Louis Giglio

List of Publications by Year
in descending order

86 papers	20,200 citations	27035 58 h-index	60403 85 g-index
86 all docs	86 docs citations	86 times ranked	15744 citing authors

#	Article	IF	Citations
1	Letter to the editor on â€œNonlinear dynamics of fires in Africa over recent decades controlled by precipitationâ€• Global Change Biology, 2022, 28, 1197-1199.	4.2	1
2	A remote sensing-based approach to estimating the fire spread rate parameter for individual burn patch extraction. International Journal of Remote Sensing, 2022, 43, 649-673.	1.3	4
3	Assessment of satellite orbit-drift artifacts in the long-term AVHRR FireCCILT11 global burned area data set. Science of Remote Sensing, 2022, 5, 100044.	2.2	7
4	Comment on OtÃ³n et al. Analysis of Trends in the FireCCI Global Long Term Burned Area Product (1982â€“2018). Fire 2021, 4, 74. Fire, 2022, 5, 52.	1.2	5
5	Impacts of large-scale refugee resettlement on LCLUC: Bidi Bidi refugee settlement, Uganda case study. Environmental Research Letters, 2022, 17, 064019.	2.2	3
6	Conflict and Climate: Drivers of Fire Activity in Syria in the Twenty-First Century. Earth Interactions, 2021, 25, 119-135.	0.7	6
7	Spectral and diurnal temporal suitability of GOES Advanced Baseline Imager (ABI) reflectance for burned area mapping. International Journal of Applied Earth Observation and Geoinformation, 2021, 96, 102271.	1.4	4
8	Environmental and political implications of underestimated cropland burning in Ukraine. Environmental Research Letters, 2021, 16, 064019.	2.2	23
9	Validation of MCD64A1 and FireCCI51 cropland burned area mapping in Ukraine. International Journal of Applied Earth Observation and Geoinformation, 2021, 102, 102443.	1.4	12
10	Satellite remote sensing of active fires: History and current status, applications and future requirements. Remote Sensing of Environment, 2021, 267, 112694.	4.6	92
11	Assessing the Shape Accuracy of Coarse Resolution Burned Area Identifications. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 1516-1526.	2.7	9
12	Forecasting Global Fire Emissions on Subseasonal to Seasonal (S2S) Time Scales. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS001955.	1.3	13
13	Landsat-8 and Sentinel-2 burned area mapping - A combined sensor multi-temporal change detection approach. Remote Sensing of Environment, 2019, 231, 111254.	4.6	155
14	Changes in Fire Activity in Africa from 2002 to 2016 and Their Potential Drivers. Geophysical Research Letters, 2019, 46, 7643-7653.	1.5	56
15	Trends in Vegetation fires in South and Southeast Asian Countries. Scientific Reports, 2019, 9, 7422.	1.6	112
16	Historical background and current developments for mapping burned area from satellite Earth observation. Remote Sensing of Environment, 2019, 225, 45-64.	4.6	287
17	How well do global burned area products represent fire patterns in the Brazilian Savannas biome? An accuracy assessment of the MCD64 collections. International Journal of Applied Earth Observation and Geoinformation, 2019, 78, 318-331.	1.4	35
18	Global validation of the collection 6 MODIS burned area product. Remote Sensing of Environment, 2019, 235, 111490.	4.6	125

#	Article	IF	Citations
19	Spatial and temporal intercomparison of four global burned area products. International Journal of Digital Earth, 2019, 12, 460-484.	1.6	85
20	The Global Fire Atlas of individual fire size, duration, speed and direction. Earth System Science Data, 2019, 11, 529-552.	3.7	227
21	The Collection 6 MODIS burned area mapping algorithm and product. Remote Sensing of Environment, 2018, 217, 72-85.	4.6	606
22	A human-driven decline in global burned area. Science, 2017, 356, 1356-1362.	6.0	694
23	Global fire emissions estimates during 1997â€“2016. Earth System Science Data, 2017, 9, 697-720.	3.7	1,159
24	A pan-tropical cascade of fire driven by El NiÃ±o/Southern Oscillation. Nature Climate Change, 2017, 7, 906-911.	8.1	115
25	How much global burned area can be forecast on seasonal time scales using sea surface temperatures?. Environmental Research Letters, 2016, 11, 045001.	2.2	72
26	The collection 6 MODIS active fire detection algorithm and fire products. Remote Sensing of Environment, 2016, 178, 31-41.	4.6	837
27	A MODIS-based burned area assessment for Russian croplands: Mapping requirements and challenges. Remote Sensing of Environment, 2016, 184, 506-521.	4.6	95
28	Active fire detection using Landsat-8/OLI data. Remote Sensing of Environment, 2016, 185, 210-220.	4.6	193
29	Vegetation fires, absorbing aerosols and smoke plume characteristics in diverse biomass burning regions of Asia. Environmental Research Letters, 2015, 10, 105003.	2.2	93
30	Analysis of Southeast Asian pollution episode during June 2013 using satellite remote sensing datasets. Environmental Pollution, 2014, 195, 245-256.	3.7	72
31	A global feasibility assessment of the bi-spectral fire temperature and area retrieval using MODIS data. Remote Sensing of Environment, 2014, 152, 166-173.	4.6	30
32	The New VIIRS 375 m active fire detection data product: Algorithm description and initial assessment. Remote Sensing of Environment, 2014, 143, 85-96.	4.6	611
33	Active fires from the Suomi NPP Visible Infrared Imaging Radiometer Suite: Product status and first evaluation results. Journal of Geophysical Research D: Atmospheres, 2014, 119, 803-816.	1.2	142
34	Satellite based analysis of fireâ€“carbon monoxide relationships from forest and agricultural residue burning (2003â€“2011). Atmospheric Environment, 2013, 64, 179-191.	1.9	70
35	Patterns of fire activity over Indonesia and Malaysia from polar and geostationary satellite observations. Atmospheric Research, 2013, 122, 504-519.	1.8	69
36	Analysis of daily, monthly, and annual burned area using the fourthâ€generation global fire emissions database (GFED4). Journal of Geophysical Research G: Biogeosciences, 2013, 118, 317-328.	1.3	1,086

