Robert Wang

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7109397/publications.pdf

Version: 2024-02-01

283 papers 3,791 citations

32 h-index 206112 48 g-index

283 all docs

283 docs citations

times ranked

283

2149 citing authors

#	Article	IF	CITATIONS
1	Bistatic SAR Experiments With PAMIR and TerraSAR-Xâ€"Setup, Processing, and Image Results. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 3268-3279.	6.3	133
2	Focus FMCW SAR Data Using the Wavenumber Domain Algorithm. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 2109-2118.	6.3	121
3	The SAR Payload Design and Performance for the GF-3 Mission. Sensors, 2017, 17, 2419.	3.8	111
4	Generation and Transmission of OAM-Carrying Vortex Beams Using Circular Antenna Array. IEEE Transactions on Antennas and Propagation, 2017, 65, 2940-2949.	5.1	84
5	Processing the Azimuth-Variant Bistatic SAR Data by Using Monostatic Imaging Algorithms Based on Two-Dimensional Principle of Stationary Phase. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 3504-3520.	6.3	76
6	Phase Mismatch Calibration of the Multichannel SAR Based on Azimuth Cross Correlation. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 903-907.	3.1	75
7	Mapping the Yellow River Delta land subsidence with multitemporal SAR interferometry by exploiting both persistent and distributed scatterers. ISPRS Journal of Photogrammetry and Remote Sensing, 2019, 148, 157-173.	11.1	73
8	Chirp-Scaling Algorithm for Bistatic SAR Data in the Constant-Offset Configuration. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 952-964.	6.3	72
9	SAR ATR based on displacement- and rotation-insensitive CNN. Remote Sensing Letters, 2016, 7, 895-904.	1.4	67
10	Ground Moving Target Extraction in a Multichannel Wide-Area Surveillance SAR/GMTI System via the Relaxed PCP. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 617-621.	3.1	62
11	Fast Backprojection Algorithm for Bistatic SAR Imaging. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 1080-1084.	3.1	61
12	Focusing Spaceborne/Airborne Hybrid Bistatic SAR Data Using Wavenumber-Domain Algorithm. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 2275-2283.	6.3	60
13	Arc FMCW SAR and Applications in Ground Monitoring. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 5989-5998.	6.3	59
14	An Advanced Nonlinear Frequency Modulation Waveform for Radar Imaging With Low Sidelobe. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 6155-6168.	6.3	59
15	Multichannel InSAR DEM Reconstruction Through Improved Closed-Form Robust Chinese Remainder Theorem. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 1314-1318.	3.1	51
16	First Bistatic Demonstration of Digital Beamforming in Elevation With TerraSAR-X as an Illuminator. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 842-849.	6.3	51
17	Full-Aperture SAR Data Focusing in the Spaceborne Squinted Sliding-Spotlight Mode. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 4596-4607.	6.3	50
18	An Advanced Phase Synchronization Scheme for LT-1. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 1735-1746.	6.3	47

#	Article	IF	Citations
19	Brief Analysis on the Development and Application of Spaceborne SAR. Journal of Radars, 2012, 1, 1-10.	0.0	47
20	Internal Calibration for Stepped-Frequency Chirp SAR Imaging. IEEE Geoscience and Remote Sensing Letters, 2011, 8, 1105-1109.	3.1	44
21	Spaceborne/Stationary Bistatic SAR Imaging With TerraSAR-X as an Illuminator in Staring-Spotlight Mode. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 5203-5216.	6.3	42
22	Modifications on Multichannel Reconstruction Algorithm for SAR Processing Based on Periodic Nonuniform Sampling Theory and Nonuniform Fast Fourier Transform. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 4998-5006.	4.9	39
23	Bistatic FMCW SAR Signal Model and Imaging Approach. IEEE Transactions on Aerospace and Electronic Systems, 2013, 49, 2017-2028.	4.7	38
24	An Accurate Range Model Based on the Fourth-Order Doppler Parameters for Geosynchronous SAR. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 205-209.	3.1	38
25	A Novel High-Order Range Model and Imaging Approach for High-Resolution LEO SAR. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 3473-3485.	6.3	38
26	A Novel Region-Merging Approach for Coastline Extraction From Sentinel-1A IW Mode SAR Imagery. IEEE Geoscience and Remote Sensing Letters, 2016, , 1-5.	3.1	38
27	Autofocus Correction of Residual RCM for VHR SAR Sensors With Light-Small Aircraft. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 441-452.	6.3	37
28	Bistatic SAR System and Signal Processing Technology. , 2018, , .		37
29	First Demonstration of Airborne SAR With Nonlinear FM Chirp Waveforms. IEEE Geoscience and Remote Sensing Letters, 2016, 13, 247-251.	3.1	36
30	Nonlinear Frequency Modulation Signal Generator in LT-1. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 1570-1574.	3.1	35
31	Integrated Denoising and Unwrapping of InSAR Phase Based on Markov Random Fields. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 4473-4485.	6.3	34
32	Sharpness-Based Autofocusing for Stripmap SAR Using an Adaptive-Order Polynomial Model. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 1086-1090.	3.1	34
33	Motion Compensation for High-Resolution Automobile FMCW SAR. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 1157-1161.	3.1	33
34	A New Region Growing-Based Method for Road Network Extraction and Its Application on Different Resolution SAR Images. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 4772-4783.	4.9	33
35	A New Quality Map for 2-D Phase Unwrapping Based on Gray Level Co-Occurrence Matrix. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 444-448.	3.1	33
36	High-Resolution and Wide-Swath SAR Imaging Mode Using Frequency Diverse Planar Array. IEEE Geoscience and Remote Sensing Letters, 2021, 18, 321-325.	3.1	31

