1. Record Nr. UNINA9910299934603321

Autore	Zhu Jing
Titolo	Limits of Stability and Stabilization of Time-Delay Systems : A Small-Gain Approach / / by Jing Zhu, Tian Qi, Dan Ma, Jie Chen
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-73651-5
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (228 pages) : illustrations (some color)
Collana	Advances in Delays and Dynamics, , 2197-117X ; ; 8
Disciplina	629.8
Soggetti	Automatic control System theory Vibration Dynamics Calculus of variations Control and Systems Theory Systems Theory, Control Vibration, Dynamical Systems, Control Calculus of Variations and Optimal Control; Optimization
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Sommario/riassunto	This authored monograph presents a study on fundamental limits and robustness of stability and stabilization of time-delay systems, with an emphasis on time-varying delay, robust stabilization, and newly emerged areas such as networked control and multi-agent systems. The authors systematically develop an operator-theoretic approach that departs from both the traditional algebraic approach and the currently pervasive LMI solution methods. This approach is built on the classical small-gain theorem, which enables the author to draw upon powerful tools and techniques from robust control theory. The book contains motivating examples and presents mathematical key facts that are required in the subsequent sections. The target audience primarily comprises researchers and professionals in the field of control theory,

but the book may also be beneficial for graduate students alike. .