the 9.6 μm HIRS ozone channel using collocated SBUV-determined ozone abundances. *Journal of Geophysical Research*, **1998**, 103, 19213-19229		12
24	Accurate determination of total ozone using SBUV continuous spectral scan measurements. *Journal of Geophysical Research*, **1997**, 102, 12957-12969		9
23	Reanalysis of historical observations and its role in the development of the goddard EOS climate Data Assimilation System. *Advances in Space Research*, **1997**, 19, 491-501	2.4	4
22	Temporal and spatial variations in upper atmospheric Mg+. *Journal of Geophysical Research*, **1996**, 101, 5239-5249		25
21	Rotational Raman scattering (Ring effect) in satellite backscatter ultraviolet measurements. *Applied Optics*, **1995**, 34, 4513-25	1.7	97
20	The determination of cloud pressures from rotational Raman scattering in satellite backscatter ultraviolet measurements. *Journal of Geophysical Research*, **1995**, 100, 23019		58
19	. *IEEE Transactions on Microwave Theory and Techniques*, **1992**, 40, 1101-1109	4.1	7
18	Modeling of Jupiter's millimeter wave emission utilizing laboratory measurements of ammonia (NH3) opacity. *Journal of Geophysical Research*, **1991**, 96, 17463		19
17	Laboratory measurements of the 7.5–9.38-mm absorption of gaseous ammonia (NH3) under simulated jovian conditions. *Icarus*, **1989**, 81, 386-395	3.8	9
16	Analysis of satellite-derived Arctic tropospheric BrO columns in conjunction with aircraft measurements during ARCTAS and ARCPAC		1
15	Global free tropospheric NO₂ abundances derived using a cloud slicing technique applied to satellite observations from the Aura Ozone Monitoring Instrument (OMI)		2
14	Aura OMI observations of regional SO₂ and NO₂ pollution changes from 2005 to 2014		19
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