#	Article	IF	CITATIONS
37	Double-Channel Bistatic SAR System With Spaceborne Illuminator for 2-D and 3-D SAR Remote Sensing. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 4496-4507.	6.3	30
38	Mitigating Range Ambiguities With Advanced Nonlinear Frequency Modulation Waveform. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 1230-1234.	3.1	30
39	IMage formation algorithm for bistatic forward-looking SAR. , 2010, , .		28
40	Error Analysis of Bistatic SAR Imaging and Stereoscopy Bistatic SAR. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 4518-4543.	6.3	28
41	Focusing the L-Band Spaceborne Bistatic SAR Mission Data Using a Modified RD Algorithm. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 294-306.	6.3	28
42	High-Quality 3-D InISAR Imaging of Maneuvering Target Based on a Combined Processing Approach. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 1036-1040.	3.1	27
43	Achieving High-Quality Three-Dimensional InISAR Imageries of Maneuvering Target via Super-Resolution ISAR Imaging by Exploiting Sparseness. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 828-832.	3.1	27
44	Robust river boundaries extraction of dammed lakes in mountain areas after Wenchuan Earthquake from high resolution SAR images combining local connectivity and ACM. ISPRS Journal of Photogrammetry and Remote Sensing, 2014, 94, 91-101.	11.1	27
45	Processing of Multichannel Sliding Spotlight and TOPS Synthetic Aperture Radar Data. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 4417-4429.	6.3	26
46	SAR Signal Recovery and Reconstruction in Staggered Mode With Low Oversampling Factors. IEEE Geoscience and Remote Sensing Letters, 2018, 15, 704-708.	3.1	25
47	Frequency-Domain Bistatic SAR Processing for Spaceborne/Airborne Configuration. IEEE Transactions on Aerospace and Electronic Systems, 2010, 46, 1329-1345.	4.7	24
48	Multichannel synthetic aperture radar systems with a planar antenna for future spaceborne microwave remote sensing. IEEE Aerospace and Electronic Systems Magazine, 2012, 27, 26-30.	1.3	24
49	An Improved Real-Coded Genetic Algorithm for the Beam Forming of Spaceborne SAR. IEEE Transactions on Antennas and Propagation, 2012, 60, 3034-3040.	5.1	24
50	Interferometric Phase Denoising by Pyramid Nonlocal Means Filter. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 826-830.	3.1	24
51	Waterline Mapping and Change Detection of Tangjiashan Dammed Lake After Wenchuan Earthquake From Multitemporal High-Resolution Airborne SAR Imagery. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 3200-3209.	4.9	24
52	Segmented Phase Code Waveforms: A Novel Radar Waveform for Spaceborne MIMO-SAR. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 5764-5779.	6.3	23
53	On the Frequency Dispersion in DBF SAR and Digital Scalloped Beamforming. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 3619-3632.	6.3	22
54	Improved offset tracking for predisaster deformation monitoring of the 2018 Jinsha River landslide (Tibet, China). Remote Sensing of Environment, 2020, 247, 111899.	11.0	22

#	Article	IF	Citations
55	Modification of Multichannel Reconstruction Algorithm on the SAR With Linear Variation of PRI. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 3050-3059.	4.9	21
56	Quasi-Orthogonal Waveforms for Ambiguity Suppression in Spaceborne Quad-Pol SAR. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-17.	6. 3	21
57	An Accelerated Backprojection Algorithm for Monostatic and Bistatic SAR Processing. Remote Sensing, 2018, 10, 140.	4.0	20
58	A High-Accuracy Synchronization Phase-Compensation Method Based on Kalman Filter for Bistatic Synthetic Aperture Radar. IEEE Geoscience and Remote Sensing Letters, 2020, 17, 1722-1726.	3.1	20
59	A Synchronization Algorithm for Spaceborne/Stationary BiSAR Imaging Based on Contrast Optimization With Direct Signal From Radar Satellite. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 1977-1989.	6.3	19
60	Digital Beamforming Synthetic Aperture Radar (DBSAR): Experiments and Performance Analysis in Support of 16-Channel Airborne X-Band SAR Data. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 6784-6798.	6.3	19
61	Deep Learning for the Detection and Phase Unwrapping of Mining-Induced Deformation in Large-Scale Interferograms. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-18.	6.3	19
62	Large-Scene Sliding Spotlight SAR Using Multiple Channels in Azimuth. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 1006-1010.	3.1	18
63	TOPS-Mode Raw Data Processing Using Chirp Scaling Algorithm. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 235-246.	4.9	18
64	Building extraction from high-resolution SAR imagery based on deep neural networks. Remote Sensing Letters, 2017, 8, 888-896.	1.4	18
65	Signal reconstruction from recurrent samples in fractional Fourier domain and its application in multichannel SAR. Signal Processing, 2017, 131, 288-299.	3.7	18
66	A Novel Approach to Doppler Centroid and Channel Errors Estimation in Azimuth Multi-Channel SAR. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 8430-8444.	6.3	18
67	A Novel NLFM Waveform With Low Sidelobes Based on Modified Chebyshev Window. IEEE Geoscience and Remote Sensing Letters, 2020, 17, 814-818.	3.1	18
68	First Demonstration of Multipath Effects on Phase Synchronization Scheme for LT-1. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 2590-2604.	6.3	18
69	Azimuth ambiguity suppression with an improved reconstruction method based on antenna pattern for multichannel synthetic aperture radar systems. IET Radar, Sonar and Navigation, 2015, 9, 492-500.	1.8	17
70	An Improved Processing Scheme of Digital Beam-Forming in Elevation for Reducing Resource Occupation. IEEE Geoscience and Remote Sensing Letters, 2016, , 1-5.	3.1	17
71	Modified Multichannel Reconstruction Method of SAR With Highly Nonuniform Spatial Sampling. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 617-627.	4.9	17
72	Precise Calibration of Channel Imbalance for Very High Resolution SAR With Stepped Frequency. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 4252-4261.	6.3	17

