

# Franz J Meyer

## List of Publications by Year in descending order

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93  
papers

2,258  
citations

257450

24  
h-index

243625

44  
g-index

109  
all docs

109  
docs citations

109  
times ranked

2352  
citing authors

#	ARTICLE	IF	CITATIONS
1	The Potential of Low-Frequency SAR Systems for Mapping Ionospheric TEC Distributions. IEEE Geoscience and Remote Sensing Letters, 2006, 3, 560-564.	3.1	189
2	Operational Flood Mapping Using Multi-Temporal Sentinel-1 SAR Images: A Case Study from Bangladesh. Remote Sensing, 2019, 11, 1581.	4.0	168
3	Prediction, Detection, and Correction of Faraday Rotation in Full-Polarimetric L-Band SAR Data. IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 3076-3086.	6.3	116
4	Processing of Bistatic SAR Data From Quasi-Stationary Configurations. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 3350-3358.	6.3	104
5	Performance Requirements for Ionospheric Correction of Low-Frequency SAR Data. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 3694-3702.	6.3	102
6	Correction and Characterization of Radio Frequency Interference Signatures in L-Band Synthetic Aperture Radar Data. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 4961-4972.	6.3	100
7	Thermal, Deformation, and Degassing Remote Sensing Time Series (CE 2000â€“2017) at the 47 most Active Volcanoes in Latin America: Implications for Volcanic Systems. Journal of Geophysical Research: Solid Earth, 2019, 124, 195-218.	3.4	67
8	Performance analysis of the TerraSAR-X Traffic monitoring concept. ISPRS Journal of Photogrammetry and Remote Sensing, 2006, 61, 225-242.	11.1	63
9	The Influence of Equatorial Scintillation on L-Band SAR Image Quality and Phase. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 869-880.	6.3	61
10	Analyzing floating and bedfast lake ice regimes across Arctic Alaska using 25â€“ years of space-borne SAR imagery. Remote Sensing of Environment, 2018, 209, 660-676.	11.0	57
11	Estimation and compensation of ionospheric delay for SAR interferometry. , 2010, , .		56
12	Change Detection in Synthetic Aperture Radar Images Using a Multiscale-Driven Approach. Remote Sensing, 2016, 8, 482.	4.0	53
13	Integrating SAR and derived products into operational volcano monitoring and decision support systems. ISPRS Journal of Photogrammetry and Remote Sensing, 2015, 100, 106-117.	11.1	52
14	Using L-band SAR coherence to delineate glacier extent. Canadian Journal of Remote Sensing, 2010, 36, S186-S195.	2.4	50
15	Constructing accurate maps of atmospheric water vapor by combining interferometric synthetic aperture radar and GNSS observations. Journal of Geophysical Research D: Atmospheres, 2015, 120, 1391-1403.	3.3	46
16	Remote sensing northern lake methane ebullition. Nature Climate Change, 2020, 10, 511-517.	18.8	45
17	InSAR Detection and Field Evidence for Thermokarst after a Tundra Wildfire, Using ALOS-PALSAR. Remote Sensing, 2016, 8, 218.	4.0	40
18	Mapping arctic landfast ice extent using L-band synthetic aperture radar interferometry. Remote Sensing of Environment, 2011, 115, 3029-3043.	11.0	39

