

Alexei I Lyapustin

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192
papers

9,504
citations

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h-index

93
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228
ext. papers

12,087
ext. citations

6.6
avg, IF

6.43
L-index

#	Paper	IF	Citations
192	Global Estimates of Fine Particulate Matter using a Combined Geophysical-Statistical Method with Information from Satellites, Models, and Monitors. <i>Environmental Science & Technology</i> , 2016 , 50, 3762-72	10.3	627
191	Advancements in the Aerosol Robotic Network (AERONET) Version 3 database Automated near-real-time quality control algorithm with improved cloud screening for Sun photometer aerosol optical depth (AOD) measurements. <i>Atmospheric Measurement Techniques</i> , 2019 , 12, 169-209	4	370
190	Hyperspectral remote sensing of foliar nitrogen content. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, E185-92	11.5	310
189	MODIS Collection 6 MAIAC algorithm. <i>Atmospheric Measurement Techniques</i> , 2018 , 11, 5741-5765	4	291
188	Photosynthetic seasonality of global tropical forests constrained by hydroclimate. <i>Nature Geoscience</i> , 2015 , 8, 284-289	18.3	251
187	Assessing PM _{2.5} Exposures with High Spatiotemporal Resolution across the Continental United States. <i>Environmental Science & Technology</i> , 2016 , 50, 4712-21	10.3	251
186	Estimating ground-level PM _{2.5} concentrations in the Southeastern United States using MAIAC AOD retrievals and a two-stage model. <i>Remote Sensing of Environment</i> , 2014 , 140, 220-232	13.2	224
185	A New Hybrid Spatio-Temporal Model For Estimating Daily Multi-Year PM Concentrations Across Northeastern USA Using High Resolution Aerosol Optical Depth Data. <i>Atmospheric Environment</i> , 2014 , 95, 581-590	5.3	220
184	Multiangle implementation of atmospheric correction (MAIAC): 2. Aerosol algorithm. <i>Journal of Geophysical Research</i> , 2011 , 116,		218
183	Vegetation dynamics and rainfall sensitivity of the Amazon. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 16041-6	11.5	205
182	An ensemble-based model of PM concentration across the contiguous United States with high spatiotemporal resolution. <i>Environment International</i> , 2019 , 130, 104909	12.9	170
181	Full-coverage high-resolution daily PM _{2.5} estimation using MAIAC AOD in the Yangtze River Delta of China. <i>Remote Sensing of Environment</i> , 2017 , 199, 437-446	13.2	168
180	Satellite observed widespread decline in Mongolian grasslands largely due to overgrazing. <i>Global Change Biology</i> , 2014 , 20, 418-28	11.4	167
179	Multi-angle implementation of atmospheric correction for MODIS (MAIAC): 3. Atmospheric correction. <i>Remote Sensing of Environment</i> , 2012 , 127, 385-393	13.2	166
178	Scientific impact of MODIS C5 calibration degradation and C6+ improvements. <i>Atmospheric Measurement Techniques</i> , 2014 , 7, 4353-4365	4	151
177	Estimation of daily PM and PM concentrations in Italy, 2013-2015, using a spatiotemporal land-use random-forest model. <i>Environment International</i> , 2019 , 124, 170-179	12.9	147
176	Global Estimates and Long-Term Trends of Fine Particulate Matter Concentrations (1998-2018). <i>Environmental Science & Technology</i> , 2020 , 54, 7879-7890	10.3	143

