

Nickolay A Krotkov

List of Publications by Year in Descending Order

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

223
papers

10,159
citations

60
h-index

94
g-index

288
ext. papers

11,704
ext. citations

5.4
avg, IF

6.07
L-index

#	Paper	IF	Citations
223	Global fine-scale changes in ambient NO during COVID-19 lockdowns.. <i>Nature</i> , 2022 , 601, 380-387	50.4	8
222	Quantifying urban, industrial, and background changes in NO ₂ during the COVID-19 lockdown period based on TROPOMI satellite observations. <i>Atmospheric Chemistry and Physics</i> , 2022 , 22, 4201-4236	6.8	2
221	Numerical Results for Polarized Light Scattering in a Spherical Atmosphere. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2022 , 108194	2.1	2
220	Using Machine Learning for Timely Estimates of Ocean Color Information From Hyperspectral Satellite Measurements in the Presence of Clouds, Aerosols, and Sunglint. <i>Frontiers in Remote Sensing</i> , 2022 , 3,	1	1
219	Estimates of Hyperspectral Surface and Underwater UV Planar and Scalar Irradiances from OMI Measurements and Radiative Transfer Computations. <i>Remote Sensing</i> , 2022 , 14, 2278	5	
218	A sulfur dioxide Covariance-Based Retrieval Algorithm (COBRA): application to TROPOMI reveals new emission sources. <i>Atmospheric Chemistry and Physics</i> , 2021 , 21, 16727-16744	6.8	3
217	Day-Night Monitoring of Volcanic SO ₂ and Ash Clouds for Aviation Avoidance at Northern Polar Latitudes. <i>Remote Sensing</i> , 2021 , 13, 4003	5	0
216	Inconsistencies in sulfur dioxide emissions from the Canadian oil sands and potential implications. <i>Environmental Research Letters</i> , 2021 , 16, 014012	6.2	3
215	Explicit and consistent aerosol correction for visible wavelength satellite cloud and nitrogen dioxide retrievals based on optical properties from a global aerosol analysis. <i>Atmospheric Measurement Techniques</i> , 2021 , 14, 2857-2871	4	
214	Volcanic SO ₂ ; effective layer height retrieval for the Ozone Monitoring Instrument (OMI) using a machine-learning approach. <i>Atmospheric Measurement Techniques</i> , 2021 , 14, 3673-3691	4	2
213	Rethinking the correction for absorbing aerosols in the OMI- and TROPOMI-like surface UV algorithms. <i>Atmospheric Measurement Techniques</i> , 2021 , 14, 4947-4957	4	0
212	Ozone Monitoring Instrument (OMI) Aura nitrogen dioxide standard product version 4.0 with improved surface and cloud treatments. <i>Atmospheric Measurement Techniques</i> , 2021 , 14, 455-479	4	27
211	Tracking aerosols and SO ₂ clouds from the Raikoke eruption: 3D view from satellite observations. <i>Atmospheric Measurement Techniques</i> , 2021 , 14, 7545-7563	4	4
210	Ground-based retrievals of aerosol column absorption in the UV spectral region and their implications for GEMS measurements. <i>Remote Sensing of Environment</i> , 2020 , 245, 111759	13.2	2
209	Stratospheric Injection of Massive Smoke Plume From Canadian Boreal Fires in 2017 as Seen by DSCOVR-EPIC, CALIOP, and OMPS-LP Observations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020 , 125, e2020JD032579	4.4	36
208	Abrupt decline in tropospheric nitrogen dioxide over China after the outbreak of COVID-19. <i>Science Advances</i> , 2020 , 6, eabc2992	14.3	132
207	Revised and extended benchmark results for Rayleigh scattering of sunlight in spherical atmospheres. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2020 , 254, 107181	2.1	7

