Alfredo Renga

List of Publications by Year
in descending order

74	817	623734	610901
papers	citations	14 h-index	24 g-index

75	75	75	664
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Spatial Resolution of Bistatic Synthetic Aperture Radar: Impact of Acquisition Geometry on Imaging Performance. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 3487-3503.	6.3	77
2	Synthetic Aperture Radar for Earth Observation from a Lunar Base: Performance and Potential Applications. IEEE Transactions on Aerospace and Electronic Systems, 2010, 46, 1034-1051.	4.7	57
3	Segmentation of Marine SAR Images by Sublook Analysis and Application to Sea Traffic Monitoring. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 1463-1477.	6.3	41
4	Assessment of a micro-UAV system for microwave tomography radar imaging. Remote Sensing of Environment, 2018, 212, 90-102.	11.0	38
5	SAR-Based Vessel Velocity Estimation From Partially Imaged Kelvin Pattern. IEEE Geoscience and Remote Sensing Letters, 2017, 14, 2067-2071.	3.1	34
6	Use of Doppler Parameters for Ship Velocity Computation in SAR Images. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 3995-4011.	6.3	32
7	Integration of Automatic Identification System (AIS) Data and Single-Channel Synthetic Aperture Radar (SAR) Images by SAR-Based Ship Velocity Estimation for Maritime Situational Awareness. Remote Sensing, 2019, 11, 2196.	4.0	28
8	Performance of Stereoradargrammetric Methods Applied to Spaceborne Monostaticâ€“Bistatic Synthetic Aperture Radar. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 544-560.	6.3	24
9	Ionospheric path delay models for spaceborne GPS receivers flying in formation with large baselines. Advances in Space Research, 2011, 48, 507-520.	2.6	24
10	Preliminary Study of a Millimeter Wave FMCW InSAR for UAS Indoor Navigation. Sensors, 2015, 15, 2309-2335.	3.8	21
11	Cooperative UAV navigation based on distributed multi-antenna GNSS, vision, and MEMS sensors. , 2015, , .		21
12	Experimental Analysis of Radar Odometry by Commercial Ultralight Radar Sensor for Miniaturized UAS. Journal of Intelligent and Robotic Systems: Theory and Applications, 2018, 90, 485-503.	3.4	20
13	Proof of concept of micro-UAV-based radar imaging. , 2017, , .		19
14	Multi-UAV Carrier Phase Differential GPS and Vision-based Sensing for High Accuracy Attitude Estimation. Journal of Intelligent and Robotic Systems: Theory and Applications, 2019, 93, 245-260.	3.4	18
15	SAR Bathymetry in the Tyrrhenian Sea by COSMO-SkyMed Data: A Novel Approach. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 2834-2847.	4.9	17
16	Relative Navigation in LEO by Carrier-Phase Differential GPS with Intersatellite Ranging Augmentation. International Journal of Aerospace Engineering, 2013, 2013, 1-11.	0.9	15
17	Small Multicopter-UAV-Based Radar Imaging: Performance Assessment for a Single Flight Track. Remote Sensing, 2020, 12, 774.	4.0	15
18	Moon-based Synthetic Aperture Radar: Review and challenges. , 2016, , .		14

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19	Formation Flying SAR: Analysis of Imaging Performance by Array Theory. IEEE Transactions on Aerospace and Electronic Systems, 2021, 57, 1480-1497.	4.7	14
20	Validation on flight data of a closed-loop approach for GPS-based relative navigation of LEO satellites. Acta Astronautica, 2013, 86, 126-135.	3.2	13
21	Real-Time Relative Positioning of Spacecraft over Long Baselines. Journal of Guidance, Control, and Dynamics, 2014, 37, 47-58.	2.8	13
22	Small-UAV Radar Imaging System Performance with GPS and CDGPS Based Motion Compensation. Remote Sensing, 2020, 12, 3463.	4.0	13
23	Linear Dispersion Relation and Depth Sensitivity to Swell Parameters: Application to Synthetic Aperture Radar Imaging and Bathymetry. Scientific World Journal, The, 2015, 2015, 1-10.	2.1	12
24	Sentinel-1 bathymetry for North Sea palaeolandscape analysis. International Journal of Remote Sensing, 2016, 37, 471-491.	2.9	12
25	Ultralight radar sensor for autonomous operations by micro-UAS. , 2016, , .		11
26	Galileo-based spaceâ€“airborne bistatic SAR for UAS navigation. Aerospace Science and Technology, 2013, 27, 193-200.	4.8	10
27	Real-Time Hardware-in-the-Loop Tests of Star Tracker Algorithms. International Journal of Aerospace Engineering, 2013, 2013, 1-13.	0.9	10
28	Formation geometries for multistatic SAR tomography. Acta Astronautica, 2014, 96, 11-22.	3.2	10
29	Compact millimeter wave FMCW InSAR for UAS indoor navigation. , 2015, , .		10
30	Towards Automatic Recognition of Wakes Generated by Dark Vessels in Sentinel-1 Images. Remote Sensing, 2021, 13, 1955.	4.0	10
31	Novel closed-loop approaches for precise relative navigation of widely separated GPS receivers in LEO. Acta Astronautica, 2014, 93, 243-251.	3.2	9
32	Tracking of Coastal Swell Fields in SAR Images for Sea Depth Retrieval: Application to ALOS L-Band Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 3532-3540.	4.9	9
33	Accurate ionospheric delay model for real-time GPS-based positioning of LEO satellites using horizontal VTEC gradient estimation. GPS Solutions, 2018, 22, 1.	4.3	9
34	First Results on Wake Detection in SAR Images by Deep Learning. Remote Sensing, 2021, 13, 4573.	4.0	9
35	GPS-based Relative Navigation of LEO formations with Varying Baselines. , 2010, , .		8
36	PRF Selection in Formation-Flying SAR: Experimental Verification on Sentinel-1 Monostatic Repeat-Pass Data. Remote Sensing, 2020, 12, 29.	4.0	8