175	The 2010 Russian drought impact on satellite measurements of solar-induced chlorophyll fluorescence: Insights from modeling and comparisons with parameters derived from satellite reflectances. <i>Remote Sensing of Environment</i> , 2015 , 166, 163-177	13.2	142
174	Multi-angle remote sensing of forest light use efficiency by observing PRI variation with canopy shadow fraction. <i>Remote Sensing of Environment</i> , 2008 , 112, 3201-3211	13.2	137
173	Multiangle implementation of atmospheric correction (MAIAC): 1. Radiative transfer basis and look-up tables. <i>Journal of Geophysical Research</i> , 2011 , 116,		132
172	Using High-Resolution Satellite Aerosol Optical Depth To Estimate Daily PM _{2.5} Geographical Distribution in Mexico City. <i>Environmental Science & Technology</i> , 2015 , 49, 8576-84	10.3	129
171	Land and cryosphere products from Suomi NPP VIIRS: Overview and status. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013 , 118, 9753-9765	4.4	120
170	Improved 1 km resolution PM _{2.5} estimates across China using enhanced space-time extremely randomized trees. <i>Atmospheric Chemistry and Physics</i> , 2020 , 20, 3273-3289	6.8	119
169	Reconstructing 1-km-resolution high-quality PM _{2.5} data records from 2000 to 2018 in China: spatiotemporal variations and policy implications. <i>Remote Sensing of Environment</i> , 2021 , 252, 112136	13.2	111
168	Estimating daily PM and PM across the complex geo-climate region of Israel using MAIAC satellite-based AOD data. <i>Atmospheric Environment</i> , 2015 , 122, 409-416	5.3	100
167	Predicting monthly high-resolution PM concentrations with random forest model in the North China Plain. <i>Environmental Pollution</i> , 2018 , 242, 675-683	9.3	97
166	Remote sensing of photosynthetic light-use efficiency across two forested biomes: Spatial scaling. <i>Remote Sensing of Environment</i> , 2010 , 114, 2863-2874	13.2	96
165	An automatic cloud mask algorithm based on time series of MODIS measurements. <i>Journal of Geophysical Research</i> , 2008 , 113,		92
164	Spatial validation reveals poor predictive performance of large-scale ecological mapping models. <i>Nature Communications</i> , 2020 , 11, 4540	17.4	92
163	Radiative transfer codes for atmospheric correction and aerosol retrieval: intercomparison study. <i>Applied Optics</i> , 2008 , 47, 2215-26	1.7	90
162	Remote sensing of tropical ecosystems: Atmospheric correction and cloud masking matter. <i>Remote Sensing of Environment</i> , 2012 , 127, 370-384	13.2	89
161	Retrieval of snow grain size over Greenland from MODIS. <i>Remote Sensing of Environment</i> , 2009 , 113, 1976-1987	13.2	87
160	Connecting Crop Productivity, Residue Fires, and Air Quality over Northern India. <i>Scientific Reports</i> , 2019 , 9, 16594	4.9	81
159	Fine particulate matter predictions using high resolution Aerosol Optical Depth (AOD) retrievals. <i>Atmospheric Environment</i> , 2014 , 89, 189-198	5.3	81
158	10-year spatial and temporal trends of PM concentrations in the southeastern US estimated using high-resolution satellite data. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 6301-6314	6.8	81