206	A methodology to constrain carbon dioxide emissions from coal-fired power plants using satellite observations of co-emitted nitrogen dioxide. <i>Atmospheric Chemistry and Physics</i> , 2020 , 20, 99-116	6.8	16
205	High-resolution mapping of SO ₂ using airborne observations from the GeoTASO instrument during the KORUS-AQ field study: PCA-based vertical column retrievals. <i>Remote Sensing of Environment</i> , 2020 , 241, 111725	13.2	6
204	VolKilau: Volcano Rapid Response Balloon Campaign during the 2018 Kilauea Eruption. <i>Bulletin of the American Meteorological Society</i> , 2020 , 101, E1602-E1618	6.1	8
203	Anthropogenic and volcanic point source SO ₂ emissions derived from TROPOMI on board Sentinel-5 Precursor: first results. <i>Atmospheric Chemistry and Physics</i> , 2020 , 20, 5591-5607	6.8	16
202	Assessment of NO observations during DISCOVER-AQ and KORUS-AQ field campaigns. <i>Atmospheric Measurement Techniques</i> , 2020 , 13,	4	14
201	Version 2 Ozone Monitoring Instrument SO ₂ product (OMSO2 V2): new anthropogenic SO ₂ vertical column density dataset. <i>Atmospheric Measurement Techniques</i> , 2020 , 13, 6175-6191	4	14
200	Ceramic industry at Morbi as a large source of SO ₂ emissions in India. <i>Atmospheric Environment</i> , 2020 , 223, 117243	5.3	10
199	Global distribution and 14-year changes in erythemal irradiance, UV atmospheric transmission, and total column ozone for 2005-2018 estimated from OMI and EPIC observations. <i>Atmospheric Chemistry and Physics</i> , 2020 , 20, 8351-8380	6.8	6
198	Study of SO Pollution in the Middle East Using MERRA-2, CAMS Data Assimilation Products, and High-Resolution WRF-Chem Simulations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020 , 125, e2019JD031993	14.1	10
197	A geometry-dependent surface Lambertian-equivalent reflectivity product for UV _A retrievals Part 1: Evaluation over land surfaces using measurements from OMI at 466 nm. <i>Atmospheric Measurement Techniques</i> , 2019 , 12, 3997-4017	4	9
196	Exploiting OMI NO satellite observations to infer fossil-fuel CO emissions from U.S. megacities. <i>Science of the Total Environment</i> , 2019 , 695, 133805	10.2	17
195	Satellite-derived emissions of carbon monoxide, ammonia, and nitrogen dioxide from the 2016 Horse River wildfire in the Fort McMurray area. <i>Atmospheric Chemistry and Physics</i> , 2019 , 19, 2577-2599	6.8	23
194	Five decades observing Earth's atmospheric trace gases using ultraviolet and visible backscatter solar radiation from space. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2019 , 238, 106478	2.1	12
193	Surface erythemal UV _A irradiance in the continental United States derived from ground-based and OMI observations: quality assessment, trend analysis and sampling issues. <i>Atmospheric Chemistry and Physics</i> , 2019 , 19, 2165-2181	6.8	11
192	Chemical climatology of atmospheric pollutants in the eastern United States: Seasonal/diurnal cycles and contrast under clear/cloudy conditions for remote sensing. <i>Atmospheric Environment</i> , 2019 , 206, 85-107	5.3	3
191	Midlatitude Lightning NO _x Production Efficiency Inferred From OMI and WWLLN Data. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019 , 124, 13475-13497	4.4	15
190	Enhanced Capabilities of TROPOMI NO: Estimating NO from North American Cities and Power Plants. <i>Environmental Science & Technology</i> , 2019 , 53, 12594-12601	10.3	52
189	TEMPO Green Paper: Chemistry, physics, and meteorology experiments with the Tropospheric Emissions: monitoring of pollution instrument 2019 ,		8

