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Nota di contenuto	Introduction -- Fault-Tolerant Control -- Fault-Tolerant Design -- Methodical and Model-based Design of Automated Vehicles -- Design of Virtual Diagnostic Sensors for an Automated Guided Vehicles -- Predictive Fault-tolerant Control of Automated Processes -- Prediction of the Remaining Useful Life for Components of Automated Processes -- Extension to Automated Processes with Flexible Redundant and Shared Elements -- Conclusions and Future Research Directions.
Sommario/riassunto	This book summarizes strategies, methods, algorithms, frameworks and systems for the fault-tolerant design and control of automated vehicles and processes. Intelligent systems may be able to accommodate inevitable faults, but this ability requires targeted design processes and advanced control systems. This book explains the respective elements involved in automated vehicles and processes. It provides detailed descriptions of fault-tolerant design, not offered in the existent scientific literature. With regard to fault-tolerant control,

the focus is on innovative methods, which can accommodate not only uncertainties, but also shared and flexible redundant elements. The book is intended to present a concise guide for researchers in the field of fault-tolerant design and control, and to provide concrete insights for design and control engineers working in the field of automated vehicles and processes.