

Andrea Monti-Guarnieri

List of Publications by Year in descending order

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143
papers

3,799
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186265

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146
docs citations

146
times ranked

2233
citing authors

#	ARTICLE	IF	CITATIONS
1	Compact and Free-Floating Satellite MIMO SAR Formations. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-12.	6.3	11
2	Passive sensing by Sentinel-1 SAR: Methods and applications. Remote Sensing of Environment, 2022, 270, 112866.	11.0	0
3	Improving the Split-Spectrum Method for Sentinel-1 Differential TOPSAR Interferometry. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	0
4	Fast Urban Land Cover Mapping Exploiting Sentinel-1 and Sentinel-2 Data. Remote Sensing, 2022, 14, 36.	4.0	9
5	A Quick and Dirty processor for automotive forward SAR imaging. , 2022, , .		6
6	Multi-Beam Automotive SAR Imaging in Urban Scenarios. , 2022, , .		9
7	Sentinel-1 Sensitivity to Soil Moisture at High Incidence Angle and the Impact on Retrieval Over Seasonal Crops. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 7308-7321.	6.3	21
8	Joint exploitation of spaceborne SAR images and GIS techniques for urban coherent change detection. Remote Sensing of Environment, 2021, 253, 112152.	11.0	19
9	Navigation-Aided Automotive SAR for High-Resolution Imaging of Driving Environments. IEEE Access, 2021, 9, 35599-35615.	4.2	29
10	Multitemporal InSAR Coherence Analysis and Methods for Sand Mitigation. Remote Sensing, 2021, 13, 1362.	4.0	7
11	Formation of MIMO SAR Mini-Satellites: Performance Prediction. , 2021, , .		1
12	Meteorological OSSEs for New Zenith Total Delay Observations: Impact Assessment for the Hydroterra Geosynchronous Satellite on the October 2019 Genoa Event. Remote Sensing, 2020, 12, 3787.	4.0	6
13	Vegetated Target Decorrelation in SAR and Interferometry: Models, Simulation, and Performance Evaluation. Remote Sensing, 2020, 12, 2545.	4.0	17
14	Excess Path Delays From Sentinel Interferometry to Improve Weather Forecasts. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 3213-3228.	4.9	13
15	Joint Exploitation of SAR and GNSS for Atmospheric Phase Screens Retrieval Aimed at Numerical Weather Prediction Model Ingestion. Remote Sensing, 2020, 12, 654.	4.0	12
16	Along-Track Multistatic Synthetic Aperture Radar Formations of Minisatellites. Remote Sensing, 2020, 12, 124.	4.0	25
17	Distributed Scatterer Interferometry With the Refinement of Spatiotemporal Coherence. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 3977-3987.	6.3	93
18	An Iso-Frequency MIMO SAR Formation for Wide-Swath Imaging, Interferometry and Tomography. , 2020, , .		1

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19	LEO to GEO-SAR Interferences: Modelling and Performance Evaluation. Remote Sensing, 2019, 11, 1720.	4.0	10
20	Impact of the RFI Generated by Active Leo Systems on a Nearly-Geostationary SAR System. , 2019, , .		0
21	A Synergistic Use of a High-Resolution Numerical Weather Prediction Model and High-Resolution Earth Observation Products to Improve Precipitation Forecast. Remote Sensing, 2019, 11, 2387.	4.0	35
22	ARGOS: A fractioned geosynchronous SAR. Acta Astronautica, 2019, 164, 444-457.	3.2	12
23	Câ€CLASS: geosynchronous radar for water cycle science â€ orbit selection and system design. Journal of Engineering, 2019, 2019, 7534-7537.	1.1	8
24	Decorrelation in GEO SARs due to radio frequency interferences. Journal of Engineering, 2019, 2019, 7039-7041.	1.1	0
25	Atmospheric Phase Screen in GEO-SAR: Estimation and Compensation. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 1668-1679.	6.3	33
26	3D Vibration Estimation from Ground-Based Radar. Remote Sensing, 2018, 10, 1670.	4.0	18
27	Atmospheric Slant Delay from SAR Interferometry, GNSS and Numerical Weather Prediction Model: A Comparison Study in View of a Geosynchronous SAR Mission. , 2018, , .		0
28	Sentinel-1 Radiometric Accuracy Enhancement Exploiting Antenna Model Refinement Technique. , 2018, , .		0
29	Coherence Change Detection For Sentinel-1 Sar: Methods And Applications. , 2018, , .		0
30	Performance and Requirements of GEO SAR Systems in the Presence of Radio Frequency Interferences. Remote Sensing, 2018, 10, 82.	4.0	29
31	Sentinel-1 Sensitivity to Soil Moisture at High Incidence Angle and its Impact on Retrieval. , 2018, , .		2
32	End-to-End Simulator of Geosynchronous SAR Data for System Performance Assessment. , 2018, , .		1
33	Geosynchronous Continental Land-Atmosphere Sensing System (G-Class): Persistent Radar Imaging for Earth Science. , 2018, , .		7
34	Coherent Change Detection for Multipass SAR. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 6811-6822.	6.3	30
35	Options for continuous radar Earth observations. Science China Information Sciences, 2017, 60, 1.	4.3	34
36	On the Phase Calibration by Multisquint Analysis in TOPSAR and Stripmap Interferometry. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 134-147.	6.3	18

