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Descrizione fisica	1 online resource (227 pages)
Collana	Studies in Systems, Decision and Control, , 2198-4190 ; ; 465
Disciplina	519.233
Soggetti	Automatic control Robotics Automation System theory Control theory Dynamics Nonlinear theories Control, Robotics, Automation Systems Theory, Control Applied Dynamical Systems
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Quantized sliding mode control -- Sliding mode control under stochastic disturbance.-Sliding mode control under stochastic disturbance and singularity -- Finite-time sliding mode control under quantization -- Adaptive event-triggered sliding mode control -- Finite-time synchronization -- Fuzzy sliding mode control -- Fuzzy H sliding mode control under phase-type distribution -- Sliding mode control under denial-of-service attacks -- Sliding mode control under deception attacks -- Conclusion and future research direction.
Sommario/riassunto	The book focuses on control synthesis for semi-Markovian switching systems. By using multiple semi-Markovian Lyapunov function approaches, a basic theoretical framework is formed toward the issue of control synthesis for semi-Markovian switching systems. This is achieved by providing an in-depth study on several major topics such

as sliding mode control, finite-time control, quantized control, event-triggered control, synchronization, and fuzzy control for semi-Markovian switching systems. The comprehensive and systematic treatment of semi-Markovian switching systems is one of the major features of the book, which is particularly suitable for readers who are interested to learn control theory and engineering. By reading this book, the reader can obtain the most advanced analysis and design techniques for stochastic switching systems.