

1. Record Nr.	UNINA9910728947103321
Autore	Liu Yu
Titolo	Advances in Reliability and Maintainability Methods and Engineering Applications : Essays in Honor of Professor Hong-Zhong Huang on his 60th Birthday // edited by Yu Liu, Dong Wang, Jinhua Mi, He Li
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2023
ISBN	9783031288593 3031288599
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (642 pages)
Collana	Springer Series in Reliability Engineering, , 2196-999X
Altri autori (Persone)	WangDong MiJinhua LiHe
Disciplina	623.8
Soggetti	Marine engineering Engineering design Vehicles Industrial engineering Production engineering Computer science Mathematical optimization Marine Engineering Engineering Design Vehicle Engineering Industrial and Production Engineering Computer Science Optimization
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Multi-Criteria based Selection of Ship-Based Ballast Water Treatment Technologies -- A Two-Phase Sampling Approach for Reliability-based Optimization in Structural Engineering -- Moment Estimation-Based Method of Motion Accuracy Reliability Analysis for Industrial Robots -- Reliability of Wireless Body Area Networks -- Sensitivity Estimation of

Markov Reward Models and Its Applications to Component Importance Analysis -- Failure Rate Modeling of Mechanical Components and Systems -- Statistical Reliability Modeling and Analysis for Repairable Systems with Bathtub-Shaped Intensity Function -- Multi-state Signatures for Multi-State Systems with Binary/Multi-State Components -- Comprehensive Reliability of Aircraft Actuation System -- Integration of Reliability Design, Installed Base, and After-Sales Services for System Availability -- Use of Artificial Neural Networks to Enhance Container Port Safety Analysis under Uncertainty -- Usage of Failure Time and Repair Time for Optimization of Maintenance and Warranty Policy and Lemon Law Application -- Reliability and opportunistic maintenance of floating offshore wind turbines -- A Summary of Inspection Policies of One Shot Systems -- Analysis for influence of maintenance and manufacturing quality on reliability of repairable systems -- Quantification of Uncertainty of Warranty Claims -- Manufacturing paradigm-oriented PHM methodologies for cyber-physical systems -- Degradation modeling and residual life prediction based on nonlinear Wiener process -- System reliability models with dependent degradation processes -- A Study of Health State Transitions for Proactive Health Management -- Kalman filter-based systems approach for prognostics and health management of electric motors -- Exploratory Fault Detection with Multivariate Data: A case study on engine bearing -- Novel approach to Prognostics and Health Management to combinereliability and process optimisation.

Sommario/riassunto

This comprehensive book brings together the latest developments in reliability and maintainability methods from leading research groups globally. Covering a diverse range of subject areas, from mechanical systems to cyber-physical systems, the book offers both theoretical advancements and practical applications in various industries. With a focus on reliability modelling, reliability analysis, reliability design, maintenance optimization, warranty policy, prognostics and health management, this book appeals to academic and industrial professionals in the field of reliability engineering and beyond. It features real-world case studies from turbofan engines bearings, industrial robots, wireless networks, aircraft actuation systems, and more. This book is ideal for engineers, scientists, and graduate students in reliability, maintainability, design optimization, prognostics and health management, and applied probability and statistics.
