Frank-M Goettsche

List of Publications by Year
in descending order

57 papers	3,570 citations	126858 33 h-index	155592 55 g-index
66 all docs	66 docs citations	66 times ranked	2530 citing authors

#	Article	IF	Citations
1	Validation and Quality Assessment of the ECOSTRESS Level-2 Land Surface Temperature and Emissivity Product. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-23.	2.7	46
2	A global dataset of spatiotemporally seamless daily mean land surface temperatures: generation, validation, and analysis. Earth System Science Data, 2022, 14, 3091-3113.	3.7	10
3	Validation and consistency assessment of land surface temperature from geostationary and polar orbit platforms: SEVIRI/MSG and AVHRR/Metop. ISPRS Journal of Photogrammetry and Remote Sensing, 2021, 175, 282-297.	4.9	15
4	Validation of Sentinel-3 SLSTR Land Surface Temperature Retrieved by the Operational Product and Comparison with Explicitly Emissivity-Dependent Algorithms. Remote Sensing, 2021, 13, 2228.	1.8	14
5	Long-term column-averaged greenhouse gas observations using a COCCON spectrometer at the high-surface-albedo site in Gobabeb, Namibia. Atmospheric Measurement Techniques, 2021, 14, 5887-5911.	1.2	12
6	Spatially Continuous and High-Resolution Land Surface Temperature Product Generation: A review of reconstruction and spatiotemporal fusion techniques. IEEE Geoscience and Remote Sensing Magazine, 2021, 9, 112-137.	4.9	61
7	Validation of AVHRR Land Surface Temperature with MODIS and In Situ LSTâ€"A TIMELINE Thematic Processor. Remote Sensing, 2021, 13, 3473.	1.8	5
8	A simple yet robust framework to estimate accurate daily mean land surface temperature from thermal observations of tandem polar orbiters. Remote Sensing of Environment, 2021, 264, 112612.	4.6	24
9	Continuous evaluation of the spatial representativeness of land surface temperature validation sites. Remote Sensing of Environment, 2021, 265, 112669.	4.6	21
10	Retrieving Soil and Vegetation Temperatures From Dual-Angle and Multipixel Satellite Observations. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 5536-5549.	2.3	7
11	Artificial Neural Networks to Retrieve Land and Sea Skin Temperature from IASI. Remote Sensing, 2020, 12, 2777.	1.8	10
12	Investigation and validation of algorithms for estimating land surface temperature from Sentinel-3 SLSTR data. International Journal of Applied Earth Observation and Geoinformation, 2020, 91, 102136.	1.4	40
13	Google Earth Engine Open-Source Code for Land Surface Temperature Estimation from the Landsat Series. Remote Sensing, 2020, 12, 1471.	1.8	263
14	A global long-term (1981â€"2000) land surface temperature product for NOAA AVHRR. Earth System Science Data, 2020, 12, 3247-3268.	3.7	33
15	The 2016 CEOS Infrared Radiometer Comparison: Part II: Laboratory Comparison of Radiation Thermometers. Journal of Atmospheric and Oceanic Technology, 2019, 36, 1079-1092.	0.5	18
16	SEVIRI Hyper-Fast Forward Model with Application to Emissivity Retrieval. Sensors, 2019, 19, 1532.	2.1	6
17	Land Surface Temperature. , 2019, , 57-127.		35
18	Component radiative temperatures over sparsely vegetated surfaces and their potential for upscaling land surface temperature. Agricultural and Forest Meteorology, 2019, 276-277, 107600.	1.9	11

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19	Validation of Collection 6 MODIS land surface temperature product using in situ measurements. Remote Sensing of Environment, 2019, 225, 16-29.	4.6	258
20	Comprehensive In Situ Validation of Five Satellite Land Surface Temperature Data Sets over Multiple Stations and Years. Remote Sensing, 2019, 11, 479.	1.8	61
21	A Method Based on Temporal Component Decomposition for Estimating 1-km All-Weather Land Surface Temperature by Merging Satellite Thermal Infrared and Passive Microwave Observations. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 4670-4691.	2.7	97
22	Correction to â€œA Method Based on Temporal Component Decomposition for Estimating 1-km All-Weather Land Surface Temperature by Merging Satellite Thermal Infrared and Passive Microwave Observationsâ€•[Feb 19 4670-4691]. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 6254-6254.	2.7	3
23	An All-Weather Land Surface Temperature Product Based on MSG/SEVIRI Observations. Remote Sensing, 2019, 11, 3044.	1.8	55
24	Physical Retrieval of Land Surface Emissivity Spectra from Hyper-Spectral Infrared Observations and Validation with In Situ Measurements. Remote Sensing, 2018, 10, 976.	1.8	29
25	Comprehensive assessment of four-parameter diurnal land surface temperature cycle models under clear-sky. ISPRS Journal of Photogrammetry and Remote Sensing, 2018, 142, 190-204.	4.9	32
26	A Thermal Sampling Depth Correction Method for Land Surface Temperature Estimation From Satellite Passive Microwave Observation Over Barren Land. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 4743-4756.	2.7	58
27	Global Land Surface Temperature From the Alongâ€Track Scanning Radiometers. Journal of Geophysical Research D: Atmospheres, 2017, 122, 12,167.	1.2	53
28	Long Term Validation of Land Surface Temperature Retrieved from MSG/SEVIRI with Continuous in-Situ Measurements in Africa. Remote Sensing, 2016, 8, 410.	1.8	100
29	Synergistic use of MERIS and AATSR as a proxy for estimating Land Surface Temperature from Sentinel-3 data. Remote Sensing of Environment, 2016, 179, 149-161.	4.6	49
30	Linking Surface Urban Heat Islands with Groundwater Temperatures. Environmental Science & Technology, 2016, 50, 70-78.	4.6	41
31	Quality Assessment of S-NPP VIIRS Land Surface Temperature Product. Remote Sensing, 2015, 7, 12215-12241.	1.8	54
32	Meteosat Land Surface Temperature Climate Data Record: Achievable Accuracy and Potential Uncertainties. Remote Sensing, 2015, 7, 13139-13156.	1.8	74
33	Ecosystem properties of semiarid savanna grassland in West Africa and its relationship with environmental variability. Global Change Biology, 2015, 21, 250-264.	4.2	91
34	Integrated fusion of multi-scale polar-orbiting and geostationary satellite observations for the mapping of high spatial and temporal resolution land surface temperature. Remote Sensing of Environment, 2015, 156, 169-181.	4.6	186
35	Kalman filter physical retrieval of surface emissivity and temperature from SEVIRI infrared channels: a validation and intercomparison study. Atmospheric Measurement Techniques, 2015, 8, 2981-2997.	1.2	47
36	Validation of remotely sensed surface temperature over an oak woodland landscape â€" The problem of viewing and illumination geometries. Remote Sensing of Environment, 2014, 148, 16-27.	4.6	105