#	Article	IF	Citations
73	Demonstration of Time-Series InSAR Processing in Beijing Using a Small Stack of Gaofen-3 Differential Interferograms. Journal of Sensors, 2019, 2019, 1-13.	1.1	17
74	The Processing Framework and Experimental Verification for the Noninterrupted Synchronization Scheme of LuTan-1. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 5740-5750.	6.3	17
75	Rethinking the Random Cropping Data Augmentation Method Used in the Training of CNN-Based SAR Image Ship Detector. Remote Sensing, 2021, 13, 34.	4.0	17
76	Improved Full-Aperture ScanSAR Imaging Algorithm Based on Aperture Interpolation. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 1101-1105.	3.1	16
77	Demonstration of NLFM Waveforms With Experiments and Doppler Shift Compensation for SAR Application. IEEE Geoscience and Remote Sensing Letters, 2016, 13, 1999-2003.	3.1	15
78	High-Fidelity SAR Intermittent Sampling Deceptive Jamming Suppression Using Azimuth Phase Coding. IEEE Geoscience and Remote Sensing Letters, 2021, 18, 489-493.	3.1	15
79	Deep-Learning-Based Phase Discontinuity Prediction for 2-D Phase Unwrapping of SAR Interferograms. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-16.	6.3	15
80	A Novel Weight Generator in Real-Time Processing Architecture of DBF-SAR. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-15.	6.3	14
81	Comparison of Nonnegative Eigenvalue Decompositions With and Without Reflection Symmetry Assumptions. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 2278-2287.	6.3	13
82	Impact of crossâ€polarization isolation on polarimetric target decomposition and target detection. Radio Science, 2015, 50, 327-338.	1.6	13
83	Modified Statistically Homogeneous Pixels' Selection With Multitemporal SAR Images. IEEE Geoscience and Remote Sensing Letters, 2016, 13, 1930-1934.	3.1	13
84	A Weighted Backprojection Algorithm for Azimuth Multichannel SAR Imaging. IEEE Geoscience and Remote Sensing Letters, 2016, 13, 1265-1269.	3.1	13
85	Multi image fusion based on compressive sensing. , 2010, , .		12
86	Investigation of Multichannel Sliding Spotlight SAR for Ultrahigh-Resolution and Wide-Swath Imaging. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 1339-1343.	3.1	12
87	Polarimetric Response of Landslides at X-Band Following the Wenchuan Earthquake. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 1722-1726.	3.1	12
88	Image Formation Processing for Sliding Spotlight SAR With Stepped Frequency Chirps. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 1692-1696.	3.1	12
89	A processing scheme for LFM-based waveform MIMO SAR with digital beam-forming in elevation. Remote Sensing Letters, 2015, 6, 874-883.	1.4	12
90	A Channel Calibration Method Based on Weighted Backprojection Algorithm for Multichannel SAR Imaging. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 1254-1258.	3.1	12

#	Article	IF	Citations
91	Signal Reconstruction Algorithm for Azimuth Multichannel SAR System Based on a Multiobjective Optimization Model. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 3881-3893.	6.3	12
92	Echo Separation for Space-Time Waveform-Encoding SAR With Digital Scalloped Beamforming and Adaptive Multiple Null-Steering. IEEE Geoscience and Remote Sensing Letters, 2021, 18, 92-96.	3.1	12
93	First Demonstration of Echo Separation for Orthogonal Waveform Encoding MIMO-SAR Based on Airborne Experiments. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-16.	6.3	12
94	Polarimetric and interferometric applications in a bistatic hybrid SAR mode using Terrasar-X., 2010,,.		11
95	Autofocus algorithm for SAR imagery based on sharpness optimisation. Electronics Letters, 2014, 50, 830-832.	1.0	11
96	Interferometric Phase Denoising by Median Patch-Based Locally Optimal Wiener Filter. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 1730-1734.	3.1	11
97	Processing of Very High Resolution GF-3 SAR Spotlight Data With Non-Start–Stop Model and Correction of Curved Orbit. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 2112-2122.	4.9	11
98	Polarimetric SAR Interferometry: A Tutorial for Analyzing System Parameters. IEEE Geoscience and Remote Sensing Magazine, 2020, 8, 83-107.	9.6	11
99	New Insights Into SAR Alternate Transmitting Mode Based on Waveform Diversity. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-9.	6.3	11
100	InSAR Study of Landslides: Early Detection, Three-Dimensional, and Long-Term Surface Displacement Estimation—A Case of Xiaojiang River Basin, China. Remote Sensing, 2022, 14, 1759.	4.0	11
101	Phase Unwrapping using 2D-Kalman Filter - Potential and Limitations. , 2008, , .		10
102	Focus Squint FMCW SAR Data Using Inverse Chirp-Z Transform Based on an Analytical Point Target Reference Spectrum. IEEE Geoscience and Remote Sensing Letters, 2012, 9, 866-870.	3.1	10
103	Unsupervised classification of polarimetric synthetic aperture radar interferometry using polarimetric interferometric similarity parameters and SPAN. IET Radar, Sonar and Navigation, 2014, 8, 1135-1144.	1.8	10
104	Channel balancing algorithm in multichannel wideâ€area surveillance systems. IET Radar, Sonar and Navigation, 2014, 8, 27-36.	1.8	10
105	Digital Elevation Model Reconstruction in Multichannel Spaceborne/Stationary SAR Interferometry. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 2080-2084.	3.1	10
106	Adaptive Multilooking Based on Complex Patch for Multitemporal Interferometry. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 907-918.	4.9	10
107	Estimation and Removal of Strong Range Ambiguities in Multistatic Synthetic Aperture Radar With Multiple Elevation Beams. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 407-411.	3.1	10
108	A Novel Spaceborne MIMO-SAR Imaging Scheme Based on Improved OFDM Waveforms. IEEE Geoscience and Remote Sensing Letters, 2021, 18, 2122-2126.	3.1	10

