Tao Zeng

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3599227/publications.pdf

Version: 2024-02-01

143	2,287	257450	265206
papers	citations	24 h-index	42 g-index

144	144	144	1491
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Generalized approach to resolution analysis in BSAR. IEEE Transactions on Aerospace and Electronic Systems, 2005, 41, 461-474.	4.7	164
2	The Accurate Focusing and Resolution Analysis Method in Geosynchronous SAR. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 3548-3563.	6.3	126
3	Toward a generalized Bienenstock-Cooper-Munro rule for spatiotemporal learning via triplet-STDP in memristive devices. Nature Communications, 2020, 11, 1510.	12.8	124
4	Plasmonic Optoelectronic Memristor Enabling Fully Lightâ€Modulated Synaptic Plasticity for Neuromorphic Vision. Advanced Science, 2022, 9, e2104632.	11.2	81
5	An Improved Frequency Domain Focusing Method in Geosynchronous SAR. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 5514-5528.	6.3	67
6	Mainlobe Interference Suppression Based on Eigen-Projection Processing and Covariance Matrix Reconstruction. IEEE Antennas and Wireless Propagation Letters, 2014, 13, 1369-1372.	4.0	67
7	A New Method of Zero-Doppler Centroid Control in GEO SAR. IEEE Geoscience and Remote Sensing Letters, 2011, 8, 512-516.	3.1	66
8	Range Migration Compensation and Doppler Ambiguity Resolution by Keystone Transform. , 2006, , .		64
9	Subaperture Approach Based on Azimuth-Dependent Range Cell Migration Correction and Azimuth Focusing Parameter Equalization for Maneuvering High-Squint-Mode SAR. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 6718-6734.	6.3	61
10	Fate of Fe and Cd upon microbial reduction of Cd-loaded polyferric flocs by Shewanella oneidensis MR-1. Chemosphere, 2016, 144, 2065-2072.	8.2	60
11	Transferable and Flexible Artificial Memristive Synapse Based on WO_x Schottky Junction on Arbitrary Substrates. Advanced Electronic Materials, 2018, 4, 1800373.	5.1	58
12	Applying Auxiliary Array to Suppress Mainlobe Interference for Ground-Based Radar. IEEE Antennas and Wireless Propagation Letters, 2013, 12, 433-436.	4.0	53
13	Effect of intensifying highâ€temperature ripening on proteolysis, lipolysis and flavor of Jinhua ham. Journal of the Science of Food and Agriculture, 2009, 89, 834-842.	3.5	48
14	Photoreduced nanocomposites of graphene oxide/N-doped carbon dots toward all-carbon memristive synapses. NPG Asia Materials, 2020, 12, .	7.9	47
15	Radar Parameter Design for Geosynchronous SAR in Squint Mode and Elliptical Orbit. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 2720-2732.	4.9	46
16	Multiangle BSAR Imaging Based on BeiDou-2 Navigation Satellite System: Experiments and Preliminary Results. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 5760-5773.	6.3	41
17	Fast STAP Method Based on PAST with Sparse Constraint for Airborne Phased Array Radar. IEEE Transactions on Signal Processing, 2016, 64, 4550-4561.	5.3	40
18	A Ship ISAR Imaging Algorithm Based on Generalized Radon-Fourier Transform With Low SNR. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 6385-6396.	6.3	37

