1. Record Nr. UNINA9910299917003321

Titolo	Computational Methods and Models for Transport [[electronic resource]] : New Challenges for the Greening of Transport Systems / / edited by Pedro Diez, Pekka Neittaanmäki, Jacques Periaux, Tero Tuovinen, Olli Bräysy
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-54490-X
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (257 pages) : illustrations
Collana	Computational Methods in Applied Sciences, , 1871-3033 ; ; 45
Disciplina	380.50184
Soggetti	Transportation Transportation engineering Traffic engineering Computer mathematics Computer simulation Aerospace engineering Astronautics Transportation Technology and Traffic Engineering Computational Science and Engineering Simulation and Modeling Aerospace Technology and Astronautics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
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to Climb if One Can Jump: A Hill Jumping Algorithm for the Vehicle Routing Problem with Time Windows, by David Mester, Olli Bräysy, Wout Dullaert -- 7 Clustering Driving Destinations Using a Modified DBSCAN Algorithm with Locally-defined Map-Based Thresholds, by Ghazaleh Panahandeh, Niklas Åkerblom -- 8 Automatic Customization Framework for Efficient Vehicle Routing System Deployment, by Jussi Rasku, Tuukka Puranen, Antoine Kalmbach, Tommi Kärkkäinen4 -- 9 The Multi-period Fleet Size and Mix Vehicle Routing Problem with Stochastic Demands, by Urooj Pasha, Arild Hoff, Lars Magnus Hvattum -- 10 Applying multi-objective robust design optimization procedure to the route planning of a commercial aircraft, by Jordi Pons-Prats, Gabriel Bugeda, Francisco Zarate, Eugenio Oñate, Jacques Periaux -- Part III Translational research -- 11 Reallocation of Logistics Costs in a Cooperative Network of Sawmills, by Patrik Flisberg, Mikael Frisk, Mario Guajardo, Mikael Rönnqvist -- 12 Impact of the Heterogeneity of the Ballast on the Dynamical Behavior of the Ballast-soil, by Lucio De Abreu Correa, Regis Cottereau, Estelle Bongini, Sofia Costa d'Aguiar, Baldrik Faure and Charles Voivret -- 13 Numerical and Parametric Study of MVGs on a UAV Geometry in Subsonic Flow, by Miguel Chavez, Oliver. M. F. Browne, Eusebio Valero -- 14 Investigating Side-wind Stability of High Speed Trains using High Resolution Large Eddy Simulations and Hybrid Models, by Moritz M. Fragner, Ralf Deiterding -- 15 Russian Mechanism to Support Renewable Energy Investments: Before and After Analysis, by Mariia Kozlova, Mikael Collan, Pasi Luukka.

Sommario/riassunto

This volume addresses challenges and solutions in transport and mobility of people and goods with respect to environment, safety, security and socio–economics issues, exploring advanced computational research work and the latest innovations in transport. This book brings together lectures presented at the ECCOMAS Thematic CM3 Conference on Transport held in Jyväskylä, Finland, 25-27 May 2015. It is divided into three parts, I: Reviews and Perspective, II: Computational Methods and Models and III: Translational Research. Each of these parts consists of contributions that present solutions to many transport challenges in this complex, rapidly changing subject. The work contains the latest achievements of European research and technological developments needed for the next decade through computational results of scientific and technical experts who have made essential contributions in transport efficiency in Europe. The material presented here is the state of the art in Transport Modeling, Simulation and Optimization in the fields of Aeronautics, Automotive, Logistics, Maritime and Rails. Furthermore, this volume also answers the question how to apply Computational Research in Transport in order to provide innovative solutions to Green Transportation challenges of identified in the ambitious Horizon 2020 program. This book is intended for students, researchers, engineers and practitioners that are computationally involved in the deployment of Intelligent Transport Systems (ITS) in the areas of optimal use of road, traffic and travel data, traffic and freight management ITS services, road safety and security, sea traffic management, etc.