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Soggetti	Automatic control System theory Biomedical engineering Signal processing Image processing Speech processing systems Biomathematics Control and Systems Theory Systems Theory, Control Biomedical Engineering/Biotechnology Signal, Image and Speech Processing Mathematical and Computational Biology
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Robust Stability and Stabilization of Switched Systems with Dwell Time -- Robust State-Dependent Switching of Linear Systems with Dwell Time -- Robust Control of Linear Systems via Switching. Robust Estimation of Linear Switched Systems with Dwell Time -- Stability and Controller Synthesis of Discrete Linear Switched Systems -- Robust Output-Feedback Control of Linear Switched Systems with Dwell Time -- Robust Switching-Based Fault-Tolerant Control -- Robust H-infinity Control of Stochastic Linear Switched Systems with Dwell Time -- Robust Vertex-Dependent Control and Filtering -- Robust Output-Feedback Control of Stochastic Systems --

	Predictor-Based Control of Systems with State Multiplicative Noise -- Static Output-Feedback -- H-infinity Feedback-Control Theory in Biochemical Systems -- Feedback-Control Theory in Biochemical Systems: Various System Norms -- Applications.
Sommario/riassunto	Advances in H Control Theory is concerned with state-of-the-art developments in three areas: the extended treatment of mostly deterministic switched systems with dwell-time; the control of retarded stochastic state-multiplicative noisy systems; and a new approach to the control of biochemical systems, exemplified by the threonine synthesis and glycolytic pathways. Following an introduction and extensive literature survey, each of these major topics is the subject of an individual part of the book. The first two parts of the book contain several practical examples taken from various fields of control engineering including aircraft control, robot manipulation and process control. These examples are taken from the fields of deterministic switched systems and state-multiplicative noisy systems. The text is rounded out with short appendices covering mathematical fundamentals: -algebra and the input-output method for retarded systems. Advances in H Control Theory is written for engineers engaged in control systems research and development, for applied mathematicians interested in systems and control and for graduate students specializing in stochastic control.