188	A new discrete wavelength backscattered ultraviolet algorithm for consistent volcanic SO ₂ retrievals from multiple satellite missions. <i>Atmospheric Measurement Techniques</i> , 2019 , 12, 5137-5153	4	4
187	A geometry-dependent surface Lambertian-equivalent reflectivity product for UV _{vis} retrievals □ Part 2: Evaluation over open ocean. <i>Atmospheric Measurement Techniques</i> , 2019 , 12, 6749-6769	4	5
186	Lightning NO _x Production in the Tropics as Determined Using OMI NO ₂ Retrievals and WWLLN Stroke Data. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019 , 124, 13498-13518	4-4	11
185	High resolution mapping of nitrogen dioxide with TROPOMI: First results and validation over the Canadian oil sands. <i>Geophysical Research Letters</i> , 2019 , 46, 1049-1060	4-9	117
184	Linking improvements in sulfur dioxide emissions to decreasing sulfate wet deposition by combining satellite and surface observations with trajectory analysis. <i>Atmospheric Environment</i> , 2019 , 199, 210-223	5-3	11
183	SO ₂ trajectories in a complex terrain environment using CALPUFF dispersion model, OMI and MODIS data. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2018 , 69, 99-109	7-3	4
182	Comparisons of spectral aerosol single scattering albedo in Seoul, South Korea. <i>Atmospheric Measurement Techniques</i> , 2018 , 11, 2295-2311	4	27
181	Dry Deposition of Reactive Nitrogen From Satellite Observations of Ammonia and Nitrogen Dioxide Over North America. <i>Geophysical Research Letters</i> , 2018 , 45, 1157-1166	4-9	42
180	A new global anthropogenic SO ₂ emission inventory for the last decade: a mosaic of satellite-derived and bottom-up emissions. <i>Atmospheric Chemistry and Physics</i> , 2018 , 18, 16571-16586	6-8	165
179	Earth Observations from DSCOVR/EPIC Instrument. <i>Bulletin of the American Meteorological Society</i> , 2018 , 99, 1829-1850	6-1	72
178	A cloud algorithm based on the O ₂ -O ₂ 477 nm absorption band featuring an advanced spectral fitting method and the use of surface geometry-dependent Lambertian-equivalent reflectivity. <i>Atmospheric Measurement Techniques</i> , 2018 , 11, 4093-4107	4	13
177	Application of satellite-based sulfur dioxide observations to support the cleantech sector: Detecting emission reduction from copper smelters. <i>Environmental Technology and Innovation</i> , 2018 , 12, 172-179	7	5
176	First Observations of Volcanic Eruption Clouds From the L1 Earth-Sun Lagrange Point by DSCOVR/EPIC. <i>Geophysical Research Letters</i> , 2018 , 45, 11,456	4-9	15
175	OMI surface UV irradiance in the continental United States: quality assessment, trend analysis, and sampling issues 2018 ,		1
174	The Ozone Monitoring Instrument: overview of 14 years in space. <i>Atmospheric Chemistry and Physics</i> , 2018 , 18, 5699-5745	6-8	163
173	The TROPOMI surface UV algorithm. <i>Atmospheric Measurement Techniques</i> , 2018 , 11, 997-1008	4	16
172	A decade of global volcanic SO emissions measured from space. <i>Scientific Reports</i> , 2017 , 7, 44095	4-9	175
171	The net decay time of anomalies in concentrations of atmospheric pollutants. <i>Atmospheric Environment</i> , 2017 , 160, 19-26	5-3	3

170	High-resolution NO ₂ observations from the Airborne Compact Atmospheric Mapper: Retrieval and validation. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017 , 122, 1953-1970	4.4	28
169	The Ozone Monitoring Instrument: Overview of twelve years in space 2017 ,		2
168	New-generation NASA Aura Ozone Monitoring Instrument (OMI) volcanic SO ₂ dataset: algorithm description, initial results, and continuation with the Suomi-NPP Ozone Mapping and Profiler Suite (OMPS). <i>Atmospheric Measurement Techniques</i> , 2017 , 10, 445-458	4	55
167	Continuation of long-term global SO ₂ pollution monitoring from OMI to OMPS. <i>Atmospheric Measurement Techniques</i> , 2017 , 10, 1495-1509	4	36
166	Retrieval of volcanic SO ₂ from HIRS/2 using optimal estimation. <i>Atmospheric Measurement Techniques</i> , 2017 , 10, 2687-2702	4	2
165	The version 3 OMI NO ₂ standard product. <i>Atmospheric Measurement Techniques</i> , 2017 , 10, 3133-3149	4	152
164	India Is Overtaking China as the World's Largest Emitter of Anthropogenic Sulfur Dioxide. <i>Scientific Reports</i> , 2017 , 7, 14304	4.9	182
163	Tropospheric Emissions: Monitoring of Pollution (TEMPO). <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2017 , 186, 17-39	2.1	163
162	Multi-source SO ₂ emission retrievals and consistency of satellite and surface measurements with reported emissions. <i>Atmospheric Chemistry and Physics</i> , 2017 , 17, 12597-12618	6.8	37
161	Structural uncertainty in air mass factor calculation for NO ₂ and HCHO satellite retrievals. <i>Atmospheric Measurement Techniques</i> , 2017 , 10, 759-782	4	91
160	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. <i>Atmospheric Measurement Techniques</i> , 2017 , 10, 333-349	4	30
159	Comparison of OMI NO ₂ observations and their seasonal and weekly cycles with ground-based measurements in Helsinki. <i>Atmospheric Measurement Techniques</i> , 2016 , 9, 5203-5212	4	35
158	Anthropogenic sulphur dioxide load over China as observed from different satellite sensors. <i>Atmospheric Environment</i> , 2016 , 145, 45-59	5.3	27
157	Impacts of brown carbon from biomass burning on surface UV and ozone photochemistry in the Amazon Basin. <i>Scientific Reports</i> , 2016 , 6, 36940	4.9	68
156	Aura OMI observations of regional SO ₂ and NO ₂ pollution changes from 2005 to 2015. <i>Atmospheric Chemistry and Physics</i> , 2016 , 16, 4605-4629	6.8	428
155	Using CATS near-real-time lidar observations to monitor and constrain volcanic sulfur dioxide (SO ₂) forecasts. <i>Geophysical Research Letters</i> , 2016 , 43, 11,089-11,097	4.9	10
154	A global catalogue of large SO ₂ sources and emissions derived from the Ozone Monitoring Instrument. <i>Atmospheric Chemistry and Physics</i> , 2016 , 16, 11497-11519	6.8	148
153	Space-based detection of missing sulfur dioxide sources of global air pollution. <i>Nature Geoscience</i> , 2016 , 9, 496-500	18.3	105

