

1. Record Nr.	UNINA9910688209303321
Titolo	Advances in SAR : sensors, methodologies, and applications // edited by Timo Balz [and three others]
Pubbl/distr/stampa	Basel, Switzerland : , : MDPI, , 2018
ISBN	3-03897-183-9
Descrizione fisica	1 online resource (530 pages)
Disciplina	621.38485
Soggetti	Synthetic aperture radar Remote sensing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	About the Special Issue Editors -- Timo Balz, Uwe Sorgel, Mattia Crespi and Batuhan Osmanoglu Editorial for Special Issue "Advances in SAR: Sensors, Methodologies, and Applications" Reprinted from: Remote Sens. 2018, 10, 1233, doi: 10.3390/rs10081233 -- Davide Giudici, Andrea Monti Guarnieri and Juan Pablo Cuesta Gonzalez Pre-Flight SAOCOM-1A SAR Performance Assessment by Outdoor Campaign Reprinted from: Remote Sens. 2017, 9, 729, doi: 10.3390/rs9070729 -- Matthew C. Garthwaite Deformation Monitoring in On the Design of Multi-Frequency InSAR Radar Corner Reflectors for Reprinted from: Remote Sens. 2017, 9, 648, doi: 10.3390/rs9070648 -- Andrea Monti-Guarnieri, Davide Giudici and Andrea Recchia Identification of C-Band Radio Frequency Interferences from Sentinel-1 Data Reprinted from: Remote Sens. 2017, 9, 1183, doi: 10.3390/rs9111183 -- Heng Zhang, Jiangwen Tang, Robert Wang, Yunkai Deng, Wei Wang and Ning Li An Accelerated Backprojection Algorithm for Monostatic and Bistatic SAR Processing Reprinted from: Remote Sens. 2018, 10, 140, doi: 10.3390/rs10010140 -- Seok Kim, Jiwoong Yu, Se-Yeon Jeon, Aulia Dewantari and Min-Ho Ka Signal Processing for a Multiple-Input, Multiple-Output (MIMO) Video Synthetic Aperture Radar (SAR) with Beat Frequency Division Frequency-Modulated Continuous Wave (FMCW) Reprinted from: Remote Sens. 2017, 9, 491, doi: 10.3390/rs9050491 -- Jeong-Won Park, Jae Hun Kim and Joong-Sun Won Fast and Efficient Correction of Ground Moving Targets in a Synthetic Aperture Radar,