#	ARTICLE	IF	CITATIONS
19	Traffic monitoring with spaceborne SAR Theory, simulations, and experiments. <i>Computer Vision and Image Understanding</i> , 2007, 106, 231-244.	4.7	37
20	Mapping pan-Arctic landfast sea ice stability using Sentinel-1 interferometry. <i>Cryosphere</i> , 2019, 13, 557-577.	3.9	35
21	Assessing SAR C-band data to effectively distinguish modified land uses in a heavily disturbed Amazon forest. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2021, 94, 102214.	2.8	32
22	Synthetic aperture radar (SAR) backscatter response from methane ebullition bubbles trapped by thermokarst lake ice. <i>Canadian Journal of Remote Sensing</i> , 2013, 38, 667-682.	2.4	31
23	The 30 November 2018 Mw 7.1 Anchorage Earthquake. <i>Seismological Research Letters</i> , 2020, 91, 66-84.	1.9	29
24	Characterization of L-band synthetic aperture radar (SAR) backscatter from floating and grounded thermokarst lake ice in Arctic Alaska. <i>Cryosphere</i> , 2013, 7, 1741-1752.	3.9	26
25	Top-of-permafrost ground ice indicated by remotely sensed late-season subsidence. <i>Cryosphere</i> , 2021, 15, 2041-2055.	3.9	26
26	Environmental Security in Arctic Ice-Covered Seas: From Strategy to Tactics of Hazard Identification and Emergency Response. <i>Marine Technology Society Journal</i> , 2011, 45, 37-48.	0.4	25
27	Detection and spatiotemporal analysis of methane ebullition on thermokarst lake ice using high-resolution optical aerial imagery. <i>Biogeosciences</i> , 2016, 13, 27-44.	3.3	25
28	Comparison of Small Baseline Interferometric SAR Processors for Estimating Ground Deformation. <i>Remote Sensing</i> , 2016, 8, 330.	4.0	23
29	Ionospheric correction of InSAR data for accurate ice velocity measurement at polar regions. <i>Remote Sensing of Environment</i> , 2018, 209, 166-180.	11.0	23
30	Temporal Filtering of InSAR Data Using Statistical Parameters From NWP Models. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2015, 53, 4033-4044.	6.3	22
31	Decadal-scale hotspot methane ebullition within lakes following abrupt permafrost thaw. <i>Environmental Research Letters</i> , 2021, 16, 035010.	5.2	21
32	Constraining clastic input controls on magnetic susceptibility and trace element anomalies during the Late Devonian <i>punctata</i> Event in the Western Canada Sedimentary Basin. <i>Terra Nova</i> , 2012, 24, 301-309.	2.1	20
33	Assessing small-scale deformation and stability of landfast sea ice on seasonal timescales through L-band SAR interferometry and inverse modeling. <i>Remote Sensing of Environment</i> , 2016, 187, 492-504.	11.0	20
34	Evaluating landfast sea ice stress and fracture in support of operations on sea ice using SAR interferometry. <i>Cold Regions Science and Technology</i> , 2018, 149, 51-64.	3.5	20
35	A review of ionospheric effects in low-frequency SAR Signals, correction methods, and performance requirements. , 2010, , .		19
36	Ionospheric effects in SAR interferometry: An analysis and comparison of methods for their estimation. , 2011, , .		19

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37	The Impact of the Ionosphere on Interferometric SAR Processing. , 2008, , .		18
38	Measurement and interpretation of subtle deformation signals at Unimak Island from 2003 to 2010 using weather modelâ€assisted time series InSAR. Journal of Geophysical Research: Solid Earth, 2015, 120, 1175-1194.	3.4	18
39	Traversing Sea Iceâ€Linking Surface Roughness and Ice Trafficability Through SAR Polarimetry and Interferometry. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 416-433.	4.9	18
40	Assessing Sea Ice Trafficability in a Changing Arctic. Arctic, 2018, 71, .	0.4	17
41	SAR interferometry at Venus for topography and change detection. Planetary and Space Science, 2012, 73, 130-144.	1.7	16
42	Water vapor mapping by fusing InSAR and GNSS remote sensing data and atmospheric simulations. Hydrology and Earth System Sciences, 2015, 19, 4747-4764.	4.9	16
43	Measurement and imaging of infragravity waves in sea ice using InSAR. Geophysical Research Letters, 2016, 43, 6383-6392.	4.0	16
44	Complementing Optical Remote Sensing with Synthetic Aperture Radar Observations of Hail Damage Swaths to Agricultural Crops in the Central United States. Journal of Applied Meteorology and Climatology, 2020, 59, 665-685.	1.5	16
45	Studying the Applicability of X-Band SAR Data to the Network-Scale Mapping of Pavement Roughness on US Roads. Remote Sensing, 2020, 12, 1507.	4.0	15
46	A Comparative Analysis of Tropospheric Water Vapor Measurements from MERIS and SAR. , 2008, , .		14
47	Oil Spill Detection in Synthetic Aperture Radar Images Using Lipschitz-Regularity and Multiscale Techniques. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 2389-2405.	4.9	14
48	Iceberg topography and volume classification using TanDEM-X interferometry. Cryosphere, 2019, 13, 1861-1875.	3.9	14
49	Multi-sensor data fusion for remote sensing of post-eruptive deformation and depositional features at Redoubt Volcano. Journal of Volcanology and Geothermal Research, 2013, 259, 414-423.	2.1	13
50	Mapping Arctic Bottomfast Sea Ice Using SAR Interferometry. Remote Sensing, 2018, 10, 720.	4.0	13
51	Reconstructing movement history of frozen debris lobes in northern Alaska using satellite radar interferometry. Remote Sensing of Environment, 2019, 221, 722-740.	11.0	12
52	Improved Boreal Forest Wildfire Fuel Type Mapping in Interior Alaska Using AVIRIS-NG Hyperspectral Data. Remote Sensing, 2021, 13, 897.	4.0	12
53	Performance of the highâ€resolution atmospheric model HRRRâ€AK for correcting geodetic observations from spaceborne radars. Journal of Geophysical Research D: Atmospheres, 2013, 118, 11611-11624.	3.3	9
54	Characterization and extent of randomly-changing radio frequency interference in ALOS PALSAR data. , 2011, , .		8

