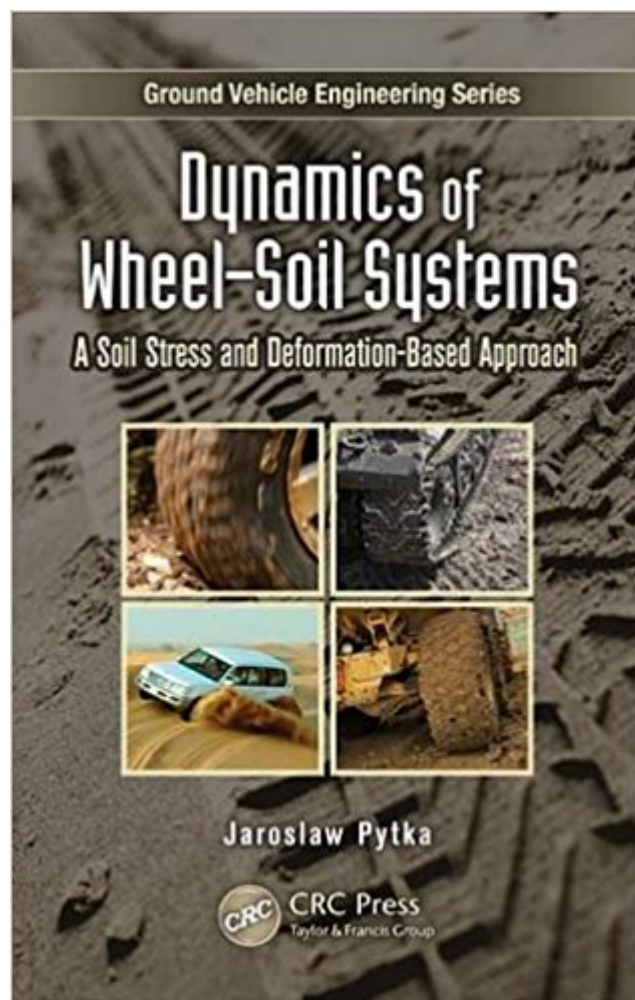




The book was found

Dynamics Of Wheel-Soil Systems: A Soil Stress And Deformation-Based Approach (Ground Vehicle Engineering)



Synopsis

Why is knowledge of soil stress and deformation state important for off-road locomotion? How do you measure soil stress and deformation under wheel loads? What are the actual values of stresses and deformation in soil or snow under a passing wheel? Providing answers to these questions and more, *Dynamics of Wheel-Soil Systems: A Soil Stress and Deformation-Based Approach* is a practical reference for anyone who works with experiment design and data analysis of soil stress and deformation measurements under vehicle load. Based on the author's 15 years of experience in field experimentation on wheel-soil dynamics, the book describes methods and devices for soil stress and deformation measurements and presents numerical data from full-scale field experiments. These methods offer practical solutions to methodological problems that may arise during the design and preparation of field experiments. Provides technical information on measuring, modeling, and optimizing off-road vehicle traction including a novel method for describing off-road traction. Provides rare experimental data on soil stress and deformation under a variety of wheeled and tracked vehicles. Supplies solutions for designing, building, and using soil or snow pressure transducers and sensors. Compiles original experimental data on soil degradation due to agricultural machinery traffic and soil compaction. Explains how to create dynamic models of wheel-soil systems based on experimental data. A valuable reference on an important area of terramechanics, this book shows how to analyze and model wheel-soil interactions to create more effective designs for a range of vehicle types.

Book Information

Series: Ground Vehicle Engineering

Hardcover: 331 pages

Publisher: CRC Press; 1 edition (August 28, 2012)

Language: English

ISBN-10: 1466515279

ISBN-13: 978-1466515277

Product Dimensions: 6 x 0.8 x 9 inches

Shipping Weight: 1.3 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #1,164,083 in Books (See Top 100 in Books) #110 in Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Sensors #1892

Customer Reviews

Jaroslav Alexander Pytko is a research engineer and instructor of undergraduate and graduate students of automotive technology at the Lublin University of Technology, Poland. Dr. Pytko earned an MS in automotive technology from the Lublin University of Technology in 1992, and a Ph.D. in soil physics from the Institute of Agrophysics in Lublin. His major research interest is wheel-
soil interaction analysis with a focus on experimental studies. Dr. Pytko has authored or coauthored more than 50 papers and is a reviewer for the Journal of Terramechanics.

[Download to continue reading...](#)

Dynamics of Wheel-
Soil Systems: A Soil Stress and Deformation-Based Approach
(Ground Vehicle Engineering) Vehicle and Traffic Law of the State of New York (Softcover) (Vehicle and Traffic Law of New York) Vehicle Maintenance Log: Vehicle Maintenance Log Template: Car Maintenance
-
Reminder | Log Book | Mileage Log | Repairs And Maintenance | Everything ... | 5.5 x 8.5
-
small & compact (Volume 1) Bug Out Vehicle: A Step-By-Step Guide On How To Build An Affordable and Quality Survival Vehicle To Evacuate Your Home In An Emergency Disaster Scenario Build the Perfect Bug Out Vehicle: The Disaster Survival Vehicle Guide Dislocation Dynamics During Plastic Deformation (Springer Series in Materials Science) Methods of Soil Analysis. Part 2. Microbiological and Biochemical Properties (Soil Science Society of America Book, No 5) (Soil Science Society of America Book Series) Deformation and Fracture Mechanics of Engineering Materials Mechanical Behavior of Materials: Engineering Methods for Deformation, Fracture, and Fatigue (2nd Edition) Mechanical Behavior of Materials: Engineering Methods for Deformation, Fracture, and Fatigue Deformation and Fracture Mechanics of Engineering Materials, 5th Edition Tunneling Dynamics in Open Ultracold Bosonic Systems: Numerically Exact Dynamics
-
Analytical Models
-
Control Schemes (Springer Theses) Fundamentals of Vehicle Dynamics (R114) (Premiere Series Books) Race Car Vehicle Dynamics (Premiere Series) The Engineering Design of Systems: Models and Methods (Wiley Series in Systems Engineering and Management) Medical Device Technologies: A Systems Based Overview Using Engineering Standards (Academic Press Series in Biomedical Engineering) Systems Engineering and Analysis (5th Edition) (Prentice Hall International Series in Industrial & Systems Engineering) Earthquake Engineering: From Engineering Seismology to Performance-Based Engineering MIMO Radar Waveform Design for Spectrum Sharing with Cellular

Systems: A MATLAB Based Approach (SpringerBriefs in Electrical and Computer Engineering)

Tissue Engineering I: Scaffold Systems for Tissue Engineering (Advances in Biochemical Engineering/Biotechnology) (v. 1)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)