

# Special Issue

## Role of Cryptography in Network Security

### Message from the Guest Editors

Cryptography is a crucial part of network security. Network security protects communication networks and their data from unauthorised access, use, disclosure, disruption, modification, or destruction. Cryptography, as a fundamental tool, is used in various aspects of network security to achieve these goals. This Special Issue of *Cryptography* is dedicated to exploring recent advances and innovative approaches in network security powered by cryptography, including 5G/6G networks, IoT, and OT. Specific topics of interest include, but are not limited to:

- Cloud computing security;
- Communication technologies and protocol security;
- Cryptographic security protocols;
- Emerging cryptographic techniques;
- Federate learning;
- Hashing techniques;
- Homomorphic encryption in networks;
- Key distribution and management;
- Real-time cryptography applications;
- Trusted heterogeneous networks.

---

### Guest Editors

Prof. Dr. Krzysztof Szczypiorski

Institute of Telecommunications, Warsaw University of Technology, 00-661 Warszawa, Poland

Prof. Dr. Borislav Stoyanov

Department of Computer Informatics, Faculty of Mathematics and Informatics, Konstantin Preslavsky University of Shumen, 9712 Shumen, Bulgaria

---

### Deadline for manuscript submissions

closed (30 November 2024)



## Cryptography

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.1  
CiteScore 5.0



[mdpi.com/si/181645](https://mdpi.com/si/181645)

*Cryptography*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[cryptography@mdpi.com](mailto:cryptography@mdpi.com)

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





# Cryptography

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.1  
CiteScore 5.0



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



## About the Journal

### Message from the Editor-in-Chief

*Cryptography* is a new international journal which provides the state-of-the-art forum for original results in all areas of modern cryptography. *Cryptography* is published in open access format: research articles, reviews and other contents are released on the internet immediately after acceptance. Our journal welcomes submissions written from the theory and practices of modern cryptography, so that it may become a forum for exchange of new scientific developments between the cryptographers and the practitioners.

We would be pleased to welcome you as one of our authors.

---

### Editor-in-Chief

Prof. Dr. Josef Pieprzyk

1. Data61, CSIRO (the Commonwealth Scientific and Industrial Research Organisation), Sydney, NSW 2000, Australia
2. Institute of Computer Science, Polish Academy of Science, 02-668 Warszawa, Poland

---

### Author Benefits

#### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

#### High Visibility:

indexed within Scopus, ESCI (Web of Science), dblp, and other databases.

#### Journal Rank:

JCR - Q2 (Computer Science, Theory and Methods) /  
CiteScore - Q1 (Applied Mathematics)