



## CALL FOR PAPERS

### IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing

#### Special Issue on “Advances in Pattern Recognition in Remote Sensing (PRRS)”

Steady progress in the development of new remote sensing devices and remote sensing technologies has dramatically improved the ability to observe the Earth and its changes. For example, these improvements are due to higher spectral, spatial, temporal, and/or radiometric resolution, but also due to access to different types of sensors. However, the ever-increasing amount and variety of data also brings methodological challenges that require the development of more advanced pattern recognition techniques for efficient data interpretation.

The International Association for Pattern Recognition (IAPR) Technical Committee 7 (TC-7 Remote Sensing and Mapping) aims at promoting the use of pattern recognition methods in the analysis of data collected from satellites or airborne sensors used for Earth observation. The Pattern Recognition in Remote Sensing (PRRS) Workshop series, which has been organized by the IAPR TC7 and technically sponsored by the International Society for Photogrammetry and Remote Sensing (ISPRS) offers a great opportunity for researchers to gain a better understanding of various research topics in remote sensing that require contributions from the pattern recognition community, and has established itself as an important interdisciplinary event for scientists involved in the combined fields of pattern recognition and remote sensing.

Following the success of the 11th IAPR Workshop on Pattern Recognition in Remote Sensing (PRRS 2020), this special issue is to provide an updated snapshot of recent advances in the use of pattern recognition techniques to address the challenges in new-generation remote sensing data. It will consider revised and extended papers initially presented at the workshop, as well as other submissions in response to this open call for papers.

The broad topics include (but are not limited to):

- Extraction, selection, learning, and reduction of features
- Deep learning for Earth observation data
- Clustering
- Active and transfer learning
- Target and anomaly detection
- Data fusion
- Multi-modal and multi-temporal analysis
- Nonlinear methods for pattern recognition
- Novel remote sensing applications of pattern recognition

#### Schedule

May 1, 2021	Submission system opening
November 11, 2021	Submission system closing

#### Format

All submissions will be peer reviewed according to the IEEE Geoscience and Remote Sensing Society guidelines. Submitted articles should not have been published or be under review elsewhere. Submit your manuscript on <http://mc.manuscriptcentral.com/jstars>, using the Manuscript Central interface and select the “**Advances in Pattern Recognition in Remote Sensing (PRRS)**” special issue manuscript type. Prospective authors should consult the site <https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9082768> for guidelines and information on paper submission. All submissions must be formatted using the IEEE standard format (double column, single spaced). Please visit [http://www.ieee.org/publications\\_standards/publications/authors/author\\_templates.html](http://www.ieee.org/publications_standards/publications/authors/author_templates.html) to download a template for transactions. Please note that as of Jan. 1, 2020, IEEE J-STARS has become a fully open-access journal charging a flat publication fee \$1,250 per paper.

#### Guest Editors

Ribana Roscher	University of Bonn, Germany (ribana.roscher@uni-bonn.de)
Gabriele Cavallaro	Forschungszentrum Jülich, Germany (g.cavallaro@fz-juelich.de)
Jie Shan	Purdue University, USA (jshan@purdue.edu)
Eckart Michaelsen	Fraunhofer IOSB, Germany (eckart.michaelsen@iosb.fraunhofer.de)
Uwe Stilla	Technical University of Munich, Germany (stilla@tum.de)