

1. Record Nr.	UNINA9910882892003321
Titolo	Advanced Sensing and Robotics Technologies in Smart Agriculture // edited by Yuliang Yun, Wenyi Sheng, Zhao Zhang
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2024
ISBN	981-9764-41-6
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (181 pages)
Collana	Smart Agriculture, , 2731-3484 ; ; 9
Disciplina	630
Soggetti	Robotics Agriculture Materials Detectors Image processing Robotic Engineering Sensors and biosensors Image Processing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Research Progress on Seed Appearance Recognition for Major Crops -- A review of corn growth status sensing methods -- Greenhouse Phenotyping Measurement Techniques and Systems: A Review -- On-site Intelligent Grading System for Fruits and Vegetables: Case Studies on Tomato and Apple -- Recent advances in intelligent harvesting robots -- Infield honeysuckle detection based on improved YOLOv5s under natural lighting -- Multiscale wheat lodging parameter detection based on MobilenetV3.
Sommario/riassunto	This book specifically focuses on state-of-the-art advanced sensing and robotic techniques in smart agriculture and comprehensively describes the new knowledge. Significant agricultural technology progress in advanced sensing and robotics technology has been made recently, which has transformed the conventional agriculture to smart and digital agriculture. It provides readers take-away knowledge for seed quality detection, specialty crop harvest and sorting robotics, new sensing method for crop nutrient status, and broadband soil dielectric

permittivity measurements. All these new technologies have been developed, tested, or practically applied. It is a useful reference for readers in the field of smart agriculture and agriculture robotics.

2. Record Nr.

**Titolo**

UNINA9910972216603321

Quantum cryptography and computing : theory and implementation //  
edited by Ryszard Horodecki, Sergei Ya. Kilin and Janusz Kowalik

**Pubbl/distr/stampa**

Washington, D.C., : IOS Press, 2010

**ISBN**

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**Edizione**

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**Descrizione fisica**

1 online resource (271 p.)

**Collana**

NATO science for peace and security series. Sub-series D, Information  
and communication security, , 1874-6268 ; ; v. 26

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**Disciplina**

004.1

**Soggetti**

Quantum computers

Cryptography

Quantum communication

Quantum theory

Coding theory

Data encryption (Computer science)

**Lingua di pubblicazione**

Inglese

**Formato**

Materiale a stampa

**Livello bibliografico**

Monografia

**Note generali**

Bibliographic Level Mode of Issuance: Monograph

**Nota di bibliografia**

Includes bibliographical references and indexes.

**Nota di contenuto**

Title -- Preface -- Contents -- Quantum Cryptography -- Optimal local protocols for processing of entangled states - local cloning and eavesdropping -- Commercial potential of quantum cryptography -- Quantum voting via NV centers in diamond -- Tools for optical implementations of quantum communication protocols with application to quantum key distribution -- Phase-time coding quantum cryptography -- Simplifying information-theoretic arguments by post-

selection -- QKD: a million signal task -- On practical implementations of qudit-based quantum key distribution protocols -- Trusted noise in continuous-variable quantum key distribution -- Eavesdropping on the LM05 secure communication protocol -- Quantum Computing -- Quantum algorithms for formula evaluation -- Tradeoffs for reliable quantum information storage in 2D systems -- Quantum algorithm for preparing thermal Gibbs states - detailed analysis -- Spin-Hamiltonian analysis of quantum registers on single NV center and proximal <sup>13</sup>C nuclei in diamond -- Physics for Quantum Information Processing -- Multimode detection of broadband squeezed vacuum -- Superadditivity of multiple access gaussian channels -- Multi-pixel sources of entangled light in the correlation measurements without homodyne detection -- Nonmultiplicativity of probability of faithful teleportation in the Knill-Laflamme-Milburn scheme -- Continuous variable entanglement creation by means of small cross-Kerr nonlinearity -- Multi mode nano scale Raman echo quantum memory -- Local bounds for general Bell inequalities with the reduced entropy of the settings -- Atomic quantum memories for light -- Observable measures of entanglement -- Solid state hybrid devices for quantum information processing -- Subject Index -- Author Index.

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#### Sommario/riassunto

This volume contains papers presented at the NATO Advanced Research Workshop September 9-12, 2009, "Quantum Cryptography and Computing: Theory and Implementation", that was held in Sopot, Poland and organized by the National Quantum Information Centre of Gdansk. The papers are related to three broad subjects. The first is quantum cryptography, which includes technical and experimental issues and theory in a wide range of topics from the fundamental information-theoretical to commercial quantum cryptography. The second subject is quantum computing, in particular, some quantum algorithms are analyzed and basic restrictions for quantum memory are presented. The last part is closely related to the physics of quantum information processing. It includes solid state devices for quantum information processing, quantum memories and superadditivity effects for quantum resources. The book is of interest and recommended to researchers and graduate students of experimental and theoretical quantum information. Its unique feature is contributions by experts from both the West and the former Soviet Union.

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