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Titolo	Advances in RAMS Engineering : In Honor of Professor Ajit Kumar Verma on His 60th Birthday // edited by Durga Rao Karanki, Gopika Vinod, Srividya Ajit
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ISBN	3-030-36518-2
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Descrizione fisica	1 online resource (484 pages)
Collana	Springer Series in Reliability Engineering, , 1614-7839
Disciplina	620.00452
Soggetti	Quality control Reliability Industrial safety Computer software—Reusability Nuclear energy Chemical engineering Mechanical engineering Quality Control, Reliability, Safety and Risk Performance and Reliability Nuclear Energy Industrial Chemistry/Chemical Engineering Mechanical Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Prognostic of Electronic Systems -- Challenges in Implementation -- Reliability Prediction of Instrumentation and Control Cables for NPP Applications -- BOCR Modelling for Decision Assessment -- A Multi-criteria Evaluation Framework -- DevOps for IT Service Reliability and Availability -- The Unpopularity of the Software Tester Role Among Software Practitioners: A Cuban Study -- Demand Forecasting in situations of Volatile Sales of Products -- A Study on Reliability of Rotors using XLrotor -- Time Variant Reliability Analysis of Passive Systems -- Passive System Reliability Assessment and its Integration

into PSA -- Reliability Considerations in Analysis of Tunnels in Squeezing Rock -- DC and AC Contingency Solvers Used in Composite Power System Adequacy Assessment -- Fuzzy Approach to Well-being Analysis for Composite Power Systems Reliability Studies -- Reliable Distribution Systems Planning with Voltage Control -- Estimation of Power Quality Parameters using Soft Computing Techniques -- Predictive Maintenance Tools and Technologies for Transportation: A Review -- Optimum Decisions for Design of Maintenance Systems for Large Engineering Plants in an Industry 4.0 Scenario -- Artificial intelligence in Maintenance Engineering -- Probabilistic Safety Assessment in Nuclear & Non-nuclear Facilities: In a Glimpse -- Project Stage Considerations for an Inherently Safe and Reliable Chemical Plant -- Integrated Deterministic and Probabilistic Safety Assessment -- Fuzzy Logic Based Analysis of Dissolved Decay Contents in Transformer Oil -- Reliability Analysis of Microgrid Systems Using Hybrid Approaches.

Sommario/riassunto

This book surveys reliability, availability, maintainability and safety (RAMS) analyses of various engineering systems. It highlights their role throughout the lifecycle of engineering systems and explains how RAMS activities contribute to their efficient and economic design and operation. The book discusses a variety of examples and applications of RAMS analysis, including: • software products; • electrical and electronic engineering systems; • mechanical engineering systems; • nuclear power plants; • chemical and process plants and • railway systems. The wide-ranging nature of the applications discussed highlights the multidisciplinary nature of complex engineering systems. The book provides a quick reference to the latest advances and terminology in various engineering fields, assisting students and researchers in the areas of reliability, availability, maintainability, and safety engineering.