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37	Validation of Land Surface Temperature products derived from the Visible Infrared Imaging Radiometer Suite (VIIRS) using ground-based and heritage satellite measurements. Remote Sensing of Environment, 2014, 154, 19-37.	4.6	122
38	Temperature and Emissivity Separation From MSG/SEVIRI Data. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 5937-5951.	2.7	36
39	Evaluation of GOES-R Land Surface Temperature Algorithm Using SEVIRI Satellite Retrievals With <italic>In Situ</italic> Measurements. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 3812-3822.	2.7	23
40	Directional Viewing Effects on Satellite Land Surface Temperature Products Over Sparse Vegetation Canopiesâ€"A Multisensor Analysis. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 1464-1468.	1.4	69
41	Validation of land surface temperature derived from MSG/SEVIRI with in situ measurements at Gobabeb, Namibia. International Journal of Remote Sensing, 2013, 34, 3069-3083.	1.3	87
42	Validation of six satellite-retrieved land surface emissivity products over two land cover types in a hyper-arid region. Remote Sensing of Environment, 2012, 124, 149-158.	4.6	58
43	Directional Effects on Land Surface Temperature Estimation From Meteosat Second Generation for Savanna Landscapes. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 4458-4468.	2.7	52
44	Tree survey and allometric models for tiger bush in northern Senegal and comparison with tree parameters derived from high resolution satellite data. International Journal of Applied Earth Observation and Geoinformation, 2011, 13, 517-527.	1.4	35
45	Quantifying the Uncertainty of Land Surface Temperature Retrievals From SEVIRI/Meteosat. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 523-534.	2.7	142
46	Modelling the effect of optical thickness on diurnal cycles of land surface temperature. Remote Sensing of Environment, 2009, 113, 2306-2316.	4.6	65
47	The impact of image dynamic range on texture classification of brain white matter. BMC Medical Imaging, 2008, 8, 18.	1.4	36
48	Separating surface emissivity and temperature using two-channel spectral indices and emissivity composites and comparison with a vegetation fraction method. Remote Sensing of Environment, 2005, 96, 1-17.	4.6	29
49	Emissivity and temperature estimation from MSG SEVIRI data; method validation with simulated and NOAA-14 AVHRR data. Advances in Space Research, 2003, 32, 2241-2246.	1.2	5
50	Land surface temperature and emissivity estimation from passive sensor data: Theory and practice-current trends. International Journal of Remote Sensing, 2002, 23, 2563-2594.	1.3	459
51	Potential of MSG for surface temperature and emissivity estimation: Considerations for real-time applications. International Journal of Remote Sensing, 2002, 23, 4511-4518.	1.3	19
52	Evolution of neural networks for radiative transfer calculations in the terrestrial infrared. Remote Sensing of Environment, 2002, 80, 157-164.	4.6	22
53	<i>Letter to the Editor</i>Retrieval of land surface temperature from combined AVHRR data. Annales Geophysicae, 2002, 20, 1257-1259.	0.6	4
54	Retrieval of land surface temperature and emissivity from satellite data: Physics, theoretical limitations and current methods. Journal of the Indian Society of Remote Sensing, 2001, 29, 23-30.	1.2	31

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55	Influence of Land Surface Parameters and Atmosphere on METEOSAT Brightness Temperatures and Generation of Land Surface Temperature Maps by Temporally and Spatially Interpolating Atmospheric Correction. Remote Sensing of Environment, 2001, 75, 39-46.	4.6	87
56	Modelling of diurnal cycles of brightness temperature extracted from METEOSAT data. Remote Sensing of Environment, 2001, 76, 337-348.	4.6	160
57	Substituting radiative transfer modelling in the thermal infrared by neural networks. , 0, , .		0