157	Spatial scales of pollution from variable resolution satellite imaging. <i>Environmental Pollution</i> , 2013 , 172, 131-8	9.3	81
156	Sunlight mediated seasonality in canopy structure and photosynthetic activity of Amazonian rainforests. <i>Environmental Research Letters</i> , 2015 , 10, 064014	6.2	77
155	Comparison and evaluation of MODIS Multi-angle Implementation of Atmospheric Correction (MAIAC) aerosol product over South Asia. <i>Remote Sensing of Environment</i> , 2019 , 224, 12-28	13.2	73
154	An assessment of photosynthetic light use efficiency from space: Modeling the atmospheric and directional impacts on PRI reflectance. <i>Remote Sensing of Environment</i> , 2009 , 113, 2463-2475	13.2	73
153	Earth Observations from DSCOVR/EPIC Instrument. <i>Bulletin of the American Meteorological Society</i> , 2018 , 99, 1829-1850	6.1	72
152	The AERONET Version 3 aerosol retrieval algorithm, associated uncertainties and comparisons to Version 2. <i>Atmospheric Measurement Techniques</i> , 2020 , 13, 3375-3411	4	67
151	Estimation of Terrestrial Global Gross Primary Production (GPP) with Satellite Data-Driven Models and Eddy Covariance Flux Data. <i>Remote Sensing</i> , 2018 , 10, 1346	5	67
150	Estimation of daily PM concentrations in Italy (2006-2012) using finely resolved satellite data, land use variables and meteorology. <i>Environment International</i> , 2017 , 99, 234-244	12.9	66
149	IPRT polarized radiative transfer model intercomparison project [Phase A]. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2015 , 164, 8-36	2.1	64
148	Assessment of biases in MODIS surface reflectance due to Lambertian approximation. <i>Remote Sensing of Environment</i> , 2010 , 114, 2791-2801	13.2	63
147	Spatiotemporal prediction of fine particulate matter using high-resolution satellite images in the Southeastern US 2003-2011. <i>Journal of Exposure Science and Environmental Epidemiology</i> , 2016 , 26, 377-84	6.7	62
146	MAIAC-based long-term spatiotemporal trends of PM in Beijing, China. <i>Science of the Total Environment</i> , 2018 , 616-617, 1589-1598	10.2	61
145	Assessing NO Concentration and Model Uncertainty with High Spatiotemporal Resolution across the Contiguous United States Using Ensemble Model Averaging. <i>Environmental Science & Technology</i> , 2020 , 54, 1372-1384	10.3	61
144	A critical assessment of high-resolution aerosol optical depth retrievals for fine particulate matter predictions. <i>Atmospheric Chemistry and Physics</i> , 2013 , 13, 10907-10917	6.8	60
143	On the measurability of change in Amazon vegetation from MODIS. <i>Remote Sensing of Environment</i> , 2015 , 166, 233-242	13.2	59
142	Tracking ambient PM _{2.5} build-up in Delhi national capital region during the dry season over 15 years using a high-resolution (1 km) satellite aerosol dataset. <i>Atmospheric Environment</i> , 2019 , 204, 142-150	5.3	57
141	Merging regional and global aerosol optical depth records from major available satellite products. <i>Atmospheric Chemistry and Physics</i> , 2020 , 20, 2031-2056	6.8	56
140	Validation of high-resolution MAIAC aerosol product over South America. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017 , 122, 7537-7559	4.4	56

139	Impacts of snow and cloud covers on satellite-derived PM levels. <i>Remote Sensing of Environment</i> , 2019 , 221, 665-674	13.2	54
138	Agricultural Burning and Air Quality over Northern India: A Synergistic Analysis using NASA A-train Satellite Data and Ground Measurements. <i>Aerosol and Air Quality Research</i> , 2018 , 18, 1756-1773	4.6	53
137	Advances in multiangle satellite remote sensing of speciated airborne particulate matter and association with adverse health effects: from MISR to MAIA. <i>Journal of Applied Remote Sensing</i> , 2018 , 12, 1	1.4	52
136	Exploring systematic offsets between aerosol products from the two MODIS sensors. <i>Atmospheric Measurement Techniques</i> , 2018 , 11, 4073-4092	4	49
135	Climate drivers of the Amazon forest greening. <i>PLoS ONE</i> , 2017 , 12, e0180932	3.7	46
134	Observations of rapid aerosol optical depth enhancements in the vicinity of polluted cumulus clouds. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 11633-11656	6.8	46
133	Estimation of crop gross primary production (GPP): fAPARchl versus MOD15A2 FPAR. <i>Remote Sensing of Environment</i> , 2014 , 153, 1-6	13.2	45
132	Analysis of snow bidirectional reflectance from ARCTAS Spring-2008 Campaign. <i>Atmospheric Chemistry and Physics</i> , 2010 , 10, 4359-4375	6.8	45
131	Inferring terrestrial photosynthetic light use efficiency of temperate ecosystems from space. <i>Journal of Geophysical Research</i> , 2011 , 116,		44
130	Airborne Spectral Measurements of Ocean Directional Reflectance. <i>Journals of the Atmospheric Sciences</i> , 2005 , 62, 1072-1092	2.1	44
129	Impacts of light use efficiency and fPAR parameterization on gross primary production modeling. <i>Agricultural and Forest Meteorology</i> , 2014 , 189-190, 187-197	5.8	43
128	Radiative transfer code SHARM for atmospheric and terrestrial applications. <i>Applied Optics</i> , 2005 , 44, 7764-72	1.7	42
127	Correcting Measurement Error in Satellite Aerosol Optical Depth with Machine Learning for Modeling PM in the Northeastern USA. <i>Remote Sensing</i> , 2018 , 10,	5	41
126	Analysis of MODIS/MISR calibration differences using surface albedo around AERONET sites and cloud reflectance. <i>Remote Sensing of Environment</i> , 2007 , 107, 12-21	13.2	39
125	Regional atmospheric CO2 inversion reveals seasonal and geographic differences in Amazon net biome exchange. <i>Global Change Biology</i> , 2016 , 22, 3427-43	11.4	39
124	A method of retrieving cloud top height and cloud geometrical thickness with oxygen A and B bands for the Deep Space Climate Observatory (DSCOVR) mission: Radiative transfer simulations. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2013 , 122, 141-149	2.1	37
123	Detecting Inter-Annual Variations in the Phenology of Evergreen Conifers Using Long-Term MODIS Vegetation Index Time Series. <i>Remote Sensing</i> , 2017 , 9, 49	5	37
122	Characterization of forest fire smoke event near Washington, DC in summer 2013 with multi-wavelength lidar. <i>Atmospheric Chemistry and Physics</i> , 2015 , 15, 1647-1660	6.8	36

