

Biao Zhang

List of Publications by Year in descending order

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88
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citations

257450

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docs citations

88
times ranked

1028
citing authors

#	ARTICLE	IF	CITATIONS
1	Up-to-Downwave Asymmetry of the CFOSAT SWIM Fluctuation Spectrum for Wave Direction Ambiguity Removal. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-12.	6.3	3
2	Sea Surface Wind Retrieval Using the Combined Scatterometer and Altimeter Backscatter Measurements of the HY-2B Satellite. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-12.	6.3	1
3	Observed Ocean Surface Winds and Mixed Layer Currents Under Tropical Cyclones: Asymmetric Characteristics. Journal of Geophysical Research: Oceans, 2022, 127, .	2.6	7
4	First Quasi-Synchronous Hurricane Quad-Polarization Observations by C-Band Radar Constellation Mission and RADARSAT-2. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-10.	6.3	3
5	Ocean wave parameters retrieved directly from compact Polarimetric SAR data. Acta Oceanologica Sinica, 2022, 41, 129-137.	1.0	1
6	Aircraft and Satellite Observations of Vortex Evolution and Surface Wind Asymmetry of Concentric Eyewalls in Hurricane Irma. Remote Sensing, 2022, 14, 2158.	4.0	0
7	A novel deep learning method for marine oil spill detection from satellite synthetic aperture radar imagery. Marine Pollution Bulletin, 2022, 179, 113666.	5.0	30
8	Airâ€“Sea Interface Parameters and Heat Flux from Neural Network and Advanced Microwave Scanning Radiometer Observations. Remote Sensing, 2022, 14, 2364.	4.0	2
9	A Nonparametric Tropical Cyclone Wind Speed Estimation Model Based on Dual-Polarization SAR Observations. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-13.	6.3	3
10	CMODH Validation for C-Band Synthetic Aperture Radar HH Polarization Wind Retrieval Over the Ocean. IEEE Geoscience and Remote Sensing Letters, 2021, 18, 102-106.	3.1	10
11	Estimating Tropical Cyclone Wind Structure and Intensity From Spaceborne Radiometer and Synthetic Aperture Radar. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 4043-4050.	4.9	12
12	Compact Polarimetry Synthetic Aperture Radar Ocean Wind Retrieval: Model Development and Validation. Journal of Atmospheric and Oceanic Technology, 2021, 38, 747-757.	1.3	5
13	Estimating the Key Parameter of a Tropical Cyclone Wind Field Model over the Northwest Pacific Ocean: A Comparison between Neural Networks and Statistical Models. Remote Sensing, 2021, 13, 2653.	4.0	3
14	Using Synthetic Aperture Radar and Radiometer Observations to Estimate Tropical Cyclone Wind Structure and Intensity. , 2021, , .		0
15	Synergistic Observations of Surface Winds and Currents in Tropical Cyclone. , 2021, , .		0
16	Estimation of Wind Direction in Tropical Cyclones Using C-Band Dual-Polarization Synthetic Aperture Radar. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 1450-1462.	6.3	22
17	On Modeling of Quadâ€“Polarization Radar Scattering From the Ocean Surface With Breaking Waves. Journal of Geophysical Research: Oceans, 2020, 125, e2020JC016319.	2.6	9
18	On Quad-Polarized SAR Measurements of the Ocean Surface. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 8362-8370.	6.3	34

