

1. Record Nr.	UNINA9910821271103321
Titolo	From physics to control through an emergent view // edited by Luigi Fortuna, Alexander Fradkov, Mattia Frasca
Pubbl/distr/stampa	Hackensack, N.J., : World Scientific, c2010
ISBN	1-283-14465-4 9786613144652 981-4313-15-7
Edizione	[1st ed.]
Descrizione fisica	1 online resource (396 p.)
Collana	World Scientific series on nonlinear science. Series B ; ; v. 15
Altri autori (Persone)	FortunaL <1953-> (Luigi) FradkovA. L (Aleksandr Lvovich) FrascaMattia
Disciplina	003.5
Soggetti	Control theory Physics - Data processing Mathematical physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Selected papers from the 4th International Conference Physics and Control (PhysCon2009), held at the University of Catania, Engineering Faculty, Sept. 1-4, 2009.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	pt. A. Distinguished talks (plenary talks and EPS talks) -- pt. B. Modelling and control of coupled stochastic oscillators -- pt. C. Multistability in natural and laboratory-scale nonlinear systems -- pt. D. Linear and matritial algebra, open problems related to control theory -- pt. E. Localization of oscillations in dynamical systems and control of oscillatory delayed-coupled networks -- pt. F. Microfluidics : theory, methods and applications -- pt. G. Mathematical modelling of dynamic systems for volcano physics -- pt. H. Geometric control for quantum and classical models -- pt. I. Control problems for dynamical systems under uncertainty and conflict -- pt. J. Physics and control in fusion plasma devices -- pt. K. Modeling and optimization of beam and plasma dynamics.
Sommario/riassunto	The book is a compilation of selected papers from the conference on Physics and Control 2009, presenting a unified perspective underlying the thematics and strategies related to the control of physical systems

with emerging applications in physics, engineering, chemistry, biology and other natural sciences. The selected papers reflect the state-of-the-art of the more advanced theoretical and practical studies in the field of control of complex systems. The contributions provide a comprehensive view on some selected topics of particular importance at the disciplinary borderline between Physics

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