#	Article	IF	Citations
19	Micro-Doppler measurement of insect wing-beat frequencies with W-band coherent radar. Scientific Reports, 2017, 7, 1396.	3.3	36
20	A Modified Frequency Domain Algorithm Based on Optimal Azimuth Quadratic Factor Compensation for Geosynchronous SAR Imaging. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 1119-1131.	4.9	35
21	Design and Imaging of Ground-Based Multiple-Input Multiple-Output Synthetic Aperture Radar (MIMO) Tj ETQq1 1 0.784314 rgBT /Over	3.8	35
22	Improved Motion Compensation Approach for Squint Airborne SAR. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 4378-4387.	6.3	30
23	Optimization of Subarray Partition for Large Planar Phased Array Radar Based on Weighted K-Means Clustering Method. IEEE Journal on Selected Topics in Signal Processing, 2015, 9, 1460-1468.	10.8	29
24	A 2-D Nonlinear Chirp Scaling Algorithm for High Squint GEO SAR Imaging Based on Optimal Azimuth Polynomial Compensation. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 5724-5735.	4.9	28
25	New analytical approach to detection threshold of a dynamic programming trackâ€beforeâ€detect algorithm. IET Radar, Sonar and Navigation, 2013, 7, 773-779.	1.8	26
26	Extended NLCS Algorithm of BiSAR Systems With a Squinted Transmitter and a Fixed Receiver: Theory and Experimental Confirmation. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 5019-5030.	6.3	22
27	SAR Parametric Super-Resolution Image Reconstruction Methods Based on ADMM and Deep Neural Network. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 10197-10212.	6.3	22
28	Entomological Radar Overview: System and Signal Processing. IEEE Aerospace and Electronic Systems Magazine, 2020, 35, 20-32.	1.3	21
29	Nitrogen-induced ultralow power switching in flexible ZnO-based memristor for artificial synaptic learning. Applied Physics Letters, 2021, 118, .	3.3	21
30	A Novel Rapid SAR Simulator Based on Equivalent Scatterers for Three-Dimensional Forest Canopies. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 5243-5255.	6.3	20
31	An Optimal Resolution Steering Method for Geosynchronous Orbit SAR. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 1732-1736.	3.1	20
32	A Novel Range Grating Lobe Suppression Method Based on the Stepped-Frequency SAR Image. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 606-610.	3.1	20
33	Strip Layering Diagram-Based Optimum Continuously Varying Pulse Interval Sequence Design for Extremely High-Resolution Spaceborne Sliding Spotlight SAR. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 6751-6770.	6.3	20
34	Modification of slant range model and imaging processing in GEO SAR. , 2010, , .		18
35	Improved Stepped-Frequency SAR Imaging Algorithm With the Range Spectral-Length Extension Strategy. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2012, 5, 1483-1494.	4.9	18
36	Motion and Doppler Characteristics Analysis Based on Circular Motion Model in Geosynchronous SAR. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 1132-1142.	4.9	18

#	Article	IF	Citations
37	Vibration Measurement Method for Artificial Structure Based on MIMO Imaging Radar. IEEE Transactions on Aerospace and Electronic Systems, 2020, 56, 748-760.	4.7	18
38	Photo-tunable organic resistive random access memory based on PVP/N-doped carbon dot nanocomposites for encrypted image storage. Journal of Materials Chemistry C, 2020, 8, 14789-14795.	5.5	18
39	An Improved PolSAR Image Speckle Reduction Algorithm Based on Structural Judgment and Hybrid Four-Component Polarimetric Decomposition. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 4438-4449.	6.3	17
40	Offline Performance Prediction of PDAF With Bayesian Detection for Tracking in Clutter. IEEE Transactions on Signal Processing, 2013, 61, 770-781.	5.3	17
41	Silent Synapse Activation by Plasmaâ€Induced Oxygen Vacancies in TiO₂ Nanowireâ€Based Memristor. Advanced Electronic Materials, 2020, 6, 2000536.	5.1	17
42	Flexible and transparent memristive synapse based on polyvinylpyrrolidone/N-doped carbon quantum dot nanocomposites for neuromorphic computing. Nanoscale Advances, 2021, 3, 2623-2631.	4.6	17
43	Ground-Based SAR Wide View Angle Full-Field Imaging Algorithm Based on Keystone Formatting. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 2160-2170.	4.9	16
44	An Autofocus Approach for UAV-Based Ultrawideband Ultrawidebeam SAR Data With Frequency-Dependent and 2-D Space-Variant Motion Errors. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-18.	6.3	16
45	High accuracy unambiguous angle estimation using multiâ€scale combination in distributed coherent aperture radar. IET Radar, Sonar and Navigation, 2017, 11, 1090-1098.	1.8	15
46	Improved Probabilistic Multi-Hypothesis Tracker for Multiple Target Tracking With Switching Attribute States. IEEE Transactions on Signal Processing, 2011, 59, 5721-5733.	5.3	14
47	Improved orthogonal projection approach utilising interference covariance matrix reconstruction for adaptive beamforming. Electronics Letters, 2014, 50, 1446-1447.	1.0	14
48	Two-Dimensional Deformation Measurement Based on Multiple Aperture Interferometry in GB-SAR. IEEE Geoscience and Remote Sensing Letters, 2017, 14, 208-212.	3.1	13
49	Zeoliteâ€Based Memristive Synapse with Ultralow Subâ€10â€fJ Energy Consumption for Neuromorphic Computation. Small, 2021, 17, e2006662.	10.0	13
50	Azimuth Location Deambiguity for SAR Ground Moving Targets via Coprime Adjacent Arrays. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 551-561.	4.9	12
51	Design and Processing of a Novel Chaos-Based Stepped Frequency Synthesized Wideband Radar Signal. Sensors, 2018, 18, 985.	3.8	12
52	Accurate range profile alignment method based on minimum entropy for inverse synthetic aperture radar image formation. IET Radar, Sonar and Navigation, 2016, 10, 663-671.	1.8	11
53	A Range Grating Lobes Suppression Method for Stepped-Frequency SAR Imagery. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 5677-5687.	4.9	11
54	FMCW Radar-Based Hand Gesture Recognition Using Spatiotemporal Deformable and Context-Aware Convolutional 5-D Feature Representation. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-11.	6.3	11

