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Soggetti	Quantitative research Statistics Financial risk management Data Analysis and Big Data Statistical Theory and Methods Risk Management Bayesian Inference Avaluació del risc Fiabilitat (Enginyeria) Estadística matemàtica Llibres electrònics
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Degradation and Failure Mechanisms of Complex Systems: Principles -- Simplified Approach to Analyse Fuzzy Reliability of a Repairable System -- Fault-Tolerant and Resilient Neural Control for Discrete-Time Nonlinear Systems -- Bayesian Reliability Analysis of the Topp–Leone Model under Different Loss Functions -- Availability Analysis of Non-Markovian Models with Rejuvenation and Check Pointing -- Reliability Metrics of Textile Confection Plant Using Copula Linguistic -- An Application of Soft Computing in Oil Condition Monitoring -- A Multi-Parameter Occupational Safety Risk Assessment Model for Chemicals in the University Laboratories by an MCDM-Sorting Method -- Failure Mode and Effect Analysis (FMEA) for Safety-Critical Systems in the

Context of Industry 4.0 -- Optimization of Redundancy Allocation Problem Using QPSO Algorithm under Uncertain Environment -- Resilience: Enterprise Sustainability Based to Risk Management -- Reliability Analysis of Process Systems Using Intuitionistic Fuzzy Set Theory -- Smart Systems Risk Management in IoT-Based Supply Chain -- Risk and Reliability Analysis in the Era of Digital Transformation -- Distributed System Reliability Analysis with Two Coverage Factors: A Copula Approach -- Qualitative Analysis Method for Evaluation of Risk and Failures in Wind Power Plants: A Case Study of Turkey -- Some Discrete Parametric Markov-Chain System Models to Analyze Reliability -- Repair and Maintenance Management System of Food Processing Equipment: A Systematic Literature Review -- Reliability, Availability, Maintainability and Dependability of a Serial Rice Mill Plant with the Incorporation of Coverage Factor.

Sommario/riassunto

This book collects select chapters on modern industrial problems related to uncertainties and vagueness in the expert domain of knowledge. The book further provides the knowledge related to application of various mathematical and statistical tools in these areas. The results presented in the book help the researchers and scientists in handling complicated projects in their domains. Useful to industrialists, academicians, researchers and students alike, the book aims to help managers and technical specialists in designing and implementation of reliability and risk programs as below: Ensure the system safety and risk informed asset management Follow a proper strategy to maintain the mechanical components of the system Schedule the proper actions throughout the product life cycle Understand the structure and cost of a complex system Plan the proper schedule to improve the reliability and life of the system Identify unwanted failures and set up preventive and correction action .
