

1. Record Nr.	UNINA9910743372403321
Autore	Zhao Wanzhong
Titolo	Nonlinear control technology of vehicle chassis-by-wire system // Wanzhong Zhao, Chunyan Wang
Pubbl/distr/stampa	Singapore : , : Springer, , [2022] ©2022
ISBN	981-16-7321-7 981-16-7322-5
Descrizione fisica	1 online resource (248 pages) : illustrations (chiefly color)
Collana	Recent Advancements in Connected Autonomous Vehicle Technologies
Disciplina	629.26
Soggetti	Automobiles - Chassis Automobiles - Design and construction Automobiles - Lateral stability Nonlinear control theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction Nonlinear stability control of steer-by-wire system Consistency optimization control of electro-hydraulic composite brake-by-wire system Decoupling control of nonlinear inverse system for chassis-by-wire system Nonlinear rollover prevention integrated control of chassis-by-wire system
Sommario/riassunto	This book belongs to the field of intelligent vehicle control, which is dedicated to the research of nonlinear control problems of intelligent vehicle chassis-by-wire systems. Through the nonlinear stability control of the steer-by-wire system and the consistency optimization control of the brake-by-wire system, the performance of the vehicle subsystem is improved. Then, the decoupling control of the nonlinear inverse system is used to realize the decoupling of the chassis-by-wire system. Finally, this book further adopts nonlinear rollover prevention integrated control to improve the rollover prevention performance of the vehicle.