#	Article	IF	Citations
55	Robust time synchronization method based on step frequency signal for wideband distributed coherent aperture radar. , 2013, , .		10
56	Geoâ€location error analysis in geosynchronous SAR. Electronics Letters, 2014, 50, 1741-1743.	1.0	10
57	Regional tropical deforestation detection using ALOS PALSAR 50Âm mosaics in Riau province, Indonesia. Electronics Letters, 2014, 50, 547-549.	1.0	10
58	Space-surface BiSAR based on GNSS signal: Synchronization, imaging and experiment result. , 2014, , .		10
59	Power Transmission Tower Detection Based on Polar Coordinate Semivariogram in High-Resolution SAR Image. IEEE Geoscience and Remote Sensing Letters, 2017, 14, 2200-2204.	3.1	9
60	GB-InSAR-Based DEM Generation Method and Precision Analysis. Remote Sensing, 2019, 11, 997.	4.0	9
61	Parametric Image Reconstruction for Edge Recovery From Synthetic Aperture Radar Echoes. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 2155-2173.	6.3	9
62	Passive Bistatic SAR with GNSS Transmitters. , 0, , 339-361.		9
63	Physical modeling and spectrum spread analysis of surface clutter in forward scattering radar. Science China Information Sciences, 2010, 53, 2310-2322.	4.3	8
64	Statistic characteristic analysis of forward scattering surface clutter in bistatic radar. Science China Information Sciences, 2010, 53, 2675-2686.	4.3	8
65	SAR Doppler Ambiguity Resolver Based on Entropy Minimization. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 4405-4416.	6.3	8
66	Tracking with nonlinear measurement model by coordinate rotation transformation. Science China Technological Sciences, 2014, 57, 2396-2406.	4.0	8
67	An Improved Frequency-Domain Image Formation Algorithm for Mini-UAV-Based Forward-Looking Spotlight BiSAR Systems. Remote Sensing, 2020, 12, 2680.	4.0	8
68	Calibration Method of Array Errors for Wideband MIMO Imaging Radar Based on Multiple Prominent Targets. Remote Sensing, 2021, 13, 2997.	4.0	8
69	Estimation of Aircraft Altitude Based on Squint Mode SAR Data. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 135-139.	3.1	7
70	Improved MDL method for estimation of source number at subarray level. Electronics Letters, 2016, 52, 85-86.	1.0	7
71	Robust and fast iterative sparse recovery method for space-time adaptive processing. Science China Information Sciences, 2016, 59, 1.	4.3	7
72	Sliding Spotlight Mode Imaging with GF-3 Spaceborne SAR Sensor. Sensors, 2018, 18, 43.	3.8	7