121	Green's Function Method for the Radiative Transfer Problem. I. Homogeneous non-Lambertian Surface. <i>Applied Optics</i> , 2001 , 40, 3495-501	1.7	36
120	Seasonal and interannual assessment of cloud cover and atmospheric constituents across the Amazon (2000-2015): Insights for remote sensing and climate analysis. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2018 , 145, 309-327	11.8	35
119	Analysis of a severe dust storm and its impact on air quality conditions using WRF-Chem modeling, satellite imagery, and ground observations. <i>Air Quality, Atmosphere and Health</i> , 2019 , 12, 453-470	5.6	34
118	Predicting Fine Particulate Matter (PM _{2.5}) in the Greater London Area: An Ensemble Approach using Machine Learning Methods. <i>Remote Sensing</i> , 2020 , 12, 914	5	34
117	High spatial resolution aerosol retrieval with MAIAC: Application to mountain regions. <i>Journal of Geophysical Research</i> , 2011 , 116, n/a-n/a		34
116	Role of adjacency effect in the remote sensing of aerosol. <i>Journal of Geophysical Research</i> , 2001 , 106, 11909-11916		34
115	SPHERICAL HARMONICS METHOD IN THE PROBLEM OF RADIATIVE TRANSFER IN THE ATMOSPHERE-SURFACE SYSTEM. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 1999 , 61, 393-404	2.1	34
114	Bayesian geostatistical modelling of PM and PM surface level concentrations in Europe using high-resolution satellite-derived products. <i>Environment International</i> , 2018 , 121, 57-70	12.9	34
113	Estimation of High-Resolution PM over the Indo-Gangetic Plain by Fusion of Satellite Data, Meteorology, and Land Use Variables. <i>Environmental Science & Technology</i> , 2020 , 54, 7891-7900	10.3	33
112	Observations of the Interaction and Transport of Fine Mode Aerosols with Cloud and/or Fog in Northeast Asia from Aerosol Robotic Network (AERONET) and Satellite Remote Sensing. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 5560-5587	4.4	33
111	A multi-angle aerosol optical depth retrieval algorithm for geostationary satellite data over the United States. <i>Atmospheric Chemistry and Physics</i> , 2011 , 11, 11977-11991	6.8	32
110	Discrimination of biomass burning smoke and clouds in MAIAC algorithm. <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 9679-9686	6.8	32
109	Atmospheric and geometrical effects on land surface albedo. <i>Journal of Geophysical Research</i> , 1999 , 104, 4127-4143		31
108	Evaluation of the Multi-Angle Implementation of Atmospheric Correction (MAIAC) Aerosol Algorithm through Intercomparison with VIIRS Aerosol Products and AERONET. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017 , 122, 3005-3022	4.4	30
107	Validation of GRASP algorithm product from POLDER/PARASOL data and assessment of multi-angular polarimetry potential for aerosol monitoring. <i>Earth System Science Data</i> , 2020 , 12, 3573-3620	10.5	30
106	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2009 , 47, 2450-2466	8.1	29
105	Surface reflectance of Mars observed by CRISM/MRO: 1. Multi-angle Approach for Retrieval of Surface Reflectance from CRISM observations (MARS-ReCO). <i>Journal of Geophysical Research E: Planets</i> , 2013 , 118, 514-533	4.1	28
104	Similarity of radiative transfer equation: Error analysis of phase function truncation techniques. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2010 , 111, 1964-1979	2.1	28