#	Article	IF	Citations
109	A Novel Channel Errors Calibration Algorithm for Multichannel High-Resolution and Wide-Swath SAR Imaging. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-19.	6.3	10
110	Clutter suppression for multichannel wideâ€area surveillance systems via Kalman filtering. IET Radar, Sonar and Navigation, 2013, 7, 246-254.	1.8	9
111	Unsupervised polarimetric synthetic aperture radar classification of large-scale landslides caused by Wenchuan earthquake in hue-saturation-intensity color space. Journal of Applied Remote Sensing, 2014, 8, 083595.	1.3	9
112	Integrated Time and Phase Synchronization Strategy for a Multichannel Spaceborne-Stationary Bistatic SAR System. Remote Sensing, 2016, 8, 628.	4.0	9
113	Processing Sliding Mosaic Mode Data With Modified Full-Aperture Imaging Algorithm Integrating Scalloping Correction. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 1804-1812.	4.9	9
114	High-resolution polarimetric SAR image decomposition of urban areas based on a POA correction method. Remote Sensing Letters, 2018, 9, 363-372.	1.4	9
115	Simultaneous range ambiguity mitigation and sidelobe reduction using orthogonal non-linear frequency modulated (ONLFM) signals for satellite SAR Imaging. Remote Sensing Letters, 2018, 9, 829-838.	1.4	9
116	Research on Strong Clutter Suppression for Gaofen-3 Dual-Channel SAR/GMTI. Sensors, 2018, 18, 978.	3.8	9
117	An Advanced Non-Interrupted Synchronization Scheme for Bistatic Synthetic Aperture Radar. , 2019, , .		9
118	Characteristics of Saline Soil in Extremely Arid Regions: A Case Study Using GF-3 and ALOS-2 Quad-Pol SAR Data in Qinghai, China. Remote Sensing, 2021, 13, 417.	4.0	9
119	Robust PCA for Ground Moving Target Indication in Wide-Area Surveillance Radar System. Journal of the Operations Research Society of China, 2013, 1, 135-153.	1.4	8
120	An Accurate and Efficient Extended Scene Simulator for FMCW SAR With Static and Moving Targets. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 1672-1676.	3.1	8
121	Out-of-Band Ambiguity Analysis of Nonuniformly Sampled SAR Signals. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 2027-2031.	3.1	8
122	A method of estimating the velocity of moving targets for use in high-resolution wide-swath SAR imaging. Remote Sensing Letters, 2018, 9, 305-313.	1.4	8
123	A Novel Azimuth Ambiguity Suppression Method for Spaceborne Dual-Channel SAR-GMTI. IEEE Geoscience and Remote Sensing Letters, 2021, 18, 87-91.	3.1	8
124	Implementation of a MIMO-SAR Imaging Mode Based on OFDM Chirp Waveforms. IEEE Geoscience and Remote Sensing Letters, 2021, 18, 1249-1253.	3.1	8
125	A Novel Range-Azimuth Joint Modulation Scheme for Range Ambiguity Suppression. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-10.	6.3	8
126	Focus Improvement of Airborne High-Squint Bistatic SAR Data Using Modified Azimuth NLCS Algorithm Based on Lagrange Inversion Theorem. Remote Sensing, 2021, 13, 1916.	4.0	8