#	Article	IF	Citations
73	A Novel Motion Compensation Algorithm Based on Motion Sensitivity Analysis for Mini-UAV-Based BiSAR System. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-13.	6.3	7
74	The possibility of isolated target 3-D position estimation and optimal receiver position determination in SS-BSAR. Science in China Series F: Information Sciences, 2008, 51, 1372-1383.	1.1	6
75	Multi-angle fusion of SS-BiSAR images using Compass-2/Beidou-2 Satellites as opportunity illuminators. , 2014, , .		6
76	Improved weak space object tracking assisted by strong target. IET Radar, Sonar and Navigation, 2015, 9, 751-757.	1.8	6
77	Improved Reconstruction of Radio Holographic Signal for Forward Scatter Radar Imaging. Sensors, 2016, 16, 651.	3.8	6
78	Flexible Artificial Synapses: Transferable and Flexible Artificial Memristive Synapse Based on WO_x Schottky Junction on Arbitrary Substrates (Adv. Electron. Mater. 12/2018). Advanced Electronic Materials, 2018, 4, 1870056.	5.1	6
79	Spatially Variant Sidelobe Suppression for Linear Array MIMO SAR 3-D Imaging. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-15.	6.3	6
80	Tomographic SAR imaging with large elevation aperture: a P-band small UAV demonstration. Science China Information Sciences, 2022, 65, 1.	4.3	6
81	Phase difference estimation based on orthogonal signals for distributed coherent aperture radar. , 2013, , .		5
82	A novel DEM reconstruction strategy based on multi-frequency InSAR in highly sloped terrain. Science China Information Sciences, 2017, 60, 1.	4.3	5
83	Improved F-K Migration Based on Interpolation Method for GPR Imaging. , 2019, , .		5
84	Linear-Array-MIMO SAR Tomography: An Autofocus Approach for Time-Variant and 3-D Space-Variant Motion Errors. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-17.	6.3	5
85	Novel MIMOâ€SAR system applied for highâ€speed and highâ€accuracy deformation measurement. Journal of Engineering, 2019, 2019, 6598-6602.	1.1	5
86	An Autofocus Back Projection Algorithm for GEO SAR Based on Minimum Entropy. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-14.	6.3	5
87	Improved spectrum reconstruction technique based on chirp rate modulation in stepped-frequency SAR. Science China Information Sciences, 2015, 58, 1-11.	4.3	4
88	Target Tracking Using SePDAF under Ambiguous Angles for Distributed Array Radar. Sensors, 2016, 16, 1456.	3.8	4
89	Road Network Extraction From Low-Contrast SAR Images. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 907-911.	3.1	4
90	Near-Field Phase Cross Correlation Focusing Imaging and Parameter Estimation for Penetrating Radar. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 598-611.	6.3	4

#	Article	IF	Citations
91	Parametric Synthetic Aperture Radar Image Recovery for Multiple Linear Structures: An Image Domain Approach. Remote Sensing, 2020, 12, 1996.	4.0	4
92	Blocked Azimuth Spectrum Reconstruction Algorithm for Onboard Real-Time Dual-Channel SAR Imaging. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	4
93	Preliminary Result of MIMO SAR Tomography via 3D FFBP. , 2020, , .		4
94	Multi-Layer Overlapped Subaperture Algorithm for Extremely-High-Squint High-Resolution Wide-Swath SAR Imaging with Continuously Time-Varying Radar Parameters. Remote Sensing, 2022, 14, 365.	4.0	4
95	Mainlobe interference suppression based on large aperture auxiliary array. , 2012, , .		3
96	Impacts of topography for forest height estimation. , 2012, , .		3
97	An improved wide swath imaging algorithm based on series reversion in GEO SAR. , 2012, , .		3
98	SAR autofocus based on minimum entropy. , 2013, , .		3
99	Grating lobes suppression method for stepped frequency GB-SAR system. Journal of Systems Engineering and Electronics, 2014, 25, 987-995.	2.2	3
100	A continuous PRI variation method for geosynchronous SAR with elliptical orbit. , 2015, , .		3
101	Phase unwrapping method based on multiâ€frequency InSAR in highly sloped terrain. Electronics Letters, 2016, 52, 1058-1059.	1.0	3
102	A new Doppler centroid estimation method for high-squint curved-trajectory airborne synthetic aperture radar. International Journal of Remote Sensing, 0, , 1-23.	2.9	3
103	Extended Multiple Aperture Mapdrift-Based Doppler Parameter Estimation and Compensation for Very-High-Squint Airborne SAR Imaging. Sensors, 2019, 19, 213.	3.8	3
104	Interpolation Free Wide Nonlinear Chirp Scaling Algorithm for Spaceborne Stripmap Range Sweep SAR Imaging. IEEE Geoscience and Remote Sensing Letters, 2020, 17, 621-625.	3.1	3
105	Analytic Constraint Between Minimum Number of Acquisitions and SNR in SAR Tomography. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	3
106	Joint Association and Registration in a Multiradar System for Migratory Insect Track Observation. IEEE Transactions on Aerospace and Electronic Systems, 2021, , 1-1.	4.7	3
107	Space-Surface Bistatic SAR. , 0, , 215-246.		3
108	A High-Frequency Motion Error Compensation Algorithm Based on Multiple Errors Separation in BiSAR Onboard Mini-UAVs. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-13.	6.3	3

