

## Improved of Elliptic Curves Cryptography over a Ring

**Authors :** Abdelhakim Chillali, Abdelhamid Tadmori, Muhammed Ziane

**Abstract :** In this article we will study the elliptic curve defined over the ring  $A_n$  and we define the mathematical operations of ECC, which provides a high security and advantage for wireless applications compared to other asymmetric key cryptosystem.

**Keywords :** elliptic curves, finite ring, cryptography, study

**Conference Title :** ICSRSD 2020 : International Conference on Scientific Research and Development

**Conference Location :** Chicago, United States

**Conference Dates :** December 12-13, 2020