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Nota di contenuto	Reversible and Quantum Circuits -- Reversible computation in integrated photonics -- Optimization of Quantum Boolean Circuits by Relative-Phase Toffoli Gates -- Constructing all qutrit controlled Clifford+T gates in Clifford+T -- Fast Control for Reversible Processors -- Designing a Reversible Stack Machine -- Applications of Quantum Computing -- Directed Graph Encoding in Quantum Computing supporting Edge-Failures -- Reordering Decision Diagrams for Quantum Computing Is Harder Than You Might Think -- Foundations and Applications -- Certifying algorithms and relevant properties of Reversible Primitive Permutations with Lean -- Algeo: An Algebraic Approach to Reversibility -- Concurrencies in Reversible Concurrent Calculi -- The @-Calculus -- Formal Translation from Reversing Petri Nets to Coloured Petri Nets -- Reversibility in Erlang: Imperative

Constructs -- A Reversible Debugger for Imperative Parallel Programs with Contracts -- Towards Causal-consistent Reversibility of Imperative Concurrent Programs.

Sommario/riassunto

This book constitutes the refereed proceedings of the 14th International Conference on Reversible Computation, RC 2022, which was held in Urbino, Italy, during July 5-6, 2021. The 10 full papers and 6 short papers included in this book were carefully reviewed and selected from 20 submissions. They were organized in topical sections named: Reversible and Quantum Circuits; Applications of quantum Computing; Foundations and Applications.
