Special Issue

Imaging Geodesy Technologies and Applications in Geohazard Monitoring and Risk Assessment

Message from the Guest Editors

Due to climate change and rapid urban expansion, the number of geohazards, e.g., land subsidence, sinkhole, landslide, collapse and debris flow, has significantly increased. Once triggered, geohazards can be very destructive or even fatal, which threatens the sustainable development of our society. However, we lack knowledge of geohazards, e.g., their distribution, kinematics and mechanisms. Therefore, monitoring and assessing the risks of geohazards becomes an urgent task for geohazard management and prevention. Imaging geodesy technologies, such as Synthetic Aperture Radar (SAR), Optical Remote Sensing and Light Detection And Ranging (LiDAR), play increasingly virtual roles in geohazards monitoring and mapping. The ongoing advances of image processing, numerical modeling and machine/deep learning algorithms provide new opportunities for a better understanding of geohazards. The main objective of this Special Issue is to present the progress and state-of-the-art approaches in algorithm development and scientific exploitation of imaging geodesy technologies to retrieve information about geohazards.

Guest Editors

Dr. Xuguo Shi

Prof. Dr. Yunlong Wu

Dr. Zhengjia Zhang

Deadline for manuscript submissions

closed (20 November 2024)



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/203391

Applied Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 applsci@mdpi.com

mdpi.com/journal/applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multidimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