#	Article	IF	Citations
127	An Innovative Superpolyhedron (SP) Formation for Multistatic SAR (M-SAR) Interferometry. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 10136-10150.	6.3	8
128	Pattern Synthesis Algorithm for Range Ambiguity Suppression in the LT-1 Mission via Sequential Convex Optimizations. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-13.	6.3	8
129	Extension and Evaluation of PGA in ScanSAR Mode using Full-Aperture Approach. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 870-874.	3.1	7
130	Statistically homogeneous pixel selection for small SAR data sets based on the similarity test of the covariance matrix. Remote Sensing Letters, 2017, 8, 927-936.	1.4	7
131	A Small-Baseline InSAR Inversion Algorithm Combining a Smoothing Constraint and \$L_1\$ -Norm Minimization. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 1061-1065.	3.1	7
132	Very High Resolution SAR Imaging With DGPS-Supported Airborne X-Band Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 3605-3617.	4.9	7
133	Optimization of Weighting Window Functions for SAR Imaging via QCQP Approach. Sensors, 2020, 20, 419.	3.8	7
134	Automatic Landslide Inventory Mapping Approach Based on Change Detection Technique With Very-High-Resolution Images. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	7
135	General Two-Stage Model-Based Three-Component Hybrid Compact Polarimetric SAR Decomposition Method. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 4647-4660.	4.9	7
136	RFI Suppression for SAR via a Dictionary-Based Nonconvex Low-Rank Minimization Framework and Its Adaptive Implementation. Remote Sensing, 2022, 14, 678.	4.0	7
137	An Image-Domain Least <i>L</i> ¹ -Norm Method for Channel Error Effect Analysis and Calibration of Azimuth Multi-Channel SAR. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-14.	6.3	7
138	BISTATIC FMCW SAR RAW SIGNAL SIMULATOR FOR EXTENDED SCENES. Progress in Electromagnetics Research, 2012, 128, 479-502.	4.4	6
139	A Modification to the Complex-Valued MRF Modeling Filter of Interferometric SAR Phase. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 681-685.	3.1	6
140	MOCO for High-Resolution ScanSAR via Full-Aperture Processing. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 1721-1726.	4.9	6
141	Improved digital beamâ€forming approach with scaling function for range multiâ€channel synthetic aperture radar system. IET Radar, Sonar and Navigation, 2016, 10, 379-385.	1.8	6
142	Improved Phase-Encoding Calibration for Active Phased-Array Antennas of SAR. IEEE Geoscience and Remote Sensing Letters, 2016, 13, 767-771.	3.1	6
143	Effective Mapping of Urban Areas Using ENVISAT ASAR, Sentinel-1A, and HJ-1-C Data. IEEE Geoscience and Remote Sensing Letters, 2017, 14, 891-895.	3.1	6
144	Demonstration of Dual-Channel TOPS SAR Imaging With Airborne C-Band Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 3569-3581.	4.9	6

#	Article	IF	Citations
145	Improved eigensubspace-based approach for radio frequency interference filtering of synthetic aperture radar images. Journal of Applied Remote Sensing, 2017, 11, 025004.	1.3	6
146	Chirp Signal Transmission and Reception With Orbital Angular Momentum Multiplexing. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 986-990.	4.0	6
147	On the SAR Imaging Performance Analysis of Alternate Transmitting Mode Based on Waveform Diversity: Theory and Simulation. IEEE Geoscience and Remote Sensing Letters, 2020, 17, 1553-1557.	3.1	6
148	Additional Reference Height Error Analysis for Baseline Calibration Based on a Distributed Target DEM in TwinSAR-L. Remote Sensing, 2021, 13, 2750.	4.0	6
149	Atmospheric Correction to Passive Microwave Brightness Temperature in Snow Cover Mapping Over China. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 6482-6495.	6.3	6
150	On the Processing of Dual-Channel Receiving Signals of the LuTan-1 SAR System. Remote Sensing, 2022, 14, 515.	4.0	6
151	An Advanced Scheme for Range Ambiguity Suppression of Spaceborne SAR Based on Blind Source Separation. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-12.	6.3	6
152	A two-step method to process bistatic SAR data in the general configuration. , 2008, , .		5
153	Improved Azimuth Multichannel SAR Imaging for Configurations With Redundant Measurements. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 1610-1614.	3.1	5
154	Improved superpixel-based polarimetric synthetic aperture radar image classification integrating color features. Journal of Applied Remote Sensing, 2016, 10, 026026.	1.3	5
155	Attitude-Steering Strategy for Squint Spaceborne Synthetic Aperture Radar. IEEE Geoscience and Remote Sensing Letters, 2016, 13, 1163-1167.	3.1	5
156	Interferogram denoising using an iteratively refined nonlocal InSAR filter. Remote Sensing Letters, 2017, 8, 897-906.	1.4	5
157	Imaging for High-Resolution Wide-Swath Spaceborne SAR Using Cubic Filtering and NUFFT Based on Circular Orbit Approximation. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 787-800.	6.3	5
158	An Improved Two-Step Multitemporal SAR Interferometry Method for Precursory Slope Deformation Detection Over Nanyu Landslide. IEEE Geoscience and Remote Sensing Letters, 2021, 18, 592-596.	3.1	5
159	An Innovative Multiswath Jump Imaging Mode for Spaceborne SAR. IEEE Geoscience and Remote Sensing Letters, 2021, 18, 1219-1223.	3.1	5
160	A Unified Framework for Comparing the Classification Performance Between Quad-, Compact-, and Dual-Polarimetric SARs. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-14.	6.3	5
161	A Novel Vortex Synthetic Aperture Radar Imaging System: Decreasing the Pulse Repetition Frequency Without Increasing the Antenna Aperture. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-14.	6.3	5
162	On the Processing of Gaofen-3 Spaceborne Dual-Channel Sliding Spotlight SAR Data. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-12.	6.3	5

