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Nota di contenuto	Cover; Title Page; Copyright Page; Table of Contents; Preface; Chapter 1. Ellipsoidal Output-Feedback Sets for H Control of a Class of Stochastic Hybrid Systems with State-Dependent Noise; Chapter 2. A Contribution to the Study of Periodic Systems in the Behavioral Approach; Chapter 3. Iteratively Improving Moving Horizon Observers for Repetitive Processes; Chapter 4. Exponential Stability of Dynamic Equations on Time Scales; Chapter 5. Jurdjevic-Quinn Conditions and Discontinuous Bounded Damping Control Chapter 6. Smooth Approximations of Single-Input Optimal Orbital Transfer using Continuation and Averaging Techniques Chapter 7. Achieving Stability in Non-holonomic Systems by Means of Switched Control Laws; Chapter 8. Stability of Equilibria for Hybrid Models of Genetic Regulatory Networks; Chapter 9. Tools for Semiglobal Practical

Stability Analysis of Cascaded Systems and Applications; Chapter 10. A Rigorous Numerical Algorithm for Controllability; Chapter 11. Deadlocks and Break of Symmetry in Robot Coordination; Chapter 12. Iterative Nonlinear Model Predictive Control: A Review
Chapter 13. Transient Stabilization and Voltage Regulation of a Synchronous Generator
Chapter 14. A Current-based Approach to Wave Reflection Suppression in AC Drives Fed through Long Cables; Chapter 15. Stabilizability of Affine Switching Systems: A Kalman-like Approach; Chapter 16. Observability of Hybrid Automata by Abstraction; Chapter 17. New Convenient Formula for Impedance Change Calculation in Non-destructive Testing Problems by Control of Eddy Currents; Chapter 18. Dynamic Optimization of Nonlinear Bioreactors
Chapter 19. About Stability Analysis for Discrete Time Systems with Time Varying Delays
Chapter 20. Real-time Implementation of Rotor Flux and Speed Control of Induction Motors using Online Rotor Resistance and Load Torque Adaptation; Chapter 21. The On-line Diagnosis of Time Petri Nets Based on Partial Orders; Chapter 22. Optimization Methods for the Sphere Packing Problem on Grassmannians; Chapter 23. Analytical Solution of the Problem on a Magnetohydrodynamic Flow in the Initial Part of a Plane Channel in a Transverse Magnetic Field in Oseen Approximation
Chapter 24. A Formation Control Algorithm using Voronoi Regions
Chapter 25. Output Delay Systems Tracking Using System Centre Approach and Sliding Mode Control; Chapter 26. State-Linearization of Positive Nonlinear Systems: Applications to Lotka-Volterra Controlled Dynamics; Chapter 27. Energy Transfer via Point Interaction Controls; Chapter 28. Further Remarks on Stability Crossing Curves of Distributed Delay Systems; Chapter 29. A New Adaptive Controller for Systems with Multilinear Parameterization
Chapter 30. Hybrid Model Predictive Control Applied on Sewer Networks: The Barcelona Case Study

Sommario/riassunto

This book gathers together a selection of papers presented at the Joint CTS-HYCON Workshop on Nonlinear and Hybrid Control held at the Paris Sorbonne, France, 10-12 July 2006. The main objective of the Workshop was to promote the exchange of ideas and experiences and reinforce scientific contacts in the large multidisciplinary area of the control of nonlinear and hybrid systems.