152	Satellite observation of pollutant emissions from gas flaring activities near the Arctic. <i>Atmospheric Environment</i> , 2016 , 133, 1-11	5.3	16
151	A Decade of Change in NO ₂ and SO ₂ over the Canadian Oil Sands As Seen from Space. <i>Environmental Science & Technology</i> , 2016 , 50, 331-7	10.3	46
150	A global catalogue of large SO ₂ sources and emissions derived from the Ozone Monitoring Instrument 2016 ,		5
149	Ultraviolet Satellite Measurements of Volcanic Ash 2016 , 217-231		12
148	Limb-to-limb matching using non-coincident NO ₂ observations: proof of concept and the OMI-minus-OSIRIS prototype product. <i>Atmospheric Measurement Techniques</i> , 2016 , 9, 4103-4122	4	8
147	Satellite-based global volcanic SO ₂ emissions and sulfate direct radiative forcing during 2005-2012. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016 , 121, 3446-3464	4.4	29
146	Estimates of lightning NO _x production based on OMI NO ₂ observations over the Gulf of Mexico. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016 , 121, 8668-8691	4.4	43
145	Response of SO ₂ and particulate air pollution to local and regional emission controls: A case study in Maryland. <i>Earth's Future</i> , 2016 , 4, 94-109	7.9	33
144	U.S. NO ₂ trends (2005-2013): EPA Air Quality System (AQS) data versus improved observations from the Ozone Monitoring Instrument (OMI). <i>Atmospheric Environment</i> , 2015 , 110, 130-143	5.3	128
143	Revising the slant column density retrieval of nitrogen dioxide observed by the Ozone Monitoring Instrument. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015 , 120, 5670-5692	4.4	61
142	Sulfur dioxide vertical column DOAS retrievals from the Ozone Monitoring Instrument: Global observations and comparison to ground-based and satellite data. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015 , 120, 2470-2491	4.4	65
141	A new method for global retrievals of HCHO total columns from the Suomi National Polar-orbiting Partnership Ozone Mapping and Profiler Suite. <i>Geophysical Research Letters</i> , 2015 , 42, 2515-2522	4.9	23
140	Comparison of operational satellite SO ₂ products with ground-based observations in northern Finland during the Icelandic Holuhraun fissure eruption. <i>Atmospheric Measurement Techniques</i> , 2015 , 8, 2279-2289	4	22
139	Validation of satellite SO ₂ observations in northern Finland during the Icelandic Holuhraun fissure eruption 2015 ,		3
138	Lifetimes and emissions of SO ₂ from point sources estimated from OMI. <i>Geophysical Research Letters</i> , 2015 , 42, 1969-1976	4.9	112
137	Extending the long-term record of volcanic SO ₂ emissions with the Ozone Mapping and Profiler Suite nadir mapper. <i>Geophysical Research Letters</i> , 2015 , 42, 925-932	4.9	44
136	Global dry deposition of nitrogen dioxide and sulfur dioxide inferred from space-based measurements. <i>Global Biogeochemical Cycles</i> , 2014 , 28, 1025-1043	5.9	58
135	Spatially and seasonally resolved estimate of the ratio of organic mass to organic carbon. <i>Atmospheric Environment</i> , 2014 , 87, 34-40	5.3	53

