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   Soggetti   Control engineering
                        System theory
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   Nota di bibliografia Includes bibliographical references at the end of each chapters and
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   Nota di contenuto   Introduction -- Switched Nonlinear Systems with Partial Unstable
                        Modes -- Switched Nonlinear Systems with All Unstable Modes --
                        Switched Nonlinear Systems with Varying Systems -- Switched
                        Nonlinear Systems with Time-Varying Parameters -- Switched
                        Nonlinear Systems with Distributed Parameters -- Conclusion and
                        Future Research Directions.

   Sommario/riassunto   This book provides its reader with a good understanding of the
                        stabilization of switched nonlinear systems (SNS), systems that are of
                        practical use in diverse situations: design of fault-tolerant systems in
                        space- and aircraft; traffic control; and heat propagation control of
                        semiconductor power chips. The practical background is emphasized
                        throughout the book; interesting practical examples frequently
                        illustrate the theoretical results with aircraft and spacecraft given
                        particular prominence. Stabilization of Switched Nonlinear Systems with
                        Unstable Modes treats several different subclasses of SNS according to

the characteristics of the individual system (time-varying and distributed parameters, for example), the state composition of individual modes and the degree and distribution of instability in its various modes. Achievement and maintenance of stability across the system as a whole is bolstered by trading off between individual modes which may be either stable or unstable, or by exploiting areas of partial stability within all the unstable modes. The book can be used as a reference for academic research on switched systems or used by graduate students of control theory and engineering. Readers should have studied linear and nonlinear system theory, and have some knowledge of switched and hybrid systems to get the most from this monograph.