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   Soggetti   Mathematical physics
                        Condensed matter
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   Nota di contenuto   Tutorial: Introductory Material -- Quantum Annealing: Basics and
                        Applications -- Other Optimizations.

   Sommario/riassunto   Quantum annealing employs quantum fluctuations in frustrated
                        systems or networks to anneal the system down to its ground state, or
                        more generally to its so-called minimum cost state. Often this
                        procedure turns out to be more effective, in multivariable optimization
                        problems, than its classical counterpart utilizing tunable thermal
                        fluctuations. This volume is divided into three parts. Part I is an
                        extensive tutorial introduction familiarizing the reader with the
                        background material necessary to follow the core of the book. Part II
                        gives a comprehensive account of the fundamentals and applications of
                        the quantum annealing method, and Part III compares quantum
                        annealing with other related optimization methods. This is the first
                        book entirely devoted to quantum annealing and will be both an
                        invaluable primer and guidebook for all advanced students and
                        researchers in this important field.