

Special Issue

Channel Coding Techniques for Next-Generation Communication Systems: Chances and Challenges

Message from the Guest Editors

Channel coding techniques are extensively used in modern communication systems to enhance the bandwidth spectral efficiency and the robustness of information transmission. Modern channel codes have interested academic researchers and industries since turbo codes were discovered in 1993. These have been applied in the 4G cellular mobile systems. At present, low density parity check (LDPC) codes and polar codes are being endorsed for the 5G standard.

Now is the age of the Internet of Things (IoT), everything will be linked through communication connections. The next-generation communication systems will be involved in many scenarios such as wireless communications, optical communications, sensor networks, and distributed storage systems. These scenarios will urge new requisites to the communication systems going from lower complexity and lower latency encoder/decoder schemes, and very reliable capacity approaching coding schemes to lower energy consuming channel coding techniques. Not only may communication systems be considered as possible application scenarios, but also emerging applications of channel codes to security, flash memories, and deep-space probing.

Guest Editors

Dr. Francesca Vatta

Dr. Roberto Garelo

Dr. Gianluigi Liva

Deadline for manuscript submissions

closed (15 May 2022)



Electronics

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 6.1



mdpi.com/si/92754

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 guest-edited 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 16.8 days after
submission; acceptance to publication is undertaken in 2.4
days (median values for papers published in this journal in
the first half of 2025).