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Nota di contenuto	Linear output regulation -- Introduction to nonlinear systems -- Nonlinear output regulation -- Approximation method for the nonlinear output regulation -- Nonlinear robust output regulation -- From output regulation to stabilization -- Global robust output regulation -- Output regulation for singular nonlinear systems -- Output regulation for discrete-time nonlinear systems -- Notes and references -- Appendix A: Kronecker product and Sylvester equation -- Appendix B: ITAE prototype design.
Sommario/riassunto	Nonlinear Output Regulation: Theory and Applications provides a comprehensive and in-depth treatment of the nonlinear output regulation problem. It contains up-to-date research results and algorithms and tools for approaching and solving the output regulation problem and related problems, such as robust stabilization of nonlinear systems. Output regulation is a general mathematical formulation of many control problems encountered in daily life including cruise control of automobiles, landing and takeoff of aircraft, manipulation of robot arms, orbiting of satellites, and speed regulation of motors. The book provides a self-contained treatment starting with an introduction to the linear output regulation problem and a review of the fundamental nonlinear control theory. The author's presentation strikes a balance between the theoretical foundation of the problem and the

practical applications of the theory. The book is accompanied by many examples, including practical case studies with numerical simulations based on MATLAB/SIMULINK. Audience: graduate students, professors, and researchers in applied mathematics, electrical engineering, mechanical engineering, and aerospace engineering. The book can be used in a graduate-level control systems course as well as by control design engineers in industry.