

Special Issue

Intelligent Resource Allocation Methods for Next Generation Wireless Cellular Systems

Message from the Guest Editors

As wireless cellular networks continue to evolve and embrace new technologies, the efficient allocation of resources becomes not only crucial but also necessary to meet the ever-increasing demands for higher data rates, improved quality of service, and ultra-high reliable connectivity. The articles featured in this Special Issue cover a wide range of topics, including but not limited to:

- Machine learning-based resource allocation algorithms;
- Optimization models for resource allocation;
- Dynamic spectrum allocation techniques;
- Energy-efficient resource allocation strategies;
- Joint resource allocation schemes for heterogeneous networks;
- Resource management for advanced wireless techniques like intelligent reflecting surface (IRS), massive MIMO, non-orthogonal multiple access (NOMA), rate-splitting multiple access (RSMA), unmanned aerial vehicle (UAV), multi-access computing (MEC), and wireless edge caching;
- Resource allocation for wireless digital twin networks;
- Resource management for the sixth-generation wireless communication networks (6G);

Guest Editors

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Deadline for manuscript submissions

closed (15 July 2025)



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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.

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