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Nota di contenuto	1. Preliminaries -- 2. Linear Differential Equations with Jumps Generating a Positive Evolution on an Ordered Banach Space -- 3. Stability of Systems of Stochastic Linear Differential Equations with Jumps -- 4. Structural Properties of Linear Stochastic Systems with Jumps -- 5. A Class of Generalized Matrix Riccati Differential Equations with Jumps -- 6. Linear Quadratic Optimal Control Problems for Linear Stochastic Systems with Jumps -- 7. H2 Optimal Control and H2 Optimal Filtering for Stochastic Linear Systems with Jumps -- 8. Robust Control with Respect to the Parametric Uncertainties of a Stochastic Linear System with Jumps.
Sommario/riassunto	This monograph concentrates on the theory of robust control of linear impulsive stochastic systems and stochastic systems with jumps. It discusses theoretical points concerned with impulsive stochastic systems including optimal control, robust stabilization, and H2- and H-infinity-type results. Considering the major role played by the

impulsive Lyapunov and impulsive Riccati equations in these problems, the book presents a thorough treatment of these equations in a general framework. It also presents various applications to sampled-data control. Robust Control of Jump Linear Stochastic Systems is a self-contained and clearly structured presentation of up-to-date research in this area, relevant to researchers in control theory and to non-specialists who are interested in the theory of robust control of linear impulsive stochastic systems. Theoretical and applied mathematicians, research engineers, and graduate students in the aforementioned fields will also find value in this book.