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37	Error sources and sensitivity analysis in formation flying synthetic aperture radar. Acta Astronautica, 2022, 192, 97-112.	3.2	8
38	An Algorithm for Managing Aircraft Movement on an Airport Surface. Algorithms, 2013, 6, 494-511.	2.1	7
39	From the expected scientific applications to the functional specifications, products and performance of the SABRINA missions. , 2008, , .		6
40	SAR-based sea traffic monitoring: a reliable approach for maritime surveillance. Proceedings of SPIE, 2011, , .	0.8	6
41	Passive SAR satellite constellation for near-persistent earth observation: Prospects and issues. IEEE Aerospace and Electronic Systems Magazine, 2018, 33, 4-15.	1.3	6
42	Bistatic Synthetic Aperture Radar. , 2013, , 3-59.		6
43	RetinaNet: A deep learning architecture to achieve a robust wake detector in SAR images. , 2021, , .		6
44	Effects of Orbit and Pointing Geometry of a Spaceborne Formation for Monostatic-Bistatic Radargrammetry on Terrain Elevation Measurement Accuracy. Sensors, 2009, 9, 175-195.	3.8	5
45	Enhancing workers safety in worksites through augmented GNSS sensors. Measurement: Journal of the International Measurement Confederation, 2018, 117, 144-152.	5.0	5
46	Formation-Flying SAR Receivers in Far-From-Transmitter Geometry: Signal Model and Processing Scheme. , 2021, , .		5
47	Real-Time Hardware-in-the-Loop Laboratory Testing for Multisensor Sense and Avoid Systems. International Journal of Aerospace Engineering, 2013, 2013, 1-9.	0.9	4
48	Geometric total electron content models for topside ionospheric sounding. , 2014, , .		4
49	Ship velocity estimation by Doppler Centroid analysis of focused SAR data. , 2014, , .		4
50	L-band SAR image processing for the determination of coastal bathymetry based on swell analysis. , 2014, , .		4
51	Earth observation with MEO transmitters and UAS receivers: A potential utilization of Galileo constellation. Acta Astronautica, 2014, 94, 93-103.	3.2	3
52	Adaptive threshold and sub-look processing in ship detection by SAR. , 2015, , .		3
53	Flight demonstration of multi-UAV CDGPS and vision-based sensing for high accuracy attitude estimation. , 2017, , .		3
54	On-board orbit determination for low thrust LEO-MEO transfer by Consider Kalman Filtering and multi-constellation GNSS. Acta Astronautica, 2017, 138, 242-254.	3.2	3

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55	Improving radar-based mini-UAS navigation in complex environments with outlier rejection. , 2019, , .		3
56	Hybrid space-airborne bistatic SAR geometric resolutions. Proceedings of SPIE, 2009, , .	0.8	2
57	Spaceborne-airborne bistatic radar for UAS navigation purposes: Preliminary analysis and strawman system identification. , 2010, , .		2
58	Performance analysis of millimeter wave FMCW InSAR for UAS indoor operations. , 2015, , .		2
59	Robust filter setting in GPS-based relative positioning of small-satellite LEO formations. Advances in Space Research, 2018, 62, 3369-3382.	2.6	2
60	Sabrina. , 2013, , 447-471.		2
61	An advanced system for performance evaluation of integrated navigation systems. , 2011, , .		1
62	On-the-fly outlier rejection in high-precision spaceborne GPS applications. , 2014, , .		1
63	Ionospheric delays compensation for on-the-fly integer ambiguity resolution in long baseline LEO formations. International Journal of Space Science and Engineering, 2014, 2, 63.	0.1	1
64	Indoor Operations by FMCW Millimeter Wave SAR Onboard Small UAS: A Simulation Approach. Journal of Sensors, 2016, 2016, 1-13.	1.1	1
65	Investigation on radar-based applications for mini-UAS and MAVs. , 2016, , .		1
66	Multi-purposes radar for remote sensing and navigation by mini and micro unmanned aerial vehicles. , 2016, , .		1
67	Ionosphere-gradient based filtering approach for precise relative navigation in LEO. , 2017, , .		1
68	Formation-Flying SAR Receivers in FAR-from-Transmitter Geometry: X-Band SAR Antenna Design. , 2021, , .		1
69	X-Band SAR Antenna Design for a CubeSat Formation-Flying Remote Sensing Mission. , 2021, , .		1
70	An advanced system for performance evaluation of integrated navigation systems. , 2011, , .		0
71	Prescreening and discrimation of maritime targets in single-channel SAR images. , 2016, , .		0
72	Preliminary performance assessment of Radar-aided monocular Visual Odometry for small aerial platforms. , 2019, , .		0

#	Article	IF	Citations
73	UAV radar imaging for target detection. , 2019, , .		0
74	A hybrid technique for wake-based ship detection: precise target localization by deterministic analysis of deep-learning segmented images. , 2021, , .		0