134	Satellite data of atmospheric pollution for U.S. air quality applications: Examples of applications, summary of data end-user resources, answers to FAQs, and common mistakes to avoid. <i>Atmospheric Environment</i> , 2014 , 94, 647-662	5.3	148
133	Relationship between column-density and surface mixing ratio: Statistical analysis of O ₃ and NO ₂ data from the July 2011 Maryland DISCOVER-AQ mission. <i>Atmospheric Environment</i> , 2014 , 92, 429-441	5.3	36
132	Optical, microphysical and compositional properties of the Eyjafjallajökull volcanic ash. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 10649-10661	6.8	16
131	Evaluation of OMI operational standard NO ₂ column retrievals using in situ and surface-based NO ₂ observations. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 11587-11609	6.8	143
130	Improved satellite retrievals of NO ₂ and SO ₂ over the Canadian oil sands and comparisons with surface measurements. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 3637-3656	6.8	110
129	Characterization of OMI tropospheric NO ₂ over the Baltic Sea region. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 7795-7805	6.8	20
128	First estimates of global free-tropospheric NO ₂ abundances derived using a cloud-slicing technique applied to satellite observations from the Aura Ozone Monitoring Instrument (OMI). <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 10565-10588	6.8	23
127	Evaluation of GEOS-5 sulfur dioxide simulations during the Frostburg, MD 2010 field campaign. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 1929-1941	6.8	30
126	Real Time Volcanic Cloud Products and Predictions for Aviation Alerts 2014 ,		1
125	The GeoTASO airborne spectrometer project 2014 ,		9
124	Emissions estimation from satellite retrievals: A review of current capability. <i>Atmospheric Environment</i> , 2013 , 77, 1011-1042	5.3	270
123	Measuring global volcanic degassing with the Ozone Monitoring Instrument (OMI). <i>Geological Society Special Publication</i> , 2013 , 380, 229-257	1.7	51
122	The observed response of Ozone Monitoring Instrument (OMI) NO ₂ columns to NO _x emission controls on power plants in the United States: 2005-2011. <i>Atmospheric Environment</i> , 2013 , 81, 102-111	5.3	76
121	Scaling relationship for NO ₂ pollution and urban population size: a satellite perspective. <i>Environmental Science & Technology</i> , 2013 , 47, 7855-61	10.3	129
120	Ozone monitoring instrument observations of interannual increases in SO ₂ emissions from Indian coal-fired power plants during 2005-2012. <i>Environmental Science & Technology</i> , 2013 , 47, 13993-4000	10.3	88
119	A new stratospheric and tropospheric NO ₂ retrieval algorithm for nadir-viewing satellite instruments: applications to OMI. <i>Atmospheric Measurement Techniques</i> , 2013 , 6, 2607-2626	4	220
118	A new stratospheric and tropospheric NO ₂ retrieval algorithm for nadir-viewing satellite instruments: applications to OMI 2013 ,		17
117	Modeling of 2008 Kasatochi volcanic sulfate direct radiative forcing: assimilation of OMI SO ₂ plume height data and comparison with MODIS and CALIOP observations. <i>Atmospheric Chemistry and Physics</i> , 2013 , 13, 1895-1912	6.8	28