Single-Look Complex Image Reprinted from: Remote Sens. 2017, 9, 926, doi: 10.3390/rs9090926 -- Yuncheng Bu, Xingdong Liang, Yu Wang, Fubo Zhang and Yanlei Li A Unified Algorithm for Channel Imbalance and Antenna Phase Center Position Calibration of a Single-Pass Multi-Baseline TomoSAR System Reprinted from: Remote Sens. 2018, 10, 456, doi: 10.3390/rs10030456 -- Markus Even and Karsten Schulz InSAR Deformation Analysis with Distributed Scatterers: A Review Complemented by New Advances Reprinted from: Remote Sens. 2018, 10, 744, doi: 10.3390/rs10050744 -- Xin Tian, Rakesh Malhotra, Bing Xu, Haoping Qi and Yuxiao Ma Modeling Orbital Error in InSAR Interferogram Using Frequency and Spatial Domain Based Methods Reprinted from: Remote Sens. 2018, 10, 508, doi: 10.3390/rs10040508 -- Cheng Wang, Liang Chen, Haisheng Zhao, Zheng Lu, Mingming Bian, Running Zhang and Jian Feng Ionospheric Reconstructions Using Faraday Rotation in Spaceborne Polarimetric SAR Data Reprinted from: Remote Sens. 2017, 9, 1169, doi: 10.3390/rs9111169 -- Yuting Dong, Houjun Jiang, Lu Zhang and Mingsheng Liao An Efficient Maximum Likelihood Estimation Approach of Multi-Baseline SAR Interferometry for Refined Topographic Mapping in Mountainous Areas Reprinted from: Remote Sens. 2018, 10, 454, doi: 10.3390/rs10030454 -- Jingwen Zhao, Jicang Wu, Xiaoli Ding and Mingzhou Wang Elevation Extraction and Deformation Monitoring by Multitemporal InSAR of Lupu Bridge in Shanghai Reprinted from: Remote Sens. 2017, 9, 897, doi: 10.3390/rs9090897 -- Julia Neelmeijer, Tilo Schone, Robert Dill, Volker Klemann and Mahdi Motagh Ground Deformations around the Toktogul Reservoir, Kyrgyzstan, from Envisat ASAR and Sentinel-1 Data-A Case Study about the Impact of Atmospheric Corrections on InSAR Time Series Reprinted from: Remote Sens. 2018, 10, 462, doi: 10.3390/rs10030462 -- Luyi Sun, Jan-Peter Muller and Jinsong Chen Time Series Analysis of Very Slow Landslides in the Three Gorges Region through Small Baseline SAR Offset Tracking Reprinted from: Remote Sens. 2017, 9, 1314, doi: 10.3390/rs9121314 -- Xuguo Shi, Houjun Jiang, Lu Zhang and Mingsheng Liao Landslide Displacement Monitoring with Split-Bandwidth Interferometry: A Case Study of the Shuping Landslide in the Three Gorges Area Reprinted from: Remote Sens. 2017, 9, 937, doi: 10.3390/rs9090937 -- Ludivine Libert, Dominique Derauw, Nicolas d'Oreye, Christian Barbier and Anne Orban Split-Band Interferometry-Assisted Phase Unwrapping for the Phase Ambiguities Correction Reprinted from: Remote Sens. 2017, 9, 879, doi: 10.3390/rs9090879 -- Ali Ghafouri, Jalal Amini, Mojtaba Dehmollaian and Mohammad Ali Kavooosi Better Estimated IEM Input Parameters Using Random Fractal Geometry Applied on Multi-Frequency SAR Data Reprinted from: Remote Sens. 2017, 9, 445, doi: 10.3390/rs9050445 -- Gerardo Di Martino, Antonio Iodice, Daniele Riccio, Giuseppe Ruello and Ivana Zinno The Role of Resolution in the Estimation of Fractal Dimension Maps From SAR Data Reprinted from: Remote Sens. 2018, 10, 9, doi: 10.3390/rs10010009 -- Xinping Deng, Carlos Lopez-Martinez, Jinsong Cheng and Pengpeng Han Statistical Modeling of Polarimetric SAR Data: A Survey and Challenges Reprinted from: Remote Sens. 2017, 9, 348, doi: 10.3390/rs9040348 -- Qihao Chen, Linlin Li, Qiao Xu, Shuai Yang, Xuguo Shi and Xiuguo Liu Multi-Feature Segmentation for High-Resolution Polarimetric SAR Data Based on Fractal Net Evolution Approach Reprinted from: Remote Sens. 2017, 9, 570, doi: 10.3390/rs9060570 -- Chensong Tao, Siwei Chen, Yongzhen Li and Shunping Xiao PolSAR Land Cover Classification Based on Roll-Invariant and Selected Hidden Polarimetric Features in the Rotation Domain Reprinted from: Remote Sens. 2017, 9, 660, doi: 10.3390/rs9070660 -- Andreas Braun and Volker Hochschild A SAR-

Based Index for Landscape Changes in African Savannas Reprinted from: Remote Sens. 2017, 9, 359, doi: 10.3390/rs9040359 -- Amir Behnamian, Sarah Banks, Koreen Milard, Lori White, Jon Pasher, Zhaohua Chen, Jason Duff, Laura Bourgeau-Chavez and Michael Battaglia Semi-Automated Surface Water Detection with Synthetic Aperture Radar Data: A Wetland Case Study Reprinted from: Remote Sens. 2017, 9, 1209, doi: 10.3390/rs9121209 -- Prosper Washaya, Timo Balz and Bahaa Mohamadi Coherence Change-Detection with Sentinel-1 for Natural and Anthropogenic Disaster Monitoring in Urban Areas Reprinted from: Remote Sens. 2018, 10, 1026, doi: 10.3390/rs10071026 -- Aobo Zhai, Xianbin Wen, Haixia Xu, Liming Yuan and Qingxia Meng Multi-Layer Model Based on Multi-Scale and Multi-Feature Fusion for SAR Images Reprinted from: Remote Sens. 2017, 9, 1085, doi: 10.3390/rs9101085 -- Yusuf Eshqi Molan, Jin-Woo Kim, Zhong Lu and Piyush Agram L-Band Temporal Coherence Assessment and Modeling Using Amplitude and Snow Depth over Interior Alaska Reprinted from: Remote Sens. 2018, 10, 150, doi: 10.3390/rs10010150.

Sommario/riassunto

The key importance of radar remote sensing for civil applications has been recognized for decades, and enormous scientific and technical developments have been carried out to further improve SAR sensors and SAR data processing. In recent years, SAR satellite constellations, consisting of two or more satellites, are becoming the "new normal" in SAR remote sensing. The present availability of SAR sensor constellations, such as Cosmo SkyMed, TerraSAR-X/TanDEM-X, and the new Copernicus sensors Sentinel-1A and 1B, supply a continuous stream of imagery with a unique short revisit cycle of only six days. Together with many more operational and planned SAR satellite systems, such as Geo-Fen 3 or NASA ISRO SAR (NISAR), this unprecedented amount of high-quality SAR data is suitable for a variety of applications, provided proper data processing methodology are applied. In "Advances in SAR: Sensors, Methodologies, and Applications" advancements in the field of hardware, software, and applications are presented, covering a wide range of topics.
