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Nota di contenuto	Overview of FD and FTC Technology -- Configuration of Nonlinear Observer-Based FD Systems -- Design of L2 nonlinear Observer-Based FD Systems -- Design of Weighted Fuzzy Observer-Based FD Systems -- FTC Configurations for Nonlinear Systems -- Application to Benchmark Processes.
Sommario/riassunto	Linlin Li addresses the analysis and design issues of observer-based FD and FTC for nonlinear systems. The author analyses the existence conditions for the nonlinear observer-based FD systems to gain a deeper insight into the construction of FD systems. Aided by the T-S fuzzy technique, she recommends different design schemes, among them the L_inf/L_2 type of FD systems. The derived FD and FTC approaches are verified by two benchmark processes. Contents Overview of FD and FTC Technology Configuration of Nonlinear Observer-Based FD Systems Design of L2 nonlinear Observer-Based FD Systems Design of Weighted Fuzzy Observer-Based FD Systems FTC

Configurations for Nonlinear Systems< Application to Benchmark Processes Target Groups Researchers and students in the field of engineering with a focus on fault diagnosis and fault-tolerant control fields The Author Dr. Linlin Li completed her dissertation under the supervision of Prof. Steven X. Ding at the Faculty of Engineering, University of Duisburg-Essen, Germany.