

Special Issue

Advances in the System of Higher-Dimension-Valued Neural Networks

Message from the Guest Editors

Neural networks have developed and flourished in aspects such as signal processing, image operation, pattern recognition and so on. Today, the lower-dimension-valued neural networks can no longer meet the increasing demands of the real world. Therefore, systems of higher-dimension-valued neural networks, such as complex-valued, quaternion-valued ones or octonion-valued networks, are gaining traction because they can be applied in more areas. This Special Issue welcomes submissions of original research articles and reviews. Research areas may include (but not limited to) the following: (1) Dynamic analysis for fractional-order neural networks; (2) Dynamic analysis and scientific application for memristor-based neural networks; (3) Stability analysis; (4) Complex-valued neural networks; Quaternion-valued neural networks; Octonion-valued neural networks; (5) Synchronization and controllers; (6) Deep learning theory and applications; (7) Pattern recognition; Image processing; (8) Fuzzy logic; (9) Complex systems.

Guest Editors

Dr. Jianying Xiao

School of Electronic Information and Electrical Engineering, Chengdu University, Chengdu 610106, China

Prof. Dr. Shiping Wen

Australian Artificial Intelligence Institute, Faculty of Engineering and Information Technology, University of Technology Sydney, Ultimo, NSW 2007, Australia

Deadline for manuscript submissions

closed (15 May 2024)



Electronics

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 6.1



mdpi.com/si/187758

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), CAPus /
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).