1. Record Nr. UNINA9910483296303321

Autore	Adamski Dirk
Titolo	Simulation in chassis technology : a practice-oriented introduction to the creation of component and full vehicle models using the method of multi-body systems / / Dirk Adamski
Pubbl/distr/stampa	Wiesbaden, Germany : , : Springer, , [2021] Â©2021
ISBN	3-658-30678-5
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (XX, 287 p. 188 illus., 69 illus. in color.)
Disciplina	629.24
Soggetti	Automobiles - Chassis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Part I: Introduction to Simulation -- 1. Simulation Methods -- 2. Systems Engineering -- 3. Modeling -- 4. Numerical Analysis: The Problem with the Beginning -- 5. Simulation Tools -- 6. Simulation Process -- Part II: Simulation in Chassis Technology -- 7. Modeling of Chassis Components -- 8. Kinematics and Compliance -- 9. Springs -- 10. Damping and Friction -- 11. Steering -- 12. Tires and Roads -- 13. Drive Train -- 14. Brake System -- 15. Vehicle Body -- 16. The Simulated Driver -- 17. The Vehicle Model as a Controlled System.
Sommario/riassunto	Anyone who wants to simulate the behavior of vehicles must think about how they want to model the vehicle's chassis. Depending on the question (vehicle dynamics, ride comfort, load data prediction ...) there are a variety of possibilities. This book should help to find and implement the right models and processes. In addition to a short introduction to simulation technology, the most important types of modelling for the assemblies of the chassis using the method of multi-body systems are presented. However, successful simulation does not only mean the assembly of suitable models, but always represents a well thought-out process that goes from data acquisition to the validation of the models. This will be discussed using suitable examples for concrete questions. This book is a translation of the original German edition “Simulation in der Fahrwerktechnik” by “Dirk Adamski”, published by Springer Fachmedien Wiesbaden in 2014. The

translation was done with the help of artificial intelligence (machine translation by the service DeepL.com). A subsequent human revision was done primarily in terms of content, so that the book will read stylistically different from a conventional translation. Springer Nature works continuously to further the development of tools for the production of books and on the related technologies to support the authors. The Content Introduction to Simulation: Simulation Methods - Systems Engineering - Modeling - Numerical Analysis - Simulation Process. - Simulation in Chassis Technology: Modeling of Chassis Components - Kinematics and Compliance - Springs - Damping and Friction - Steering - Tires and Roads - Drive Train - Brake System - Vehicle Body - The Simulated Driver - The Vehicle Model as a Controlled System The Target Groups Beginners, but also experienced vehicle simulation engineers who need to use or extend an existing or newly acquired simulation environment Decision makers who need to set up a simulation process or purchase a simulation environment or want to understand what their calculators are doing About the Author Prof. Dr.-Ing. Dirk Adamski worked in the passenger car development department of Daimler AG as a test and computational engineer. Since 2009, he has been Professor for Testing and Simulation in Chassis at the University of Applied Sciences in Hamburg.

2. Record Nr. UNINA9910143138503321

Autore	Menger Karl <1902-1985.>
Titolo	Algebra of Analysis
Pubbl/distr/stampa	University of Notre Dame Notre Dame, Ind
Collana	Notre Dame mathematical lectures ; ; no. 3
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia