

Special Issue

Advanced Technology and Data Analysis in Seismology

Message from the Guest Editor

Various of the planet's physical properties interact in a way that generates seismic phenomena. Hence, seismic monitoring observatories have become monitoring networks for geophysical variables that involve elastic, magnetic, electric, gravimetric, and thermal fields. The study of these broad types of signals implies the development of diverse detection and analysis strategies to understand the seismic source, the propagation environment, and possible space-time windows in which to consolidate early warning systems. This Special Issue seeks to document new experiences in monitoring seismic and volcanic sources based on recent technological trends. Additionally, we hope to further analyze approaches using traditional or disruptive techniques in order to understand the physics of the sources and the development of early warning systems for making decisions within the framework of public disaster management policies.

Guest Editor

Prof. Dr. Carlos Alberto Vargas-Jiménez
Departamento de Geociencias, Universidad Nacional de Colombia,
Bogota, Colombia

Deadline for manuscript submissions

20 December 2025



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/218273

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

mdpi.com/journal/

[appls](https://appls.mdpi.com)





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



[mdpi.com/journal/
applsci](https://mdpi.com/journal/applsci)



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 multi-dimensional 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)