#	Article	IF	Citations
37	Observing and understanding the Southeast Asian aerosol system by remote sensing: An initial review and analysis for the Seven Southeast Asian Studies (7SEAS) program. Atmospheric Research, 2013, 122, 403-468.	1.8	269
38	Hotspot Analysis of Vegetation Fires and Intensity in the Indian Region. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2013, 6, 224-238.	2.3	79
39	Satellite-based assessment of climate controls on US burned area. Biogeosciences, 2013, 10, 247-260.	1.3	44
40	Evaluating greenhouse gas emissions inventories for agricultural burning using satellite observations of active fires. Ecological Applications, 2012, 22, 1345-1364.	1.8	39
41	Regional fire monitoring and characterization using global NASA MODIS fire products in dry lands of Central Asia. Frontiers of Earth Science, 2012, 6, 196-205.	0.9	28
42	Vegetation fires in the himalayan region â€“ Aerosol load, black carbon emissions and smoke plume heights. Atmospheric Environment, 2012, 47, 241-251.	1.9	117
43	Quantifying burned area for North American forests: Implications for direct reduction of carbon stocks. Journal of Geophysical Research, 2011, 116, .	3.3	39
44	Mapping burned area in Alaska using MODIS data: a data limitations-driven modification to the regional burned area algorithm. International Journal of Wildland Fire, 2011, 20, 487.	1.0	35
45	Forecasting Fire Season Severity in South America Using Sea Surface Temperature Anomalies. Science, 2011, 334, 787-791.	6.0	197
46	Global assessment of the temporal reporting accuracy and precision of the MODIS burned area product. International Journal of Wildland Fire, 2010, 19, 705.	1.0	58
47	Assessing variability and long-term trends in burned area by merging multiple satellite fire products. Biogeosciences, 2010, 7, 1171-1186.	1.3	535
48	Early characterization of the active fire detection products derived from the next generation NPOESS/VIIRS and GOES-R/ABI instruments. , 2010, , .		4
49	Global fire emissions and the contribution of deforestation, savanna, forest, agricultural, and peat fires (1997â€“2009). Atmospheric Chemistry and Physics, 2010, 10, 11707-11735.	1.9	2,326
50	On the use of fire radiative power, area, and temperature estimates to characterize biomass burning via moderate to coarse spatial resolution remote sensing data in the Brazilian Amazon. Journal of Geophysical Research, 2010, 115, .	3.3	50
51	MODIS-Derived Global Fire Products. Remote Sensing and Digital Image Processing, 2010, , 661-679.	0.7	41
52	Estimates of fire emissions from an active deforestation region in the southern Amazon based on satellite data and biogeochemical modelling. Biogeosciences, 2009, 6, 235-249.	1.3	76
53	An active-fire based burned area mapping algorithm for the MODIS sensor. Remote Sensing of Environment, 2009, 113, 408-420.	4.6	533
54	Estimating biomass consumed from fire using MODIS FRE. Geophysical Research Letters, 2009, 36, .	1.5	83