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37	Pre-Flight SAOCOM-1A SAR Performance Assessment by Outdoor Campaign. Remote Sensing, 2017, 9, 729.	4.0	1
38	Identification of C-Band Radio Frequency Interferences from Sentinel-1 Data. Remote Sensing, 2017, 9, 1183.	4.0	29
39	Track compensation and calibration of continuous monitoring GEOSAR missions. , 2016, , .		0
40	Enhanced processing of Sentinel-1 TOPSAR data. , 2016, , .		2
41	Decorrelating targets: Models and measures. , 2016, , .		1
42	Geostare system performance assessment methodology. , 2016, , .		3
43	Impact of Scene Decorrelation on Geosynchronous SAR Data Focusing. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 1635-1646.	6.3	21
44	Demonstrative geosynchronous SAR products affected by clutter and APS decorrelation. , 2015, , .		3
45	A geostationary MIMO SAR swarm for quasi-continuous observation. , 2015, , .		2
46	Statistical characterization of clutter decorrelation for medium and long integration time imaging. , 2015, , .		0
47	Quasi geostationary, comsat-compatible SAR: Solutions for payload design. , 2015, , .		0
48	Orbit accuracy estimation by multi-squint phase: First Sentinel-1 results. , 2015, , .		1
49	Informing water management by direct use of SAR retrieved snow information in snow-rainfall dominated watersheds. , 2015, , .		1
50	Advanced three dimensional monitoring of structural vibrations and displacements by remote radar sensing. , 2015, , .		2
51	Analysis of Sentinel-1A FDFAQ after commissioning phase. , 2015, , .		0
52	A flexible frequency domain background clutter SAR simulator for GMTI applications. , 2015, , .		0
53	An experimental and theoretical comparative study of RADAR Ka band backscatter. , 2015, , .		0
54	Advanced Radar Geosynchronous Observation System: ARGOS. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 1406-1410.	3.1	64

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55	Sentinel-1A: Analysis of FDBAQ Performance on Real Data. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 6804-6812.	6.3	12
56	Calibration of SAR Polarimetric Images by Means of a Covariance Matching Approach. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 674-686.	6.3	26
57	LP norm SAR tomography by iteratively reweighted least square: First results. , 2014, , .		0
58	A comparative study of RADAR Ka-band backscatter. Proceedings of SPIE, 2014, , .	0.8	1
59	GeoSTARe initial mission design. , 2014, , .		13
60	Assesment of atmospheric phase screen impact on Geosynchronous SAR. , 2014, , .		8
61	Internal clutter motion impact on the long integration GEOSAR acquisition. , 2014, , .		3
62	Azimuth Antenna Maximum Likelihood Estimation by Persistent Point Scatterers in SAR Images. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 947-955.	6.3	8
63	Nearly Zero Inclination Geosynchronous SAR Mission Analysis With Long Integration Time for Earth Observation. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 6379-6391.	6.3	71
64	Requirements and Tests for Phase Preservation in a SAR Processor. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 2788-2798.	6.3	3
65	Generation and Calibration of High-Resolution DEM From Single-Baseline Spaceborne Interferometry: The "Split-Swath" Approach. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 4858-4867.	6.3	5
66	Geosynchronous SAR Focusing With Atmospheric Phase Screen Retrieval and Compensation. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 4397-4404.	6.3	81
67	Correction to "Atmospheric Phase Screen in Ground-Based Radar: Statistics and Compensation" [May 11 537-541]. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 204-204.	3.1	0
68	On the calibration of polarimetric SAR data with a numerical method. , 2013, , .		0
69	Long term relative polarimetric calibration by natural targets. , 2013, , .		2
70	An efficient method for the azimuth compression of geosynchronous SAR data through sub-apertures processing. , 2013, , .		4
71	Long-Term Relative Radiometric Calibration and Antenna Pointing Estimation by Natural Targets. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 4388-4396.	6.3	4
72	Accurate Monitoring of Pipe and Structural Vibrations by Remote RADAR Observations. , 2013, , .		1