#	Article	IF	Citations
109	Photocatalysisâ€Induced Nanopores toward Highly Reliable Organic Electrochemical Metallization Memory. Advanced Electronic Materials, 2022, 8, .	5.1	3
110	An improved nonlinear chirp scaling algorithm with capability motion compensation for one-stationary BiSAR. , 2010, , .		2
111	Fast processing method of SAR raw data simulation for large-scale forest stand application. , 2011, , .		2
112	Subsurface height measurement using InSAR technique in sand-covered arid areas. , 2014, , .		2
113	Height resolution analysis in geosynchronous SAR. Electronics Letters, 2015, 51, 579-581.	1.0	2
114	Recent progress in Bistatic SAR with illuminators of opportunity. Science China Technological Sciences, 2016, 59, 1965-1967.	4.0	2
115	Algorithms for GEO SAR Imaging Processing. , 2018, , 77-128.		2
116	Fast overlapped subaperture algorithm for high-squint spotlight SAR imaging. International Journal of Remote Sensing, 2020, 41, 6051-6070.	2.9	2
117	Time-Varying Nadir Echo Suppression for Spaceborne Stripmap Range Sweep Synthetic Aperture Radar via Waveform Diversity. IEEE Geoscience and Remote Sensing Letters, 2021, 18, 826-830.	3.1	2
118	A precise signal model for ultra high resolution SAR. , 2010, , .		1
119	Image formation algorithm with motion compensation for forward-looking bistatic SAR. , 2011, , .		1
120	The impact of residual motion deviations on forest height inversion by SAR remote sensing. , 2012, , .		1
121	Multi-angle BiSAR images enhancement and scatting characteristics analysis. , 2014, , .		1
122	Space-Surface Bistatic Sar Using BeiDou-2 as Illuminator. , 2014, , .		1
123	A hybrid adaptive method for interferometric phase filtering based on the mode and median filter. , 2015, , .		1
124	Full-time Resolution analysis and Path Determination for air borne Forward-Looking SAR with Opportunistic Illuminator. , 2019, , .		1
125	Parametric reconstruction of arc-shaped structures in synthetic aperture radar imaging. International Journal of Remote Sensing, 2021, 42, 7143-7165.	2.9	1
126	Dual-Frequency SAR Tomography with Long Sparse Non-Uniform Baseline in Ground-Based Lunar Mapping. , 2021, , .		1

#	Article	IF	Citations
127	Earth-Based Repeat-Pass SAR Interferometry of the Moon: Spatialâ€“Temporal Baseline Analysis. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-14.	6.3	1
128	A Novel Method for Direction of Arrival Measurement. , 2006, , .		0
129	Deriving bistatic chirp scaling algorithm based on the signal model. , 2010, , .		0
130	An improved chirp scaling algorithm with capability motion compensation for SAR. , 2010, , .		0
131	Synthesizing high resolution profile based on correlation coefficient for stepped-frequency radar. , 2012, , .		0
132	Fixed-receiver bistatic interferometric algorithms analysis and implementation. , 2013, , .		0
133	Angular tracking for ultra wideband radar under clutter. , 2015, , .		0
134	Accurate analysis method of background ionosphere effects on Geosynchronous SAR focusing. , 2015, , .		0
135	Radar equation and power allocation strategy for collaborative radar network. , 2015, , .		0
136	A Phase Reconstruction Method for Ground-Based Interferometric SAR. , 2018, , .		0
137	Passive GNSS-based SAR data acquisition and real-time preprocessing system. , 2019, , .		0
138	A Method of Acquiring Vibration Mode of Bridge Based on MIMO Radar. , 2019, , .		0
139	Design and preliminary verification of Lâ€band groundâ€based SAR system for the vegetated area. Journal of Engineering, 2019, 2019, 5707-5711.	1.1	0
140	GB-InSAR Special Issues during its Applications on DEM Generation. , 2019, , .		0
141	Memristive Neural Networks: Zeoliteâ€Based Memristive Synapse with Ultralow Subâ€10â€fJ Energy Consumption for Neuromorphic Computation (Small 13/2021). Small, 2021, 17, 2170057.	10.0	0
142	Three-Dimensional Asteroid Reconstruction Via Multi-Aspect Ground-Based Sar Images: An Optimization Comparison. , 2021, , .		0
143	Refined Multifrequency Interferometric SAR Phase Unwrapping for Extremely Steep Terrain. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-20.	6.3	0