

Special Issue

Underground Wireless Communication and Information Processing

Message from the Guest Editors

Petroleum, known as the "blood of industry", has led the revolution of production and created unprecedented achievements in civilization. Therefore, the exploration and exploitation of fossil fuel resources represented by petroleum is of great importance. Over the past 40 years, measure while drilling (MWD) technology has evolved from primitive to advanced, making remarkable progress, helping surface engineers make the right decisions, ensuring safety on drilling sites, improving efficiency, and reducing costs. However, faced with the increasing amount of underground data, the underground information transmission technology still faces many challenges, such as high bit error rate, insufficient information transmission rate, and serious signal distortion caused by specific complex environment. There are still a large number of problems to be studied and broken through. In this Special Issue, we would like to invite domain experts to share the recent progress and original work in the research and implementation of underground wireless communication and information processing.

Guest Editors

Dr. Zhengguang Xu

School of Electronic Information and Communications, Huazhong University of Science and Technology, Wuhan 430074, China

Dr. Qing Chen

School of Electrical and Electronic Engineering, Huazhong University of Science and Technology, Wuhan 430074, China

Deadline for manuscript submissions

closed (15 October 2023)



Electronics

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 6.1



mdpi.com/si/162697

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

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





Electronics

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 6.1



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



About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guestedited by leading experts in selected topics of interest.

Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

Author Benefits

High Visibility:

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

Journal Rank:

JCR - Q2 (Engineering, Electrical and Electronic) /
CiteScore - Q1 (Electrical and Electronic Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.4 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the second half of 2025).