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Titolo	Risk Based Technologies [[electronic resource] /] / edited by Prabhakar V. Varde, Raghu V. Prakash, Narendra S. Joshi
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ISBN	981-13-5796-X
Descrizione fisica	1 online resource (320 pages)
Disciplina	658.382
Soggetti	System safety Astronautics Engineering Quality Control, Reliability, Safety and Risk Nuclear Energy Aerospace Technology and Astronautics Complexity
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1: Introduction -- Chapter 2: Materials Reliability -- Chapter 3: Structural Risk Assessment -- Chapter 4: Software risk and asset management -- Chapter 5: Human Factor Engineering for Complex Engineering Scenarios -- Chapter 6: Reliability and risk engineering – Academic aspects -- Chapter 7: Condition Monitoring and Prognosis – An asset Management Approach -- Chapter 8: Structural Reliability -- Chapter 9: Risk Management in First of its Kind Mega Project – A Case Study on Indian PFBR -- Chapter 10: Design for Reliability Approach to Electronics in Nuclear Plant Environment -- Chapter 11: Passive thermal hydraulic system reliability – AHWR Challenge -- Chapter 12: Risk and Reliability Management Approach to Strategic System -- Chapter 13: Fatigue & Fracture Risk Assessment.
Sommario/riassunto	This book presents selected topics in implementing a risk-based approach for complex engineering systems in general, and nuclear plants in particular. It addresses gap areas in implementing the risk-based approach to design, operation and regulation, covering materials reliability, digital system reliability, software reliability, human factor

considerations, condition monitoring and prognosis, structural aspects in risk-based design as well as the application aspects like asset management for first-of-their-kind projects, strategic management and other academic aspect. Chapters are authored by renowned experts who address some of the identified challenges in implementation of risk-based approach in a clear and cogent manner, using illustrations, tables and photographs for ease of communication. This book will prove useful to researchers, professionals, and students alike.
