Record Nr. UNINA9910811207303321 Applied reliability engineering and risk analysis: probabilistic models **Titolo** and statistical inference / / editors, Ilia B. Frenkel ... [et al.] Pubbl/distr/stampa Chichester, West Sussex, : John Wiley & Sons Inc., 2014 **ISBN** 1-118-70189-5 1-118-70188-7 1-118-70194-1 Edizione [1st ed.] Descrizione fisica 1 online resource (451 p.) Wiley series in quality & reliability engineering Collana Classificazione TEC032000 Altri autori (Persone) Frenkelllia, Ph.D. Disciplina 620/.00452 Reliability (Engineering) Soggetti Risk assessment - Mathematical models Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto pt. I. Degradation analysis, multi-state and continuous-state system reliability -- pt. II. Networks and large-scale systems -- pt. III. Maintenance models -- pt. IV. Statistical inference in reliability -- pt. V. Systemability, physics-of-failure and reliability demonstration. "This book presents the latest developments in the field of reliability Sommario/riassunto science focusing on applied reliability, probabilistic models and risk analysis. It provides readers with the most up-to-date developments in this field and consolidates research activities in several areas of applied reliability engineering. The publication is timed to commemorate Boris Gnedenko's centennial by bringing together leading researchers, scientists, and practitioners in the field of Prof. Gnednko's expertise. The Introduction, written by Prof. Igor Ushakov, a personal friend and a colleague of Boris Gnedenko, explains the significant impact and contribution Gnedenko's work made on the reliability theory and the modern reliability practice. The book covers conventional and contemporary (recently emerged) topics in reliability science, which have seen extended research activities in the recent years. These topics include: degradation analysis and multi-state system reliability; networks and large scale systems; maintenance models; statistical

inference in reliability, and; physics of failures and reliability

demonstration. All of these topics present a great interest to researchers and practitioners, having been extensively researched in the past years and covered at a large number of international conferences and in a multitude of journal articles. This book pulls together this information with a coherent flow of chapters, and is written by the lead scientists, researchers and practitioners in their respective fields. Logically divided into five sections, each contains several chapters covering theoretical and practical issues, while case studies support the topics under discussion"--