116	A fast and sensitive new satellite SO ₂ retrieval algorithm based on principal component analysis: Application to the ozone monitoring instrument. <i>Geophysical Research Letters</i> , 2013 , 40, 6314-6318	4.9	142
115	Application of OMI, SCIAMACHY, and GOME-2 satellite SO ₂ retrievals for detection of large emission sources. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013 , 118, 11,399-11,418	4.4	91
114	Airborne MAX-DOAS measurements over California: Testing the NASA OMI tropospheric NO ₂ product. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013 , 118, 7400-7413	4.4	25
113	Likely seeding of cirrus clouds by stratospheric Kasatochi volcanic aerosol particles near a mid-latitude tropopause fold. <i>Atmospheric Environment</i> , 2012 , 46, 441-448	5.3	14
112	Fog- and cloud-induced aerosol modification observed by the Aerosol Robotic Network (AERONET). <i>Journal of Geophysical Research</i> , 2012 , 117, n/a-n/a		70
111	Air quality over the Canadian oil sands: A first assessment using satellite observations. <i>Geophysical Research Letters</i> , 2012 , 39, n/a-n/a	4.9	108
110	Rapid transpacific transport in autumn observed by the A-train satellites. <i>Journal of Geophysical Research</i> , 2012 , 117, n/a-n/a		19
109	Flux calculation using CARIBIC DOAS aircraft measurements: SO ₂ emission of Norilsk. <i>Journal of Geophysical Research</i> , 2012 , 117, n/a-n/a		24
108	Influence of desert dust intrusions on ground-based and satellite-derived ultraviolet irradiance in southeastern Spain. <i>Journal of Geophysical Research</i> , 2012 , 117, n/a-n/a		9
107	SO ₂ over central China: Measurements, numerical simulations and the tropospheric sulfur budget. <i>Journal of Geophysical Research</i> , 2012 , 117, n/a-n/a		47
106	In situ measurements of tropospheric volcanic plumes in Ecuador and Colombia during TC4. <i>Journal of Geophysical Research</i> , 2011 , 116,		33
105	SO ₂ emissions and lifetimes: Estimates from inverse modeling using in situ and global, space-based (SCIAMACHY and OMI) observations. <i>Journal of Geophysical Research</i> , 2011 , 116,		182
104	Estimation of SO ₂ emissions using OMI retrievals. <i>Geophysical Research Letters</i> , 2011 , 38, n/a-n/a	4.9	126
103	Global satellite analysis of the relation between aerosols and short-lived trace gases. <i>Atmospheric Chemistry and Physics</i> , 2011 , 11, 1255-1267	6.8	55
102	Hit from Both Sides 2011 , 75-108		
101	A Balloon Sounding Technique for Measuring SO ₂ Plumes. <i>Journal of Atmospheric and Oceanic Technology</i> , 2010 , 27, 1318-1330	2	11
100	Transport and evolution of a pollution plume from northern China: A satellite-based case study. <i>Journal of Geophysical Research</i> , 2010 , 115,		30
99	Validation of ozone monitoring instrument SO ₂ measurements in the Okmok volcanic cloud over Pullman, WA, July 2008. <i>Journal of Geophysical Research</i> , 2010 , 115,		43

98	Recent large reduction in sulfur dioxide emissions from Chinese power plants observed by the Ozone Monitoring Instrument. <i>Geophysical Research Letters</i> , 2010 , 37,	4.9	130
97	Direct retrieval of sulfur dioxide amount and altitude from spaceborne hyperspectral UV measurements: Theory and application. <i>Journal of Geophysical Research</i> , 2010 , 115,		67
96	Dispersion and lifetime of the SO ₂ cloud from the August 2008 Kasatochi eruption. <i>Journal of Geophysical Research</i> , 2010 , 115,		82
95	Comparison of UV irradiances from Aura/Ozone Monitoring Instrument (OMI) with Brewer measurements at El Arenosillo (Spain) [Part 2: Analysis of site aerosol influence. <i>Atmospheric Chemistry and Physics</i> , 2010 , 10, 11867-11880	6.8	23
94	Comparison of UV irradiances from Aura/Ozone Monitoring Instrument (OMI) with Brewer measurements at El Arenosillo (Spain) [Part 1: Analysis of parameter influence. <i>Atmospheric Chemistry and Physics</i> , 2010 , 10, 5979-5989	6.8	36
93	Comparison of TOMS retrievals and UVMRP measurements of surface spectral UV radiation in the United States. <i>Atmospheric Chemistry and Physics</i> , 2010 , 10, 8669-8683	6.8	4
92	Enhanced monitoring of sulfur dioxide sources with hyperspectral UV sensors 2009 ,		2
91	Applications of Satellite-Based Sulfur Dioxide Monitoring. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2009 , 2, 293-298	4.7	15
90	Tracking volcanic sulfur dioxide clouds for aviation hazard mitigation. <i>Natural Hazards</i> , 2009 , 51, 325-343,		117
89	Estimating the altitude of volcanic sulfur dioxide plumes from space borne hyper-spectral UV measurements. <i>Geophysical Research Letters</i> , 2009 , 36,	4.9	40
88	Satellite observations of changes in air quality during the 2008 Beijing Olympics and Paralympics. <i>Geophysical Research Letters</i> , 2009 , 36,	4.9	108
87	A new approach to correct for absorbing aerosols in OMI UV. <i>Geophysical Research Letters</i> , 2009 , 36,	4.9	63
86	Retrieval of vertical columns of sulfur dioxide from SCIAMACHY and OMI: Air mass factor algorithm development, validation, and error analysis. <i>Journal of Geophysical Research</i> , 2009 , 114,		93
85	Improving retrieval of volcanic sulfur dioxide from backscattered UV satellite observations. <i>Geophysical Research Letters</i> , 2009 , 36, n/a-n/a	4.9	39
84	Aerosol column absorption measurements using co-located UV-MFRSR and AERONET CIMEL instruments 2009 ,		6
83	What would have happened to the ozone layer if chlorofluorocarbons (CFCs) had not been regulated?. <i>Atmospheric Chemistry and Physics</i> , 2009 , 9, 2113-2128	6.8	128
82	Ozone Monitoring Instrument spectral UV irradiance products: comparison with ground based measurements at an urban environment. <i>Atmospheric Chemistry and Physics</i> , 2009 , 9, 585-594	6.8	62
81	Retrieval of aerosol single scattering albedo at ultraviolet wavelengths at the T1 site during MILAGRO. <i>Atmospheric Chemistry and Physics</i> , 2009 , 9, 5813-5827	6.8	60