103	Estimation of crop gross primary production (GPP): I. impact of MODIS observation footprint and impact of vegetation BRDF characteristics. <i>Agricultural and Forest Meteorology</i> , 2014 , 191, 51-63	5.8	26
102	Improving satellite-driven PM models with Moderate Resolution Imaging Spectroradiometer fire counts in the southeastern U.S. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014 , 119, 11375-11386	4.4	25
101	Improved cloud and snow screening in MAIAC aerosol retrievals using spectral and spatial analysis. <i>Atmospheric Measurement Techniques</i> , 2012 , 5, 843-850	4	25
100	Seasonality and drought effects of Amazonian forests observed from multi-angle satellite data. <i>Remote Sensing of Environment</i> , 2015 , 171, 278-290	13.2	24
99	Estimation of crop gross primary production (GPP): II. Do scaled MODIS vegetation indices improve performance?. <i>Agricultural and Forest Meteorology</i> , 2015 , 200, 1-8	5.8	24
98	Consistency of vegetation index seasonality across the Amazon rainforest. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2016 , 52, 42-53	7.3	24
97	Reduction of aerosol absorption in Beijing since 2007 from MODIS and AERONET. <i>Geophysical Research Letters</i> , 2011 , 38, n/a-n/a	4.9	24
96	Estimating daily and intra-daily PM10 and PM2.5 in Israel using a spatio-temporal hybrid modeling approach. <i>Atmospheric Environment</i> , 2018 , 191, 142-152	5.3	23
95	Satellite-based view of the aerosol spatial and temporal variability in the Córdoba region (Argentina) using over ten years of high-resolution data. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2018 , 145, 250-267	11.8	23
94	Radiative transfer code SHARM-3D for radiance simulations over a non-Lambertian nonhomogeneous surface: intercomparison study. <i>Applied Optics</i> , 2002 , 41, 5607-15	1.7	22
93	Amazon Forests Response to Droughts: A Perspective from the MAIAC Product. <i>Remote Sensing</i> , 2016 , 8, 356	5	22
92	AERONET Remotely Sensed Measurements and Retrievals of Biomass Burning Aerosol Optical Properties During the 2015 Indonesian Burning Season. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019 , 124, 4722-4740	4.4	21
91	Green's function method in the radiative transfer problem. II. Spatially heterogeneous anisotropic surface. <i>Applied Optics</i> , 2002 , 41, 5600-6	1.7	21
90	Assessing uncertainties of a geophysical approach to estimate surface fine particulate matter distributions from satellite-observed aerosol optical depth. <i>Atmospheric Chemistry and Physics</i> , 2019 , 19, 295-313	6.8	20
89	Advancing methodologies for applying machine learning and evaluating spatiotemporal models of fine particulate matter (PM) using satellite data over large regions. <i>Atmospheric Environment</i> , 2020 , 239, 117649-117649	5.3	20
88	Seasonal monitoring and estimation of regional aerosol distribution over Po valley, northern Italy, using a high-resolution MAIAC product. <i>Atmospheric Environment</i> , 2016 , 141, 106-121	5.3	20
87	Validation of SOAR VIIRS Over-Water Aerosol Retrievals and Context Within the Global Satellite Aerosol Data Record. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 13,496	4.4	20
86	Estimating daily PM concentrations in New York City at the neighborhood-scale: Implications for integrating non-regulatory measurements. <i>Science of the Total Environment</i> , 2019 , 697, 134094	10.2	19

