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Descrizione fisica	1 online resource (XII, 166 p. 76 illus., 20 illus. in color.)
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Nota di contenuto	Introduction -- Related concepts in reliability modeling of warm standby systems -- Reliability of -out-of- warm standby systems -- Reliability of demand-based warm standby systems -- Reliability of warm standby systems with imperfect fault coverage and switching failure -- Optimal working sequence in a 1-out-of-n warm standby system -- Reliability Evaluation for Demand-based Warm Standby Systems Considering Degradation Process -- Reliability of demand-based warm standby system with common bus performance sharing -- Reliability of Warm Standby Systems with Phased-Mission Requirement -- Reliability of warm standby systems with complex structure.
Sommario/riassunto	This book introduces the reliability modelling and optimization of warm standby systems. Warm standby is an attractive redundancy technique, as it consumes less energy than hot standby and switches into the active state faster than cold standby. Since a warm standby component experiences different failure rates in the standby state and active state, the reliability evaluation is challenging and the existing works are only restricted to very special cases. By adapting the decision diagrams, this book proposes the methodology to evaluate the reliability of different types of warm standby systems and studies the reliability optimization. Compared with existing works, the proposed methods allow the system

to have an arbitrary number of components and allow the failure time distribution of components to observe arbitrary distributions. From this book, the readers can not only learn how to evaluate and optimize the reliability of warm standby systems but also use the methods to study the reliability of other complex systems.

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