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	Collana	Lecture Notes in Control and Information Sciences, , 1610-7411 ; ; 471
	Disciplina	003.85
	Soggetti	Control engineering
		Multibody systems
		Vibration
		Mechanics, Applied
		Dynamical systems
		System theory
		Control theory
		Game theory
		Control and Systems Theory
		Multibody Systems and Mechanical Vibrations
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		Systems Theory, Control
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	Livello bibliografico	Monografia
	Nota di contenuto	Persistence, periodicity and privacy for positive systems in epidemiology and elsewhere -- Control of anesthesia based on singularly perturbed model -- Interval observers for SIR epidemic models subject to uncertain seasonality -- Analysis of a reaction-diffusion epidemic model -- On Feedback Transformation and Integral Input-to-State Stability in Designing Robust Interval Observers for Control Systems -- Stability Analysis of Neutral Type Time-Delay Positive Systems -- Internally Positive Representations and Stability

Analysis of Linear Delay Systems with Multiple Time-Varying Delays --
On robust pseudo state estimation of fractional order systems --
Analysis of the positivity and stability of fractional discrete-time
nonlinear systems -- Continuous-time Compartmental Switched
Systems -- Improved controller design for positive systems and its
application to positive switched systems.

Sommario/riassunto	This book presents high-quality original contributions on positive systems, including topics such as: monotone dynamical systems in mathematical biology and game theory; mathematical developments for networked systems in biology, chemistry and the social sciences; linear and nonlinear positive operators; dynamical analysis, observation and control of positive distributed parameter systems; stochastic realization theory; biological systems with positive variables and positive controls; iterated function systems; nonnegative dynamic processes; and dimensioning problems for collaborative systems. The book comprises a selection of the best papers presented at the POSTA 2016, the 5th International Symposium on Positive Systems, which was held in Rome, Italy, in September 2016. This conference series represents a targeted response to the growing need for research that reports on and critically discusses a wide range of topics concerning the theory and applications of positive systems.