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55	Pyroclastic Flow Deposits and InSAR: Analysis of Long-Term Subsidence at Augustine Volcano, Alaska. Remote Sensing, 2017, 9, 4.	4.0	8
56	An Object-Based Classification Method to Detect Methane Ebullition Bubbles in Early Winter Lake Ice. Remote Sensing, 2019, 11, 822.	4.0	8
57	Towards traffic monitoring with TerraSAR-X. Canadian Journal of Remote Sensing, 2007, 33, 39-51.	2.4	7
58	Using Synthetic Aperture Radar to Define Spring Breakup on the Kuparuk River, Northern Alaska. Arctic, 2014, 67, 462.	0.4	7
59	Ground-Based Radar Interferometry of Sea Ice. Remote Sensing, 2021, 13, 43.	4.0	7
60	Prediction and detection of Faraday rotation in ALOS PALSAR data. , 2007, , .		6
61	Topography and displacement of polar glaciers from multi-temporal SAR interferograms. Polar Record, 2007, 43, 331-343.	0.8	6
62	Mapping the Ionosphere Using L-Band SAR Data. , 2008, , .		6
63	Making low concentration in-house pressed pellet trace element standards for carbonate rock analyses by WD-XRF. Chemical Geology, 2012, 298-299, 97-115.	3.3	6
64	An Automatic Flood Monitoring Service from Sentinel-1 SAR: Products, Delivery Pipelines, and Performance Assessment. , 2018, , .		6
65	Synthetic Aperture Radar and Optical Remote Sensing of Crop Damage Attributed to Severe Weather in the Central United States. , 2019, , .		6
66	Repeat-Pass Interferometric Speckle. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 6736-6750.	6.3	6
67	Long-Term and Seasonal Subsidence Rates in Urban Areas from Persistent Scatterer Interferometry. , 2007, , .		5
68	Mapping aurora activity with SAR &#x2014; a case study. , 2009, , .		5
69	A statistical model of ionospheric signals in low-frequency SAR data. , 2011, , .		5
70	Instantaneous sea ice drift speed from TanDEM-X interferometry. Cryosphere, 2019, 13, 1395-1408.	3.9	5
71	Reliable InSAR Phase History Uncertainty Estimates. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-9.	6.3	5
72	Detecting moving targets in dual-channel high resolution spaceborne SAR images with a compound detection scheme. , 2007, , .		4

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73	An Integral Detection Scheme for Moving Object Indication in Dual-Channel High Resolution Spaceborne SAR Data. , 2007, , .		4
74	Analysis of atmospheric signals in spaceborne InSAR - toward water vapor mapping based on multiple sources. , 2012, , .		4
75	Assessing Wildfire Burn Severity and Its Relationship with Environmental Factors: A Case Study in Interior Alaska Boreal Forest. Remote Sensing, 2021, 13, 1966.	4.0	4
76	The Sarviews Project: Automated Processing Of Sentinel-1 Sar Data For Geoscience And Hazard Response. , 2019, , .		3
77	Applications of a SAR-Based Flood Monitoring Service During Disaster Response and Recovery. , 2019, , .		3
78	Modeling ionospheric phase noise for NISAR mission data. , 2017, , .		2
79	Practical approach for synthetic aperture radar change analysis in urban environments. Journal of Applied Remote Sensing, 2019, 13, 1.	1.3	2
80	Analyzing the spatial distribution of coherent points in SAR interferograms. , 2014, , .		1
81	Detection of augeis-related flood areas in a time series of high resolution SAR images using curvelet transform and unsupervised classification. , 2017, , .		1
82	Network-scale pavement roughness mapping using spaceborne high-resolution X-band SAR data. , 2017, , .		1
83	Radar Interferometric Phase Errors Induced by Faraday Rotation. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-11.	6.3	1
84	Relations between SAR tomography and full-waveform LIDAR for structural analysis of forested areas. , 2010, , .		0
85	Ionospheric effect correction of ice motion mapping using interferometric synthetic aperture radar. , 2016, , .		0
86	A combined estimator for Interferometric SAR ionosphere correction. , 2016, , .		0
87	The IEEE Alaska Section GRSS Chapter: Remote Sensing of the Last Frontier [Chapters]. IEEE Geoscience and Remote Sensing Magazine, 2016, 4, 92-94.	9.6	0
88	New applications of spaceborne imaging RADAR-C (SIR-C) data. , 2017, , .		0
89	Monitoring of Auroral Activities over Fairbanks, Alaska, using SAR, PFISR and Keograms. , 2018, , .		0
90	Monitoring Weather-Related Hazards Using the HydroSAR Service: Application to the 2020 South Asia Monsoon Season. , 2021, , .		0

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91	DATA PROCESSING CONCEPTS FOR THE INTEGRATION OF SAR INTO OPERATIONAL VOLCANO MONITORING SYSTEMS. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XL-1/W1, 247-252.	0.2	0
92	Fernerkundung und Global Change. , 2015, , 1-34.		0
93	Fernerkundung und Global Change. , 2017, , 771-803.		0