85	A new method of retrieving surface bidirectional reflectance from ground measurements: Atmospheric sensitivity study. <i>Journal of Geophysical Research</i> , 1999 , 104, 6257-6268		19
84	The time series technique for aerosol retrievals over land from MODIS 2009 , 69-99		18
83	An example of aerosol pattern variability over bright surface using high resolution MODIS MAIAC: The eastern and western areas of the Dead Sea and environs. <i>Atmospheric Environment</i> , 2017 , 165, 359-369	5.3	17
82	Three-dimensional effects in the remote sensing of surface albedo. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2001 , 39, 254-263	8.1	17
81	MAIAC Thermal Technique for Smoke Injection Height From MODIS. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2020 , 17, 730-734	4.1	17
80	Effects of COVID-19 lockdowns on fine particulate matter concentrations. <i>Science Advances</i> , 2021 , 7,	14.3	17
79	Observation of mountain lee waves with MODIS NIR column water vapor. <i>Geophysical Research Letters</i> , 2014 , 41, 710-716	4.9	16
78	Parameterized code SHARM-3D for radiative transfer over inhomogeneous surfaces. <i>Applied Optics</i> , 2005 , 44, 7602-10	1.7	16
77	Monthly Global Estimates of Fine Particulate Matter and Their Uncertainty. <i>Environmental Science & Technology</i> , 2021 , 55, 15287-15300	10.3	16
76	Global validation of columnar water vapor derived from EOS MODIS-MAIAC algorithm against the ground-based AERONET observations. <i>Atmospheric Research</i> , 2019 , 225, 181-192	5.4	15
75	Prototyping of LAI and FPAR Retrievals from MODIS Multi-Angle Implementation of Atmospheric Correction (MAIAC) Data. <i>Remote Sensing</i> , 2017 , 9, 370	5	15
74	Aerosol optical depth (AOD) retrieval using simultaneous GOES-East and GOES-West reflected radiances over the western United States. <i>Atmospheric Measurement Techniques</i> , 2013 , 6, 471-486	4	15
73	Local analysis of MISR surface BRF and albedo over GSFC and mongu AERONET sites. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2006 , 44, 1707-1718	8.1	15
72	The Potential Impact of Satellite-Retrieved Cloud Parameters on Ground-Level PM Mass and Composition. <i>International Journal of Environmental Research and Public Health</i> , 2017 , 14,	4.6	14
71	METHOD OF SPHERICAL HARMONICS IN THE RADIATIVE TRANSFER PROBLEM WITH NON-LAMBERTIAN SURFACE. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 1999 , 61, 545-555	2.1	14
70	Interpolation and Profile Correction (IPC) Method for Shortwave Radiative Transfer in Spectral Intervals of Gaseous Absorption. <i>Journals of the Atmospheric Sciences</i> , 2003 , 60, 865-871	2.1	14
69	An AeroCom/AeroSat study: intercomparison of satellite AOD datasets for aerosol model evaluation. <i>Atmospheric Chemistry and Physics</i> , 2020 , 20, 12431-12457	6.8	14
68	AERONET-based surface reflectance validation network (ASRVN) data evaluation: Case study for railroad valley calibration site. <i>Remote Sensing of Environment</i> , 2011 , 115, 2710-2717	13.2	13