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73	Maximum likelihood estimation of SAR Azimuth Antenna by means of Persistent Point Scatterers. , 2012, , .		0
74	Experimental assessment of the PS-cal technique over COSMO-SKYMED high resolution SAR data. , 2012, , .		0
75	Impact of atmospheric propagation in a Ka-band space-borne SAR for imaging and interferometry. , 2012, , .		1
76	A PS-based approach for the calibration of spaceborne polarimetric SAR systems. , 2012, , .		1
77	Results on spatial-temporal atmospheric phase screen retrieval from long-term GEOSAR acquisition. , 2012, , .		8
78	Stable Target Detection and Coherence Estimation in Interferometric SAR Stacks. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 3171-3178.	6.3	13
79	GEMINI: Geosynchronous SAR for Earth Monitoring by Interferometry and Imaging. , 2012, , .		17
80	Sentinel 1 SAR interferometry applications: The outlook for sub millimeter measurements. Remote Sensing of Environment, 2012, 120, 156-163.	11.0	150
81	A Space Adaptive Quantizer for Spaceborne SAR. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 3564-3573.	6.3	7
82	Atmospheric Phase Screen in Ground-Based Radar: Statistics and Compensation. IEEE Geoscience and Remote Sensing Letters, 2011, 8, 537-541.	3.1	86
83	A Ku-band geosynchronous Synthetic Aperture Radar mission analysis with medium transmitted power and medium-sized antenna. , 2011, , .		6
84	Accurate optimal doppler centroid estimation for SAR data. , 2011, , .		2
85	Impact of the antenna stability on the Doppler Centroid frequency. , 2011, , .		4
86	Phase requirements, design and validation of phase preserving processors for a SAR system. , 2011, , .		2
87	Automatic quality assessment for interferogram SAR stacks. , 2011, , .		3
88	Calibration of polarimetric SAR images affected by Faraday rotation through the PS technique. , 2011, , .		2
89	On the Role of Phase Stability in SAR Multibaseline Applications. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 2953-2966.	6.3	46
90	ML-Based Fringe-Frequency Estimation for InSAR. IEEE Geoscience and Remote Sensing Letters, 2010, 7, 136-140.	3.1	7

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91	Efficient Wavenumber Domain Focusing for Ground-Based SAR. IEEE Geoscience and Remote Sensing Letters, 2010, 7, 161-165.	3.1	16
92	Flexible Dynamic Block Adaptive Quantization for Sentinel-1 SAR Missions. IEEE Geoscience and Remote Sensing Letters, 2010, 7, 766-770.	3.1	37
93	Polarimetric and structural properties of forest scenarios as imaged by longer wavelength SARs. , 2010, , .		4
94	Roll-steering for improving SAOCOM-SAR performances. , 2010, , .		1
95	Optimal block quantization for SAR data. , 2010, , .		5
96	Performances and limitations of Persistent Scatterers-based SAR calibration. , 2010, , .		2
97	SAR Calibration Aided by Permanent Scatterers. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 2076-2086.	6.3	40
98	Impact of atmospheric water vapor on the design of a Ku band geosynchronous SAR system. , 2009, , .		17
99	FDBAQ a novel encoding scheme for Sentinel-1. , 2009, , .		9
100	GMES Sentinel-1 FDBAQ performance analysis. , 2009, , .		8
101	Advances in SAR interferometry for sentinel-1 with TOPS. , 2008, , .		2
102	On the Exploitation of Target Statistics for SAR Interferometry Applications. IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 3436-3443.	6.3	226
103	Analysis of antenna pointing errors on SAR image quality. , 2008, , .		2
104	Model Based SAR Tomography of Forested Areas. , 2008, , .		12
105	A wide swath, full polarimetric, L band spaceborne SAR. , 2008, , .		10
106	A new framework for multi-pass SAR interferometry with distributed targets. , 2007, , .		1
107	Hybrid Cram�r-Rao Bounds for Crustal Displacement Field Estimators in SAR Interferometry. IEEE Signal Processing Letters, 2007, 14, 1012-1015.	3.6	72
108	ASAR instrument performance and product quality evolution. , 2007, , .		0

