

1. Record Nr.	UNINA9910760278803321
Autore	Shen Qikun
Titolo	Distributed Fault-Tolerant Consensus Control of Leader-Following Systems : Based on Adaptive Control Approach // by Qikun Shen
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2023
ISBN	981-9974-26-7
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (197 pages)
Collana	Intelligent Control and Learning Systems, , 2662-5466 ; ; 11
Disciplina	629.836
Soggetti	Automatic control Computational intelligence Signal processing Cooperating objects (Computer systems) Control and Systems Theory Computational Intelligence Digital and Analog Signal Processing Cyber-Physical Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Chapter 1 Introduction -- Chapter 2 Distributed Cooperative Neural Fault-Tolerant Sliding Mode Control against Actuator Faults -- Chapter 3 Distributed Cooperative Fuzzy Fault-Tolerant Backstepping Control Against Dead-Zone and Saturation -- Chapter 4 Distributed Neural Fault-Tolerant Supervisory Control Against Backlash-Like Hysteresis -- Chapter 5 Distributed Fuzzy Fault-Tolerant Output Consensus Control Against Unknown Nonlinear Dead-Zone -- Chapter 6 Adaptive Fault-Tolerant Consensus Control Against Transmission Faults -- Chapter 7 Cooperative Fault-tolerant Neural Control Against Signal Transmission Faults -- Chapter 8 Distributed Fault-tolerant Output-Feedback Control Against Sensor Faults -- Chapter 9 Conclusion and Future Research Directions.
Sommario/riassunto	This book provides recent theoretical results and applications of the consensus control for nonlinear leader-following systems. Combining adaptive control technique, fuzzy logic systems, neural networks with the other control techniques or approaches, this book investigates the

consensus control problem of leader-following systems and proposes the corresponding control scheme. This book intends to provide the readers a good understanding on consensus control based on adaptive control technology. This book can serve as a reference for the main research issues and results on nonlinear multi-agent systems including leader-following systems for researchers devoting to various areas of control theory, as well as a material for graduate and undergraduate students interested in nonlinear multi-agent systems including leader-following systems and their applications. Some prerequisites for reading this book include nonlinear system theory, matrix theory, mathematics, basic graph theory, and soon.