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19	On C-Band Quad-Polarized Synthetic Aperture Radar Properties of Ocean Surface Currents. Remote Sensing, 2019, 11, 2321.	4.0	5
20	A Geophysical Model Function for Wind Speed Retrieval From C-Band HH-Polarized Synthetic Aperture Radar. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 1521-1525.	3.1	31
21	Ship Detection Using a Fully Convolutional Network with Compact Polarimetric SAR Images. Remote Sensing, 2019, 11, 2171.	4.0	42
22	Copolarized and Cross-Polarized SAR Measurements for High-Resolution Description of Major Hurricane Wind Structures: Application to Irma Category 5 Hurricane. Journal of Geophysical Research: Oceans, 2019, 124, 3905-3922.	2.6	68
23	Estimation of Sea Surface Current from X-Band Marine Radar Images by Cross-Spectrum Analysis. Remote Sensing, 2019, 11, 1031.	4.0	8
24	Inconsistencies in scatterometer wind products based on ASCAT and OSCAT-2 collocations. Remote Sensing of Environment, 2019, 225, 207-216.	11.0	23
25	C-Band Right-Circular Polarization Ocean Wind Retrieval. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 1398-1401.	3.1	6
26	Examination of Surface Wind Asymmetry in Tropical Cyclones over the Northwest Pacific Ocean Using SMAP Observations. Remote Sensing, 2019, 11, 2604.	4.0	16
27	Examination of Typhoon Surface Wind Asymmetry in Northwest Pacific Ocean Using SMAP Observations. , 2019, , .		0
28	Synergistic Measurements of Hurricane Wind Speeds and Directions from C-band Dual-Polarization Synthetic Aperture Radar. , 2019, , .		1
29	Multi-Scale, Multi-Frequency, and Quad-Polarized Microwave Scattering from Sea Surface Numerical Simulation. , 2019, , .		0
30	Contribution of Wave Breaking to Quad-Polarization Synthetic Aperture Radar. , 2019, , .		0
31	Interpreting Surface Ocean Phenomena Through Quad-Polarized SAR Measurements. , 2019, , .		0
32	C-band Compact-Polarimetric SAR Monitoring of Ocean Winds. , 2019, , .		2
33	Upper Ocean Response of Yongxing Island Area to Typhoon "Kujira"™ in the South China Sea from Multiple-Satellite and Fixed-Point Observation. , 2018, , .		0
34	Tropical Cyclone Wind Direction Retrieval from C-Band Dual-Polarization Synthetic Aperture Radar. , 2018, , .		1
35	A C-band Geophysical Model Function for Determining Coastal Wind Speed Using Synthetic Aperture Radar. , 2018, , .		5
36	Oceanic Eddy Characteristics and Generation Mechanisms in the Kuroshio Extension Region. Journal of Geophysical Research: Oceans, 2018, 123, 8548-8567.	2.6	56

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37	Ocean Wind Retrieval Models for RADARSAT Constellation Mission Compact Polarimetry SAR. Remote Sensing, 2018, 10, 1938.	4.0	7
38	Upper Ocean Response to Typhoon Kalmaegi and Sarika in the South China Sea from Multiple-Satellite Observations and Numerical Simulations. Remote Sensing, 2018, 10, 348.	4.0	47
39	A C-Band Geophysical Model Function for Determining Coastal Wind Speed Using Synthetic Aperture Radar. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 2417-2428.	4.9	55
40	Retrieving Hurricane Wind Speed From Dominant Wave Parameters. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 2589-2598.	4.9	15
41	A Hurricane Wind Speed Retrieval Model for C-Band RADARSAT-2 Cross-Polarization ScanSAR Images. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 4766-4774.	6.3	87
42	An Automatic Algorithm to Retrieve Wave Height From X-Band Marine Radar Image Sequence. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 5084-5092.	6.3	22
43	Compact Polarimetric Synthetic Aperture Radar for Marine Oil Platform and Slick Detection. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 1407-1423.	6.3	30
44	Bridging the gap between cyclone wind and wave by C-band SAR measurements. Journal of Geophysical Research: Oceans, 2017, 122, 6714-6724.	2.6	41
45	Combined Co- and Cross-Polarized SAR Measurements Under Extreme Wind Conditions. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 6746-6755.	6.3	116
46	An oceanic eddy statistical comparison using multiple observational data in the Kuroshio Extension region. Acta Oceanologica Sinica, 2017, 36, 1-7.	1.0	10
47	Investigation of upper ocean response to typhoon kalmaegi (2014) using multiple satellites observation and numerical simulation. , 2017, , .		0
48	A New Modulation Transfer Function With Range and Azimuth Dependence for Ocean Wave Spectra Retrieval From X-Band Marine Radar Observations. IEEE Geoscience and Remote Sensing Letters, 2017, 14, 1373-1377.	3.1	5
49	A Method to Correct the Influence of Rain on X-Band Marine Radar Image. IEEE Access, 2017, 5, 25576-25583.	4.2	26
50	Ku-Band Sea Surface Radar Backscatter at Low Incidence Angles under Extreme Wind Conditions. Remote Sensing, 2017, 9, 474.	4.0	11
51	Rain effects on the hurricane observations over the ocean by C-band Synthetic Aperture Radar. Journal of Geophysical Research: Oceans, 2016, 121, 14-26.	2.6	43
52	Marine oil slick and platform detection by compact polrimetric synthetic aperture radar. , 2016, , .		2
53	Radar imaging of intense nonlinear Ekman divergence. Geophysical Research Letters, 2016, 43, 9810-9818.	4.0	8
54	Observation of tide from X-band marine radar image sequences. , 2016, , .		0

