# ΑΡΧΕΣ ΚΒΑΝΤΙΚΗΣ ΥΠΟΛΟΓΙΣΤΙΚΗΣ

Ιωάννης Κ. Μαρμόρκος

ΚΑΛΛΙΠΟΣ
Δασικού ακαδημαϊκές εκδόσεις

Εθνικό Πρόγραμμα Ανάπτυξης 2021-2025

## METADATA

• • •

## Abstract

This book presents the basic principles of quantum computing. The computer is presented as a physical system and computation as a physical process. The supremacy of the contribution of quantum mechanics to computation is analyzed. The presentation of quantum computing takes place from the perspective of the quantum circuit model. The most important quantum algorithms are described, as well as the corresponding algorithms of quantum cryptography. Finally, a brief presentation of the so far candidate physical systems for the implementation of the quantum computer is attempted.

KALLIPOS open academic editions

Εθνικό Πρόγραμμα Ανάπτυξης 2021-2025