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| Nota di contenuto | Technology Empowered Risk and Reliability Management of Engineering Assets-possibilities and Challenges -- Standards for Probabilistic Risk/Safety Assessments of Nuclear Power Plants and High-level Safety Goals –An Overview -- Asset Management Can Be an Umbrella to Business for Reducing Cost and Risks and Enhancing Performance -- Harnessing Ai for Reliability and Maintenance -- Mirce Science: Solar Storm as a Mechanism of Motion of Autonomous Systems Through Mirce Space -- The Development of the Integrated System Failure Analysis and Its Application -- Digital Twins: Definition, Implementation and Applications -- Digital Twins for Rams -- Stochastic Debugging Framework for Software Reliability Growth Modelling and Its Inter-disciplinary Nature -- Human Factors Engineering, Product Development and Sustainable Performance in Organizations: Issues and Challenges from an International Perspective -- Advancements in Safety Assessment Methods and Techniques for Analysis of Internal and External Hazards -- Integrated Approach to Nuclear Safety at NPCIL. |

Sommario/riassunto

This book presents the latest research in the areas of development and application of risk-informed and risk-based technologies. The book discusses how advances in computational technologies, availability of accumulated experience and data on design, operations, maintenance and regulations, new insights in human factor modelling and development of new technologies, such as physics-of-failure modelling, prognostics and health management, have paved the way for implementation of risk and reliability tools and methods. The book will be useful for researchers, academicians, and engineers, particularly the field engineers, designers and regulators working on complex engineering systems.