Istvan Laszlo

List of Publications by Year
in descending order

64 papers	3,124 citations	201674 27 h-index	189892 50 g-index
65 all docs	65 docs citations	65 times ranked	3130 citing authors

#	Article	IF	Citations
1	Uncertainties in satellite remote sensing of aerosols and impact on monitoring its long-term trend: a review and perspective. Annales Geophysicae, 2009, 27, 2755-2770.	1.6	290
2	Multiangle implementation of atmospheric correction (MAIAC): 2. Aerosol algorithm. Journal of Geophysical Research, 2011, 116, .	3.3	284
3	Multi-angle implementation of atmospheric correction for MODIS (MAIAC): 3. Atmospheric correction. Remote Sensing of Environment, 2012, 127, 385-393.	11.0	219
4	Suomi‑NPP VIIRS aerosol algorithms and data products. Journal of Geophysical Research D: Atmospheres, 2013, 118, 12,673.	3.3	202
5	Surface radiation budgets in support of the GEWEX Continental‑Scale International Project (GCIP) and the GEWEX Americas Prediction Project (GAPP), including the North American Land Data Assimilation System (NLDAS) project. Journal of Geophysical Research, 2003, 108, .	3.3	196
6	Modeling of the scattering and radiative properties of nonspherical dust-like aerosols. Journal of Aerosol Science, 2007, 38, 995-1014.	3.8	180
7	Multiangle implementation of atmospheric correction (MAIAC): 1. Radiative transfer basis and look-up tables. Journal of Geophysical Research, 2011, 116, .	3.3	166
8	Single-scattering properties of tri-axial ellipsoidal mineral dust aerosols: A database for application to radiative transfer calculations. Journal of Aerosol Science, 2010, 41, 501-512.	3.8	130
9	Study of long‑term trend in aerosol optical thickness observed from operational AVHRR satellite instrument. Journal of Geophysical Research, 2008, 113, .	3.3	109
10	Preliminary evaluation of S‑NPP VIIRS aerosol optical thickness. Journal of Geophysical Research D: Atmospheres, 2014, 119, 3942-3962.	3.3	108
11	Development of the HIRS Outgoing Longwave Radiation Climate Dataset. Journal of Atmospheric and Oceanic Technology, 2007, 24, 2029-2047.	1.3	96
12	Intercomparison of shortwave radiative transfer codes and measurements. Journal of Geophysical Research, 2005, 110, .	3.3	88
13	Angular anisotropy of satellite observations of land surface temperature. Geophysical Research Letters, 2012, 39, .	4.0	76
14	Validation and expected error estimation of Suomi‑NPP VIIRS aerosol optical thickness and Ångström exponent with AERONET. Journal of Geophysical Research D: Atmospheres, 2016, 121, 7139-7160.	3.3	68
15	Two MODIS Aerosol Products over Ocean on the Terra and Aqua CERES SSF Datasets. Journals of the Atmospheric Sciences, 2005, 62, 1008-1031.	1.7	59
16	Operational Aerosol Observations (AEROBS) from AVHRR/3 On Board NOAA-KLM Satellites. Journal of Atmospheric and Oceanic Technology, 2004, 21, 3-26.	1.3	56
17	Remote sensing of aerosol and radiation from geostationary satellites. Advances in Space Research, 2008, 41, 1882-1893.	2.6	51
18	An enhanced VIIRS aerosol optical thickness (AOT) retrieval algorithm over land using a global surface reflectance ratio database. Journal of Geophysical Research D: Atmospheres, 2016, 121, 10,717.	3.3	47

#	Article	IF	Citations
19	Detection of water vapor in the stratosphere over very high clouds in the tropics. Journal of Geophysical Research, 1993, 98, 22959-22967.	3.3	44
20	Discrimination of biomass burning smoke and clouds in MAIAC algorithm. Atmospheric Chemistry and Physics, 2012, 12, 9679-9686.	4.9	44
21	A multi-angle aerosol optical depth retrieval algorithm for geostationary satellite data over the United States. Atmospheric Chemistry and Physics, 2011, 11, 11977-11991.	4.9	40
22	Polarization and effective Mueller matrix for multiple scattering of light by nonspherical ice crystals. Optics Express, 2006, 14, 6381.	3.4	39
23	Improved cloud and snow screening in MAIAC aerosol retrievals using spectral and spatial analysis. Atmospheric Measurement Techniques, 2012, 5, 843-850.	3.1	36
24	A study of the effect of non-spherical dust particles on the AVHRR aerosol optical thickness retrievals. Geophysical Research Letters, 2003, 30, .	4.0	33
25	Air Quality Forecast Verification Using Satellite Data. Journal of Applied Meteorology and Climatology, 2008, 47, 425-442.	1.5	33
26	Improved discrete ordinate solutions in the presence of an anisotropically reflecting lower boundary: Upgrades of the DISORT computational tool. Journal of Quantitative Spectroscopy and Radiative Transfer, 2015, 157, 119-134.	2.3	31
27	Derivation of component aerosol direct radiative forcing at the top of atmosphere for clear-sky oceans. Journal of Quantitative Spectroscopy and Radiative Transfer, 2008, 109, 1162-1186.	2.3	29
28	Effects of particle nonsphericity and radiation polarization on retrieving dust properties from MODIS observations. Journal of Aerosol Science, 2009, 40, 776-789.	3.8	29
29	Shortwave cloudâ€radiative forcing at the top of the atmosphere at the surface and of the atmospheric column as determined from ISCCP C1 data. Journal of Geophysical Research, 1993, 98, 2703-2713.	3.3	28
30	Reduction of aerosol absorption in Beijing since 2007 from MODIS and AERONET. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	27
31	Using SURFRAD to Verify the NOAA Single-Channel Land Surface Temperature Algorithm. Journal of Atmospheric and Oceanic Technology, 2013, 30, 2868-2884.	1.3	26
32	The Relative Merits of Narrowband Channels for Estimating Broadband Albedos. Journal of Atmospheric and Oceanic Technology, 1988, 5, 757-773.	1.3	25
33	Improving GOES Advanced Baseline Imager (ABI) aerosol optical depth (AOD) retrievals using an empirical bias correction algorithm. Atmospheric Measurement Techniques, 2020, 13, 5955-5975.	3.1	23
34	Comparison and analysis of two aerosol retrievals over the ocean in the Terra/Clouds and the Earth's Radiant Energy Systemâ€"Moderate Resolution Imaging Spectroradiometer single scanner footprint data: 1. Global evaluation. Journal of Geophysical Research, 2005, 110, .	3.3	22
35	Aerosol optical depth (AOD) retrieval using simultaneous GOES-East and GOES-West reflected radiances over the western United States. Atmospheric Measurement Techniques, 2013, 6, 471-486.	3.1	17
36	Validation of two-channel VIRS retrievals of aerosol optical thickness over ocean and quantitative evaluation of the impact from potential subpixel cloud contamination and surface wind effect. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	16

