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Autore	Chen Yong
Titolo	Automotive Transmissions [[electronic resource]] : Design, Theory and Applications // by Yong Chen
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Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (XII, 570 p. 567 illus., 16 illus. in color.)
Collana	Springer Tracts in Mechanical Engineering, , 2195-9862
Disciplina	629.244
Soggetti	Engines Machinery Automotive engineering Vibration Dynamical systems Dynamics Engine Technology Automotive Engineering Vibration, Dynamical Systems, Control
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Manual Transmission -- Automatic Transmission -- Continuous Variable Transmission -- Dual Clutch Transmission -- Automated Manual Transmission -- New Energy Vehicle Transmission -- Transmission Design -- Transmission Oil -- Hydraulic Torque Converter Design -- Planetary gear mechanism -- Automatic Transmission Electric Control System -- Vehicle and Transmission Vibration and Noise.
Sommario/riassunto	This book introduces readers to the theory, design and applications of automotive transmissions. It covers multiple categories, e.g. AT, AMT, CVT, DCT and transmissions for electric vehicles, each of which has its own configuration and characteristics. In turn, the book addresses the effective design of transmission gear ratios, structures and control strategies, and other topics that will be of particular interest to graduate students, researchers and engineers. Moreover, it includes

real-world solutions, simulation methods and testing procedures. Based on the author's extensive first-hand experience in the field, the book allows readers to gain a deeper understanding of vehicle transmissions. .