67	Photopolarimetric Sensitivity to Black Carbon Content of Wildfire Smoke: Results From the 2016 ImPACT-PM Field Campaign. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 5376-5396	4.4	12
66	First Provisional Land Surface Reflectance Product from Geostationary Satellite Himawari-8 AHI. <i>Remote Sensing</i> , 2019 , 11, 2990	5	12
65	Vegetation chlorophyll estimates in the Amazon from multi-angle MODIS observations and canopy reflectance model. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2017 , 58, 278-287	7.3	11
64	Vector radiative transfer code SORD: Performance analysis and quick start guide. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2017 , 200, 295-310	2.1	11
63	Matrix exponential in C/C++ version of vector radiative transfer code IPOL. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2019 , 227, 106-110	2.1	10
62	High resolution aerosol data from MODIS satellite for urban air quality studies. <i>Open Geosciences</i> , 2014 , 6,	1.3	10
61	Solution for atmospheric optical transfer function using spherical harmonics method. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2001 , 68, 43-56	2.1	10
60	Impact of aerosol layering, complex aerosol mixing, and cloud coverage on high-resolution MAIAC aerosol optical depth measurements: Fusion of lidar, AERONET, satellite, and ground-based measurements. <i>Atmospheric Environment</i> , 2021 , 247, 118163	5.3	10
59	Assessing snow extent data sets over North America to inform and improve trace gas retrievals from solar backscatter. <i>Atmospheric Measurement Techniques</i> , 2018 , 11, 2983-2994	4	10
58	Monthly analysis of PM ratio characteristics and its relation to AOD. <i>Journal of the Air and Waste Management Association</i> , 2017 , 67, 27-38	2.4	9
57	Modifications of discrete ordinate method for computations with high scattering anisotropy: Comparative analysis. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2012 , 113, 2040-2048	2.1	9
56	Reply to Townsend et al.: Decoupling contributions from canopy structure and leaf optics is critical for remote sensing leaf biochemistry. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, E1075	11.5	9
55	A Method for Unbiased High-Resolution Aerosol Retrieval from Landsat. <i>Journals of the Atmospheric Sciences</i> , 2004 , 61, 1233-1244	2.1	9
54	Evaluation and intercomparison of wildfire smoke forecasts from multiple modeling systems for the 2019 Williams Flats fire. <i>Atmospheric Chemistry and Physics</i> , 2021 , 21, 14427-14469	6.8	9
53	APC: A new code for Atmospheric Polarization Computations. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2013 , 127, 1-11	2.1	8
52	Science impact of MODIS C5 calibration degradation and C6+ improvements 2014 ,		8
51	Reply to Ollinger et al.: Remote sensing of leaf nitrogen and emergent ecosystem properties. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, E2438	11.5	8
50	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

49	Evaluating impacts of snow, surface water, soil and vegetation on empirical vegetation and snow indices for the Utqiaġik tundra ecosystem in Alaska with the LVS3 model. <i>Remote Sensing of Environment</i> , 2020 , 240, 111677	13.2	7
48	Progress in Remote Sensing of Photosynthetic Activity over the Amazon Basin. <i>Remote Sensing</i> , 2017 , 9, 48	5	7
47	Study of satellite retrieved aerosol optical depth spatial resolution effect on particulate matter concentration prediction		7
46	High spatial resolution aerosol retrievals used for daily particulate matter monitoring over Po valley, northern Italy		7
45	Analysis of the radiative transfer equation with highly asymmetric phase function. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2011 , 112, 1595-1608	2.1	6
44	MODIS Collection 6 MAIAC Algorithm		6
43	Seasonal Comparisons of Himawari-8 AHI and MODIS Vegetation Indices over Latitudinal Australian Grassland Sites. <i>Remote Sensing</i> , 2020 , 12, 2494	5	6
42	Assessment of urban aerosol pollution over the Moscow megacity by the MAIAC aerosol product. <i>Atmospheric Measurement Techniques</i> , 2020 , 13, 877-891	4	5
41	Generalization of Marshak boundary condition for non-Lambert reflection. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2000 , 67, 457-464	2.1	5
40	Advancements in the Aerosol Robotic Network (AERONET) Version 3 Database [Automated Near Real-Time Quality Control Algorithm with Improved Cloud Screening for Sun Photometer Aerosol Optical Depth (AOD) Measurements		5
39	The Relationship Between MAIAC Smoke Plume Heights and Surface PM. <i>Geophysical Research Letters</i> , 2020 , 47, e2020GL088949	4.9	5
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