#	Article	IF	Citations
163	An Innovative Push-To-Talk (PTT) Synchronization Scheme for Distributed SAR. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-13.	6.3	5
164	Evaluation of Deceptive Jamming Effect on SAR Based on Visual Consistency. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 12246-12262.	4.9	5
165	Optimizing the Individual Azimuth Contribution of Transmitter and Receiver Phase terms in Loffeld's Bistatic Formula (LBF) for Bistatic SAR Processing. , 2008, , .		4
166	Modified frequency scaling processing for FMCW SAR. , 2012, , .		4
167	Imaging processor for different spaceborne SAR imaging modes. Electronics Letters, 2012, 48, 340.	1.0	4
168	A novel clutter suppression algorithm with Kalman filtering. , 2013, , .		4
169	A New Imaging Approach for Burst Mode Synthetic Aperture Radar. IEEE Transactions on Aerospace and Electronic Systems, 2013, 49, 2035-2045.	4.7	4
170	Influences of channel errors and interference on the OFDM-MIMO SAR., 2013,,.		4
171	Spaceborne/airborne bistatic synthetic aperture radar focusing on an analytical bistatic point target reference spectrum. IET Radar, Sonar and Navigation, 2013, 7, 591-599.	1.8	4
172	Polarimetric interferometric similarity parameter and its application in scattering decomposition. , 2013, , .		4
173	AZIMUTH MULTICHANNEL SAR IMAGING BASED ON COMPRESSED SENSING. Progress in Electromagnetics Research, 2013, 141, 497-516.	4.4	4
174	Investigation on an ultra–wide-swath, multiple-elevation-beam SAR based on sweep-PRI mode. IEEE Transactions on Aerospace and Electronic Systems, 2014, 50, 2998-3020.	4.7	4
175	AET-IAA: A Novel Approach to Enhance Azimuth Resolution for ScanSAR Interferometry. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 5674-5685.	4.9	4
176	The Synchronization Transceiver Design and Experimental Verification for the LuTan-1 SAR Satellite. Sensors, 2020, 20, 1463.	3.8	4
177	Azimuth Ambiguity Suppression for Hybrid Polarimetric Synthetic Aperture Radar via Waveform Diversity. Remote Sensing, 2020, 12, 1226.	4.0	4
178	Quadratically Constrained Ambiguity Suppression Algorithm for APC/Multichannel SAR Systems With Nonuniform Spatial Sampling. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 1319-1330.	6.3	4
179	A Novel Motion Compensation Scheme for 2-D Multichannel SAR Systems With Quaternion Posture Calculation. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 9350-9360.	6.3	4
180	Robust boundary extraction of great lakes by blocking Active Contour Model using Chinese GFâ€3 SAR data: a case study of Danjiangkou reservoir, China. Journal of Engineering, 2019, 2019, 6876-6879.	1.1	4

#	Article	IF	Citations
181	Weighted LBF for spaceborne general bistatic SAR processing. Progress in Natural Science: Materials International, 2008, 18, 1271-1277.	4.4	3
182	A point target reference spectrum based on Loffeld's bistatic formula (LBF) for hybrid configurations. , 2008, , .		3
183	Analysis and Processing of Spaceborne/Airborne Bistatic SAR Data. , 2008, , .		3
184	Analysis and compensation for motion errors in FMCW SAR data. , 2010, , .		3
185	A new data processing procedure in spaceborne/stationary bistatic SAR experiment. , 2014, , .		3
186	Unsupervised classification of PollnSAR based on improved four-component decomposition. Remote Sensing Letters, 2014, 5, 295-304.	1.4	3
187	Unsupervised classification based on nonâ€negative eigenvalue decomposition and Wishart classifier. IET Radar, Sonar and Navigation, 2014, 8, 957-964.	1.8	3
188	Rangeâ€resolution improvement for spaceborne/airborne bistatic synthetic aperture radar using steppedâ€frequency chirp trains. IET Signal Processing, 2015, 9, 377-386.	1.5	3
189	SAR signal reconstruction from multi-channel non-uniform sampling near singular points. Remote Sensing Letters, 2015, 6, 106-115.	1.4	3
190	Practical signal processing algorithm for wideâ€area surveillanceâ€GMTI mode. IET Radar, Sonar and Navigation, 2015, 9, 991-998.	1.8	3
191	A Novel Optimization Framework for Classic Windows Using Bio-Inspired Methodology. Circuits, Systems, and Signal Processing, 2016, 35, 693-703.	2.0	3
192	An Adaptive Multilook Approach for Small Sets of Multitemporal SAR Data Based on Adaptive Joint Data Vector. IEEE Geoscience and Remote Sensing Letters, 2017, 14, 1161-1165.	3.1	3
193	Robust phase mismatch calibration for multichannel sliding spotlight SAR imaging . Remote Sensing Letters, 2017, 8, 869-878.	1.4	3
194	End-to-end Bistatic insar Raw Data Simulation for Twinsar-L Mission. , 2019, , .		3
195	SAR Tomographic Imaging Demonstration Using GF-3 Data., 2019, , .		3
196	Implementation of a Phase Synchronization Scheme Based on Pulsed Signal at Carrier Frequency for Bistatic SAR. Sensors, 2020, 20, 3188.	3.8	3
197	Linear Bayesian Approaches for Low-Oversampled Stepwise Staggered SAR Data. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-23.	6.3	3
198	Estimating and Removing Ionospheric Effects for L-Band Spaceborne Bistatic SAR. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1 -16.	6.3	3