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109	Burst-mode SARs for wide-swath surveys. Canadian Journal of Remote Sensing, 2007, 33, 27-38.	2.4	26
110	High-Resolution Spaceborne SAR Focusing by SVD-Stolt. IEEE Geoscience and Remote Sensing Letters, 2007, 4, 639-643.	3.1	47
111	TOPSAR: Terrain Observation by Progressive Scans. IEEE Transactions on Geoscience and Remote Sensing, 2006, 44, 2352-2360.	6.3	579
112	Maximum likelihood multi-baseline SAR interferometry. IET Radar, Sonar & Navigation, 2006, 153, 279.	2.1	79
113	Reduction to monostatic focusing of bistatic or motion uncompensated SAR surveys. IET Radar, Sonar & Navigation, 2006, 153, 199.	2.1	29
114	Joint Multi-baseline SAR Interferometry. Eurasip Journal on Advances in Signal Processing, 2005, 2005, 1.	1.7	15
115	Adaptive removal of azimuth ambiguities in SAR images. IEEE Transactions on Geoscience and Remote Sensing, 2005, 43, 625-633.	6.3	95
116	Doppler Centroid Estimation for ScanSAR Data. IEEE Transactions on Geoscience and Remote Sensing, 2004, 42, 14-23.	6.3	15
117	Focusing bistatic synthetic aperture radar using dip move out. IEEE Transactions on Geoscience and Remote Sensing, 2004, 42, 1362-1376.	6.3	129
118	Multi-mode ENVISAT ASAR interferometry: techniques and preliminary results. IET Radar, Sonar & Navigation, 2003, 150, 193.	2.1	19
119	Using topography statistics to help phase unwrapping. IET Radar, Sonar & Navigation, 2003, 150, 144.	2.1	6
120	SAR interferometry and statistical topography. IEEE Transactions on Geoscience and Remote Sensing, 2002, 40, 2567-2581.	6.3	12
121	Minimum mean square error space-varying filtering of interferometric SAR data. IEEE Transactions on Geoscience and Remote Sensing, 2002, 40, 11-21.	6.3	35
122	Optimal "focusing" for low resolution ScanSAR. IEEE Transactions on Geoscience and Remote Sensing, 2001, 39, 479-491.	6.3	15
123	Sar Interferometry And Its Applications. Surveys in Geophysics, 2000, 21, 159-176.	4.6	30
124	An interferometric quick-look processor. IEEE Transactions on Geoscience and Remote Sensing, 1999, 37, 861-866.	6.3	2
125	Combination of low- and high-resolution SAR images for differential interferometry. IEEE Transactions on Geoscience and Remote Sensing, 1999, 37, 2035-2049.	6.3	24
126	Passive geosynchronous SAR system reusing backscattered digital audio broadcasting signals. IEEE Transactions on Geoscience and Remote Sensing, 1998, 36, 1973-1976.	6.3	110

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127	SAR interferometry: a "Quick and dirty" coherence estimator for data browsing. IEEE Transactions on Geoscience and Remote Sensing, 1997, 35, 660-669.	6.3	71
128	Residual SAR focusing: an application to coherence improvement. IEEE Transactions on Geoscience and Remote Sensing, 1996, 34, 201-211.	6.3	2
129	ScanSAR focusing and interferometry. IEEE Transactions on Geoscience and Remote Sensing, 1996, 34, 1029-1038.	6.3	101
130	Cover. ERS-1 SAR interferogram of Mount Vesuvio (Italy). International Journal of Remote Sensing, 1996, 17, 2477-2478.	2.9	0
131	The wavenumber shift in SAR interferometry. IEEE Transactions on Geoscience and Remote Sensing, 1994, 32, 855-865.	6.3	535
132	Seismic Migration For Sar Focusing: Interferometrical Applications. IEEE Transactions on Geoscience and Remote Sensing, 1990, 28, 627-640.	6.3	97
133	SAR Focusing In Non-standard Geometries: A Generalized Approach. , 0, , .		2
134	Autofocusing SAR Data Using The Blind Deconvolution Approach: Limits And Experimental Results.. , 0, , .		0
135	Coherent techniques for multi channel SAR interferometry. , 0, , .		1
136	HIGH-RESOLUTION URBAN MAPPING BY FUSION OF SAR AND OPTICAL DATA. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLIII-B3-2021, 273-278.	0.2	1
137	SAR-BASED COASTLINE DETECTION AND MONITORING. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLIII-B3-2021, 327-334.	0.2	2
138	A NOVEL PROCEDURE FOR GENERATION OF SAR-DERIVED ZTD MAPS FOR WEATHER PREDICTION: APPLICATION TO SOUTH AFRICA USE CASE. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLIII-B3-2021, 405-410.	0.2	1
139	POST-DISASTER DAMAGE ASSESSMENT THROUGH COHERENT CHANGE DETECTION ON SAR IMAGERY. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-3, 431-436.	0.2	4
140	COHERENT CHANGE DETECTION FOR REPEATED-PASS INTERFEROMETRIC SAR IMAGES: AN APPLICATION TO EARTHQUAKE DAMAGE ASSESSMENT ON BUILDINGS. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-3/W4, 383-388.	0.2	7
141	HIGH-RESOLUTION SAR COHERENT CHANGE DETECTION IN URBAN ENVIRONMENT. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLIII-B3-2020, 1569-1575.	0.2	1
142	A NOVEL INDEX FOR TEMPORAL STABILITY ANALYSIS IN SPACE AND TIME OF SAR-DERIVED SCENES. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLIII-B3-2020, 1577-1583.	0.2	0
143	MIMO SAR FORMATIONS: ORBITAL DIAMETER AND SYNCHRONIZATION TOLERANCES. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLIII-B1-2020, 631-635.	0.2	0