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Sommario/riassunto	In mathematics and science, a nonlinear system is a system in which the change of the output is not proportional to the change of input. Nonlinear control systems, which are among the new technologies most widely used in many fields such as economic management, industrial production, technology research and development, ecological prevention and control, are at the core of worldwide automation control technology. In contrast to linear control systems, the nonlinear control system has the characteristics of a data model: stability, zero-input system response, self-excited oscillation or limit cycle, and a more complex structure, increasing the difficulty of its theoretical analysis and technical development. Nonlinear systems are common phenomena in real life and as such cannot be ignored. Analysis and research of nonlinear systems are therefore important, and researchers need to clarify their characteristics, explore scientific and effective application measures, and finally enhance their control quality. This book

comprehensively investigates the main principles, core mechanisms, typical problems, and relevant solutions involved in nonlinear systems. In general, this book aims to provide advanced research on nonlinear systems and control schemes for researchers and engineers working in related fields, and thus promote future study in this research area.