#	ARTICLE	IF	CITATIONS
55	Non-Bragg scattering contributions to the dual-polarized SAR imaging of Hurricane Earl. , 2016, , .		0
56	Simulation and retrieval of CFOSAT at whitecap sea. , 2016, , .		0
57	Application of AMSR-E and AMSR2 Low-Frequency Channel Brightness Temperature Data for Hurricane Wind Retrievals. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 4501-4512.	6.3	17
58	The Construction of a Three-Dimensional Antenna Gain Matrix and Its Impact on Retrieving Sea Surface Mean Square Slope Based on Aircraft Wave Spectrometer Data. Journal of Atmospheric and Oceanic Technology, 2016, 33, 847-856.	1.3	0
59	A geometrical optics model based on the non-Gaussian probability density distribution of sea surface slopes for wind speed retrieval at low incidence angles. International Journal of Remote Sensing, 2016, 37, 537-550.	2.9	7
60	A C-band cross polarization geophysical model function. , 2015, , .		0
61	Synergistic measurements of ocean winds and waves from SAR. Journal of Geophysical Research: Oceans, 2015, 120, 6164-6184.	2.6	29
62	Simultaneous multi-polarization SAR retrieval of ocean surface waves and winds from moderate to high states. , 2015, , .		0
63	Cross-polarization geophysical model function for C-band radar backscattering from the ocean surface and wind speed retrieval. Journal of Geophysical Research: Oceans, 2015, 120, 893-909.	2.6	79
64	Investigation of sea level variability in the Baltic Sea from tide gauge, satellite altimeter data, and model reanalysis. International Journal of Remote Sensing, 2015, 36, 2548-2568.	2.9	10
65	A new modulation transfer function for ocean wave spectra retrieval from X-band marine radar imagery. Chinese Journal of Oceanology and Limnology, 2015, 33, 1132-1141.	0.7	10
66	Hurricane tangential wind profile from synthetic aperture radar observations. , 2014, , .		0
67	A New Algorithm to Retrieve Wave Parameters From Marine X-Band Radar Image Sequences. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 4083-4091.	6.3	36
68	A Hurricane Tangential Wind Profile Estimation Method for C-Band Cross-Polarization SAR. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 7186-7194.	6.3	22
69	High-Resolution Hurricane Vector Winds from C-Band Dual-Polarization SAR Observations. Journal of Atmospheric and Oceanic Technology, 2014, 31, 272-286.	1.3	86
70	Recent progress on high wind-speed retrieval from multi-polarization SAR imagery: a review. International Journal of Remote Sensing, 2014, 35, 4031-4045.	2.9	24
71	Tropical cyclone vector winds from C-band dual-polarization synthetic aperture radar. , 2013, , .		0
72	Recent development in SAR-derived winds using polarized RADARSAT-2 data. , 2013, , .		1

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73	Ocean Vector Winds Retrieval From C-Band Fully Polarimetric SAR Measurements. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 4252-4261.	6.3	113
74	Thermal front retrievals from SAR imagery. , 2012, , .		2
75	Cross-Polarized Synthetic Aperture Radar: A New Potential Measurement Technique for Hurricanes. Bulletin of the American Meteorological Society, 2012, 93, 531-541.	3.3	189
76	Retrievals of sea surface temperature fronts from SAR imagery. Geophysical Research Letters, 2012, 39, .	4.0	10
77	Observation of natural and artificial features on the sea surface from SAR satellite imagery with in-situ measurements. , 2011, , .		1
78	Wind speed retrieval from RADARSAT-2 quad-polarization images using a new polarization ratio model. Journal of Geophysical Research, 2011, 116, .	3.3	118
79	On polarimetric characteristics in SAR images of mesoscale cellular convection in the marine atmospheric boundary layer. Journal of Geophysical Research, 2011, 116, .	3.3	2
80	Mapping sea surface oil slicks using RADARSAT-2 quad-polarization SAR image. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	148
81	RADARSAT application in ocean wind measurements. , 2011, , .		2
82	Breaking wave measurements with sar depolarized returns. , 2010, , .		0
83	A new polarization ratio model from C-Band RADARSAT-2 fine Quad-Pol imagery. , 2010, , .		3
84	Validation of RADARSAT-2 fully polarimetric SAR measurements of ocean surface waves. Journal of Geophysical Research, 2010, 115, .	3.3	24
85	Comparison of composite Bragg theory and quad-polarization radar backscatter from RADARSAT-2: With applications to wave breaking and high wind retrieval. Journal of Geophysical Research, 2010, 115, .	3.3	83
86	Depolarized radar return for breaking wave measurement and hurricane wind retrieval. Geophysical Research Letters, 2010, 37, .	4.0	60
87	Remote sensing of ocean waves by along-track interferometric synthetic aperture radar. Journal of Geophysical Research, 2009, 114, .	3.3	12
88	Validation of RADARSAT-2 Polarimetric SAR measurements of ocean waves. , 2009, , .		3