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Collana	Studies in Systems, Decision and Control, , 2198-4190 ; ; 296
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Soggetti	Control engineering Computational intelligence Control and Systems Theory Computational Intelligence
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di contenuto	Parametric identification for robust control -- Flow process models for pipeline diagnosis -- Output observers for linear infinite-dimensional control systems -- Non-Gaussian noise reduction in measurement signal processing -- Fractional order models of dynamic systems -- Switched models of non-integer order -- Nonlinear predictive control -- Positive linear control systems -- Controllability and stability of semilinear fractional order systems -- Computer simulation in analysis and design of control systems.
Sommario/riassunto	This book presents a wide and comprehensive range of issues and problems in various fields of science and engineering, from both theoretical and applied perspectives. The desire to develop more effective and efficient tools and techniques for dealing with complex processes and systems has been a natural inspiration for the emergence of numerous fields of science and technology, in particular control and automation and, more recently, robotics. The contributions gathered here concern the development of methods and algorithms to determine best practices regarding broadly perceived decisions or controls. From an engineering standpoint, many of them focus on how to automate a specific process or complex system. From a tools-based perspective, several contributions address the development of analytic

and algorithmic methods and techniques, devices and systems that make it possible to develop and subsequently implement the automation and robotization of crucial areas of human activity. All topics discussed are illustrated with sample applications.

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