80	Hit from both sides: tracking industrial and volcanic plumes in Mexico City with surface measurements and OMI SO ₂ retrievals during the MILAGRO field campaign. <i>Atmospheric Chemistry and Physics</i> , 2009 , 9, 9599-9617	6.8	80
79	Daily monitoring of Ecuadorian volcanic degassing from space. <i>Journal of Volcanology and Geothermal Research</i> , 2008 , 176, 141-150	2.8	92
78	El Chichon: The genesis of volcanic sulfur dioxide monitoring from space. <i>Journal of Volcanology and Geothermal Research</i> , 2008 , 175, 408-414	2.8	43
77	Description and validation of the OMI very fast delivery products. <i>Journal of Geophysical Research</i> , 2008 , 113,		8
76	Validation of SO ₂ retrievals from the Ozone Monitoring Instrument over NE China. <i>Journal of Geophysical Research</i> , 2008 , 113,		121
75	A new technique for retrieval of tropospheric and stratospheric ozone profiles using sky radiance measurements at multiple view angles: Application to a Brewer spectrometer. <i>Journal of Geophysical Research</i> , 2008 , 113,		6
74	Sulfur dioxide emissions from Peruvian copper smelters detected by the Ozone Monitoring Instrument. <i>Geophysical Research Letters</i> , 2007 , 34,	4.9	100
73	Total ozone mapping spectrometer retrievals of noon erythemal-CIE ultraviolet irradiance compared with Brewer ground-based measurements at El Arenosillo (southwestern Spain). <i>Journal of Geophysical Research</i> , 2007 , 112,		17
72	Retrieval of large volcanic SO ₂ columns from the Aura Ozone Monitoring Instrument: Comparison and limitations. <i>Journal of Geophysical Research</i> , 2007 , 112,		156
71	Validation of daily erythemal doses from Ozone Monitoring Instrument with ground-based UV measurement data. <i>Journal of Geophysical Research</i> , 2007 , 112,		112
70	Aircraft observations of dust and pollutants over northeast China: Insight into the meteorological mechanisms of transport. <i>Journal of Geophysical Research</i> , 2007 , 112,		82
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19	Improved satellite retrievals of NO _x and SO _x over the Canadian oil sands and comparisons with surface measurements		3
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14	Extended observations of volcanic SO _x and sulfate aerosol in the stratosphere		42
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6	The version 3 OMI NO ₂ standard product	3
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3	OMI/Aura Nitrogen Dioxide Standard Product with Improved Surface and Cloud Treatments	6
2	Comparison of UV irradiances from Aura/Ozone Monitoring Instrument (OMI) with Brewer measurements at El Arenosillo (Spain) [Part 2: Analysis of site aerosol influence]	1
1	Tracking aerosols and SO ₂ clouds from the Raikoke eruption: 3D view from satellite observations	4