#	Article	IF	Citations
199	On Spaceborne DBF-SAR Adopting the Degree of Freedom With NLFM Waveform: Optimization Framework and Simulation. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-15.	6.3	3
200	Image Registration of TerraSAR-X Data using Different Information Measures. , 2008, , .		2
201	On the Mosaic mode spaceborne SAR. , 2012, , .		2
202	A novel nonparametric method of ground moving target indication based on bi-channel SAR-ATI., 2012,		2
203	Efficient strip-mode SAR raw signal simulation of mixed targets based on accurate 2-D spectrum. , 2013, , .		2
204	Insights into prior learning for despeckling SAR images. IET Radar, Sonar and Navigation, 2016, 10, 1611-1618.	1.8	2
205	A velocity estimation method of moving target for SAR high-resoluton wide-swath mode. , 2016, , .		2
206	Filtering of SAR images using non-local PCA. Remote Sensing Letters, 2016, 7, 41-50.	1.4	2
207	Ultraâ€wide band bowtie slot waveguide antenna array for SAR application. IET Microwaves, Antennas and Propagation, 2019, 13, 391-397.	1.4	2
208	An ISAR Approach for Refocusing the Maritime Moving Targets With the GF-3 SAR Satellite. , 2019, , .		2
209	Processing of Spaceborne High-Resolution Sar Data with Curved Orbit. , 2019, , .		2
210	Ambiguity Suppression of Cross-Pol Signals by DPCA With DBF Reflector for Hybrid/±π/4 Quad-Pol SAR. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-13.	6.3	2
211	First Demonstration of Hybrid Quad-Pol SAR Based on P-Band Airborne Experiment. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-16.	6.3	2
212	Ambiguity Suppression Based on Joint Optimization for Multichannel Hybrid and ±π/4 Quad-Pol SAR Systems. Remote Sensing, 2021, 13, 1907.	4.0	2
213	A Novel Technique for Inversion of Rotation Angles in Built-Up Areas. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	2
214	An Innovative Push-To-Talk (PTT) Synchronization Scheme for Future Distributed SAR. , 2021, , .		2
215	lonospheric correction of ALOSâ€2 fullâ€aperture ScanSAR interferometric data for surface deformation measurement in Beijing. Journal of Engineering, 2019, 2019, 5685-5688.	1.1	2
216	The Real-Time Framework of the Push-to-Talk (PTT) Synchronization Scheme for Distributed SAR. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	2

#	Article	IF	Citations
217	Second-Order Motion Compensation in Bistatic Airborne SAR based on the Windowed Fourier-Transformation., 2008,,.		1
218	Concurrent subbands mode for multichannel SAR imaging. , 2011, , .		1
219	Pyramid non-local mean filter for interferometric phase denoising. , 2012, , .		1
220	Concept design of a MIMO-SAR using frequency diversity. , 2012, , .		1
221	An N ^{2.5} back-projection algorithm for SAR imaging. , 2012, , .		1
222	Comparison and analysis of point target reference spectrum of FMCW synthetic aperture imaging sensor. Eurasip Journal on Advances in Signal Processing, 2012, 2012, .	1.7	1
223	Multichannel InSAR DEM reconstruction through closed-form robust Chinese remainder theorem. , 2012, , .		1
224	A new approach for spotlight geosynchronous SAR data focusing. , 2013, , .		1
225	A novel method for along-track velocity estimation of moving targets in SAR image. , 2013, , .		1
226	AN EXTENDED INVERSE CHIRP-Z TRANSFORM ALGORITHM TO PROCESS HIGH SQUINT SAR DATA. Progress in Electromagnetics Research, 2013, 138, 555-569.	4.4	1
227	A Spaceborne Wide-Area Surveillance Mode and Its Application in Maritime Monitoring. International Journal of Antennas and Propagation, 2013, 2013, 1-9.	1.2	1
228	Correction of Channel Imbalance for MIMO SAR Using Stepped-Frequency Chirps. International Journal of Antennas and Propagation, 2014, 2014, 1-8.	1.2	1
229	Range ambiguity suppression for multiple-input, multiple-output synthetic aperture radar system using azimuth phase coding technique. Journal of Applied Remote Sensing, 2014, 8, 083519.	1.3	1
230	Fast ship detection for ScanSAR mode in wide sea areas. , 2016, , .		1
231	Generalized autofocus scheme for multi-mode airborne SAR systems. , 2016, , .		1
232	Phase estimation of distributed scatterer for high resolution data stacks in nonurban areas. , 2016, , .		1
233	Unique Decomposition and a New Model for the Ground Moving Target Indication Problem. Journal of Optimization Theory and Applications, 2017, 173, 297-312.	1.5	1
234	A polarimetric SAR internal calibration scheme for polarization crosstalk. Remote Sensing Letters, 2017, 8, 879-887.	1.4	1