#	Article	IF	Citations
55	An approach to estimate global biomass burning emissions of organic and black carbon from MODIS fire radiative power. Journal of Geophysical Research, 2009, 114, .	3.3	162
56	Comment on â€œReversal of trend of biomass burning in the Amazonâ€•by Ilan Koren, Lorraine A. Remer, and Karla Longo. Geophysical Research Letters, 2009, 36, .	1.5	9
57	Global emissions of non-methane hydrocarbons deduced from SCIAMACHY formaldehyde columns through 2003â€“2006. Atmospheric Chemistry and Physics, 2009, 9, 3663-3679.	1.9	144
58	Evaluating the performance of pyrogenic and biogenic emission inventories against one decade of space-based formaldehyde columns. Atmospheric Chemistry and Physics, 2009, 9, 1037-1060.	1.9	198
59	Global characterization of biomass-burning patterns using satellite measurements of fire radiative energy. Remote Sensing of Environment, 2008, 112, 2950-2962.	4.6	159
60	Validation of GOES and MODIS active fire detection products using ASTER and ETM+ data. Remote Sensing of Environment, 2008, 112, 2711-2726.	4.6	263
61	Active fire detection and characterization with the advanced spaceborne thermal emission and reflection radiometer (ASTER). Remote Sensing of Environment, 2008, 112, 3055-3063.	4.6	140
62	Global characterization of fire activity: toward defining fire regimes from Earth observation data. Global Change Biology, 2008, 14, 1488-1502.	4.2	275
63	Climate controls on the variability of fires in the tropics and subtropics. Global Biogeochemical Cycles, 2008, 22, .	1.9	238
64	Climate regulation of fire emissions and deforestation in equatorial Asia. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 20350-20355.	3.3	336
65	Characterization of the tropical diurnal fire cycle using VIRS and MODIS observations. Remote Sensing of Environment, 2007, 108, 407-421.	4.6	225
66	Time-dependent inversion estimates of global biomass-burning CO emissions using Measurement of Pollution in the Troposphere (MOPITT) measurements. Journal of Geophysical Research, 2006, 111, .	3.3	94
67	Global distribution and seasonality of active fires as observed with the Terra and Aqua Moderate Resolution Imaging Spectroradiometer (MODIS) sensors. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	493
68	Validation of active fire detection from moderate-resolution satellite sensors: the MODIS example in northern eurasia. IEEE Transactions on Geoscience and Remote Sensing, 2006, 44, 1757-1764.	2.7	133
69	Characterizing Vegetation Fire Dynamics in Brazil through Multisatellite Data: Common Trends and Practical Issues. Earth Interactions, 2005, 9, 1-26.	0.7	62
70	Global fire activity from two years of MODIS data. International Journal of Wildland Fire, 2005, 14, 117.	1.0	76
71	Validation of MODIS Active Fire Detection Products Derived from Two Algorithms. Earth Interactions, 2005, 9, 1-25.	0.7	112
72	Validation of the MODIS active fire product over Southern Africa with ASTER data. International Journal of Remote Sensing, 2005, 26, 4239-4264.	1.3	145

#	Article	IF	Citations
73	Continental-Scale Partitioning of Fire Emissions During the 1997 to 2001 El Nino/La Nina Period. Science, 2004, 303, 73-76.	6.0	549
74	Top-down estimates of global CO sources using MOPITT measurements. Geophysical Research Letters, 2004, 31, .	1.5	122
75	Correction to â€œTop-down estimates of global CO sources using MOPITT measurementsâ€• Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	4
76	An Enhanced Contextual Fire Detection Algorithm for MODIS. Remote Sensing of Environment, 2003, 87, 273-282.	4.6	1,433
77	Carbon emissions from fires in tropical and subtropical ecosystems. Global Change Biology, 2003, 9, 547-562.	4.2	390
78	Comment on â€œSeasonal, intraseasonal, and interannual variability of global land fires and their effects on atmospheric aerosol distributionâ€•by Y. Ji and E. Stocker. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	6
79	Application of the Dozier retrieval to wildfire characterization: a sensitivity analysis. Remote Sensing of Environment, 2001, 77, 34-49.	4.6	121
80	The Moderate Resolution Imaging Spectroradiometer (MODIS): land remote sensing for global change research. IEEE Transactions on Geoscience and Remote Sensing, 1998, 36, 1228-1249.	2.7	1,178
81	Potential global fire monitoring from EOS-MODIS. Journal of Geophysical Research, 1998, 103, 32215-32238.	3.3	521
82	A simplified scheme for obtaining precipitation and vertical hydrometeor profiles from passive microwave sensors. IEEE Transactions on Geoscience and Remote Sensing, 1996, 34, 1213-1232.	2.7	447
83	A Method for Combined PassiveÂ–Active Microwave Retrievals of Cloud and Precipitation Profiles. Journal of Applied Meteorology and Climatology, 1996, 35, 1763-1789.	1.7	123
84	A Method for Combining Passive Microwave and Infrared Rainfall Observations. Journal of Atmospheric and Oceanic Technology, 1995, 12, 33-45.	0.5	48
85	A Passive Microwave Technique for Estimating Rainfall and Vertical Structure Information from Space. Part I: Algorithm Description. Journal of Applied Meteorology and Climatology, 1994, 33, 3-18.	1.7	182
86	A Passive Microwave Technique for Estimating Rainfall and Vertical Structure Information from Space. Part II: Applications to SSM/I Data. Journal of Applied Meteorology and Climatology, 1994, 33, 19-34.	1.7	54