

Special Issue

Public-Key Cryptography in the Post-quantum Era

Message from the Guest Editors

Public-key cryptography is one of the fundamental tools to achieve secure communications in the modern world. The security of traditional public-key primitives, however, is threatened by Shor's algorithm. This has prompted institutes such as NIST to prepare the ground for post-quantum standardization. Consequently, the field has seen a surge in research activity and quickly risen to a prominent position in the current cryptographic domain. Lattice-based cryptography is the largest and most promising research area in the context of post-quantum cryptography. Code-based cryptosystems are also very popular. In this Special Issue, we aim to collect contributions which are broadly related to post-quantum cryptography, including (but not limited to):

- Design of post-quantum cryptographic primitives;
- Code-based cryptography;
- Lattice-based cryptography;
- Multivariate cryptography;
- Isogeny-based cryptography;
- Cryptanalysis of post-quantum cryptosystems;
- Provable security in the ROM and QROM;
- Software and hardware implementations;
- Performance and security analysis of NIST candidates.

Guest Editors

Dr. Edoardo Persichetti

Dr. Paolo Santini

Dr. Marco Baldi

Prof. Dr. Qiang Wang

Deadline for manuscript submissions

closed (31 December 2021)



Cryptography

an Open Access Journal
by MDPI

Impact Factor 2.1
CiteScore 5.0



mdpi.com/si/70575

Cryptography
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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)