#	Article	IF	CITATIONS
235	Bistatic InSAR., 2018, , 235-275.		1
236	Fundamentals of Bistatic SAR. , 2018, , 1-40.		1
237	Synchronization. , 2018, , 199-234.		1
238	Strong Clutter Suppression for Spaceborne Dual-Channel Sar/Gmti. , 2018, , .		1
239	A magnitude weighting process for bistatic SAR digital beamforming implementation. Remote Sensing Letters, 2018, 9, 770-779.	1.4	1
240	Intermittent Sampling Deceptive Jamming Suppression for Sar Based on Azimuth Phase Coding., 2019,,.		1
241	A Novel Multi-channel High-Resolution Imaging Method for MIMO-SAR System Based on Filterbank Framework Reconstruction Theory. , 2019, , .		1
242	Phase Mismatch Calibration for Multichannel Sliding Spotlight SAR Imaging with Extended Azimuth Cross Correlation., 2019,,.		1
243	A Novel Unambiguous Spectrum Reconstruction Algorithm for Space-borne High Resolution and Wide Swath SAR Imaging Based on Iterative Adaptive Algorithm. , 2019, , .		1
244	A Novel Waveform Optimization Framework. , 2019, , .		1
245	Impacts of Ionospheric Effects on Spaceborne Single-Pass SAR Imaging and Interferometry of LuTan-1., 2021,,.		1
246	The Processing Of Synchronization In Bistatic Synthetic Aperture Radar. , 2020, , .		1
247	A Quad-Pol SAR Imaging Mode with Sound Azimuth Ambiguity. , 2020, , .		1
248	Challenges and Opportunities for Staggered SAR with Low Oversampling Factors. , 2020, , .		1
249	Hybrid Compact Polarimetric SAR Calibration Considering the Amplitude and Phase Coefficients Inconsistency. Remote Sensing, 2022, 14, 416.	4.0	1
250	A Novel Weighted Amplitude Modulation (WAM) System for Ambiguity Suppression of Spaceborne Hybrid Quad-Pol SAR. Remote Sensing, 2022, 14, 155.	4.0	1
251	An Innovative Synthetic Aperture Radar Design Method for Lunar Water Ice Exploration. Remote Sensing, 2022, 14, 2148.	4.0	1
252	Evaluation of analytic point target spectra for bistatic SAR. , 2009, , .		O

#	Article	IF	CITATIONS
253	Considerations on the validity constraints for the bistatic SAR processing. , 2009, , .		O
254	Quantitative comparison of terrain height accuracy between X-band and L-band polarimetric SAR interferometry. , $2012, , .$		0
255	Significance of the additional range-azimuth coupling term in FMCW SAR PTRS. , 2012, , .		0
256	Unsupervised PolInSAR classification based on optimal coherence set. Journal of Electronics, 2013, 30, 368-376.	0.2	0
257	Correction to "Error Analysis of Bistatic SAR Imaging and Stereoscopy Bistatic SAR―[Aug 13 4518-4543]. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 5181-5181.	6.3	O
258	Adaptive model-based scattering decomposition of Polarimetric SAR Interferometry. Journal of Electronics, 2013, 30, 463-468.	0.2	0
259	Interferometric phase denoising using Total Generalized Variation (TGV). , 2013, , .		0
260	Building reconstruction by mutil-baseline SAR. , 2013, , .		0
261	Channel Phase Error Compensation for MIMO-SAR. International Journal of Antennas and Propagation, 2014, 2014, 1-7.	1.2	0
262	A spectral diversity based approach for DEM reconstruction. , 2014, , .		0
263	A patch-based filter for InSAR interferograms. , 2014, , .		O
264	Wide swath FMCW SAR data processing in squint mode. Journal of Electronics, 2014, 31, 16-23.	0.2	0
265	Crustal movement estimation based on an unchanged-feature points method using TerraSAR-X intensity images: application to the 2011 Tohoku earthquake. International Journal of Remote Sensing, 2014, 35, 6674-6686.	2.9	O
266	Moving targets detection and parameters estimation for dual-channel WAS radar., 2015, , .		0
267	Acceleration of synthetic aperture radar imaging via subaperture chirp-scaling approach based on heterogeneous graphics-processing-unit–central-processing-unit architecture. Journal of Applied Remote Sensing, 2015, 9, 095083.	1.3	0
268	Digital beamforming synthetic aperture radar imaging on received signals based on compressed sensing. Journal of Applied Remote Sensing, 2015, 9, 096060.	1.3	0
269	A high-order hyperbolic range model for high-resolution spaceborne SAR. , 2016, , .		0
270	Improved DBF algorithm for multichannel SAR with highly nonuniform sampling. , 2016, , .		0

#	Article	IF	CITATIONS
271	Modified statistically homogeneous pixel selection for coherence estimation with multi-temporal insar images. , $2016, , .$		O
272	Airborne X-band SAR for demonstrating two-dimensional digital beamforming. , 2017, , .		0
273	Fundamentals of Bistatic SAR Imaging Algorithms. , 2018, , 41-75.		0
274	Frequency-Domain Processing for Azimuth-Variant Processing. , 2018, , 113-132.		0
275	Channel Imbalance Compensation with IF Signal for China's IDBSAR. , 2019, , .		0
276	Analysis of Steering Approach for High Resolution Spaceborne Synthetic Aperture Radar with Large Scanning Angle., 2019,,.		0
277	A 3.6 GHZ X-Band Wideband Experimental Airborne Sar System. , 2019, , .		0
278	Intra-pulse Doppler effect and experimental result on nonlinear frequency modulation airborne SAR. , 2019, , .		0
279	The Design of Orthogonal Waveform Suiting for Synthetic Aperture Radar Imaging. , 2019, , .		0
280	Waterline mapping of inland great lake with subpixel accuracy from GF-3 SAR images., 2019,,.		0
281	A Novel Approach to Further Enhancing SNR in Digital Beamforming SAR Utilizing Hybrid Strip-Map/Spotlight Mode. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	0
282	Analysis of Varying-PRI Spotlight SAR Data. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-20.	6.3	0
283	A Novel Topography Retrieval Algorithm Based on Single-Pass Polarimetric SAR Data and Terrain Dependent Error Analysis. Remote Sensing, 2022, 14, 3176.	4.0	О