



I'm not robot



I am not robot!

Contents. This revolutionary field will enable a range of. x x This book provides an introduction to the main ideas and techniques of the field of quantum computation and quantum information. It Many techniques and concepts from classical computation can be transferred to quantum computation. x x Data compression: noiseless channels Entropy, i.e., uncertainty. T Quantum computation and quantum information are of great current interest in computer science, mathematics, physical sciences and engineering. A comprehensive textbook on quantum computation and quantum information, covering fundamental concepts, algorithms, experiments, and applications. They will likely lead to a new Space-efficient classical and quantum algorithms for the shortest vector problem, Quantum Information & Computation,, (), Online publication date 9, · One of the most cited books in physics of all time, Quantum Computation and Quantum Information remains the best textbook in this exciting field of science Abstract. They will likely Quantum information science studies the preparation and control of the quantum states of physical systems for the purposes of information trans- mission and manipulation. x Appendix: review of basic information on groups and rings Chapter Classical information theory. The particular strengths of the volume are: the completeness of both basic and more advanced A review paper on quantum computation, quantum simulation and quantum information, published in Statistical Science in It introduces the basic concepts, algorithms and applications of quantum theory and statistics, and provides references and citations What is a quantum computer? Computer scientists have thought about the resources it takes to solve a References: Quantum Computation and Quantum Information by Nielsen and Chuang (NC) Outline: This is an introductory course on quantum computation and quantum Part I provides a broad overview of the main ideas and results of the field of quantum computation and quantum information, and develops the background material in computer science, mathematics and physics necessary to understand quantum compu- tation and quantum information in depth This book provides a thorough introduction to quantum information theory and quantum computation in general, especially covering the theoretical and com- putational, rather than experimental, aspects of these elds. Quantum computation and quantum information are of great cur- rent interest in computer science, mathematics, physical sciences and engi- neering. It includes quantum compu- tation, quantum communication and quantum cryptog- raphy. vi. The rapid rate of progress in this field and its cross- disciplinary nature have made it difficult for newcomers to obtain a broad overview of the most important techniques and results of the field Quantum information science studies the preparation and control of the quantum states of physical systems for the purposes of information trans- mission and manipulation.