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37	Global component aerosol direct radiative effect at the top of atmosphere. International Journal of Remote Sensing, 2011, 32, 633-655.	2.9	16
38	Detection of Optically Thin Mineral Dust Aerosol Layers over the Ocean Using MODIS. Journal of Atmospheric and Oceanic Technology, 2013, 30, 896-916.	1.3	16
39	The Role of Daily Surface Forcing in the Upper Ocean over the Tropical Pacific: A Numerical Study. Journal of Climate, 2003, 16, 756-766.	3.2	15
40	Refining aerosol optical depth retrievals over land by constructing the relationship of spectral surface reflectances through deep learning: Application to Himawari-8. Remote Sensing of Environment, 2020, 251, 112093.	11.0	14
41	Air Quality Applications of ABI Aerosol Products from the GOES-R Series. , 2020, , 203-217.		12
42	A satellite approach for estimating regional land surface energy budget for GCIP/GAPP. Journal of Geophysical Research, 2003, 108, .	3.3	11
43	Estimates of surface ultraviolet radiation over north America using Geostationary Operational Environmental Satellites observations. Journal of Geophysical Research, 2008, 113, .	3.3	11
44	Evapotranspiration Data Product from NESDIS GET-D System Upgraded for GOES-16 ABI Observations. Remote Sensing, 2019, 11, 2639.	4.0	11
45	Tracking Smoke from a Prescribed Fire and Its Impacts on Local Air Quality Using Temporally Resolved GOES-16 ABI Aerosol Optical Depth (AOD). Journal of Atmospheric and Oceanic Technology, 2021, 38, 963-976.	1.3	10
46	The Discrete Ordinate Algorithm, DISORT for Radiative Transfer. , 2016, , 3-65.		9
47	Comparison and analysis of two aerosol retrievals over the ocean in the Terra/Clouds and the Earth's Radiant Energy Systemâ€"Moderate Resolution Imaging Spectroradiometer single scanner footprint data: 2. Regional evaluation. Journal of Geophysical Research, 2005, 110, .	3.3	6
48	Exceptional events monitoring using S-NPP VIIRS aerosol products. , 2017, , .		4
49	Shortwave Radiation from ABI on the GOES-R Series. , 2020, , 179-191.		4
50	Screening for snow/snowmelt in SNPP VIIRS aerosol optical depth algorithm. Atmospheric Measurement Techniques, 2018, 11, 5813-5825.	3.1	3
51	Satellite Observations of North American Climate Change. Regional Climate Studies, 2014, , 95-165.	1.2	3
52	Evaluation of VIIRS dust detection algorithms over land. Journal of Applied Remote Sensing, 2018, 12, 1.	1.3	3
53	<title>Calculation of longwave radiance spectra at a high resolution: clear-sky results</title>. , 1994, , .		2
54	Comparison of singleâ€channel and multichannel aerosol optical depths derived from MAPSS data. Journal of Geophysical Research, 2008, 113, .	3.3	2

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55	Consistency of two global MODIS aerosol products over ocean on Terra and Aqua CERES SSF datasets. , 2004, 5652, 89.		1
56	Testing and integration of JPSS VIIRS aerosol EDR algorithms and evaluation of upstream/downstream effects using the Algorithm Development Library (ADL). , 2016, , .		1
57	Application of a Machine Learning Algorithm in Generating an Evapotranspiration Data Product From Coupled Thermal Infrared and Microwave Satellite Observations. Frontiers in Big Data, 0, 5, .	2.9	1
58	Equator crossing times for NOAA satellites. , 2005, , .		0
59	Global diagnostics of operational AVHRR SST and aerosol retrievals from NOAA-16 and -17. , 2005, , .		0
60	Analsis of historical AVHRR PATMOS aerosol data in support of the long-term trend study. , 2007, , .		0
61	Study of Global Component Aerosol Direct Radiative Effect by Combining Satellite Measurement and Model Simulations. , 2009, , .		0
62	JPSS Atmospheric Composition Products for Environmental Monitoring and Applications. , 2019, , .		0
63	All-Weather Daily Evapotranspiration Data Product Based on Microwave and Thermal Infrared Satellite Observations. , 2021, , .		0
64	Shortwave Radiation Budget Products from GOES-R Series ABI. , 2020, , .		0