

1. Record Nr.	UNINA9910463359403321
Titolo	New trends in mechanics and transport // edited by Tadeusz Uhl and Andrzej Chudzikiewicz
Pubbl/distr/stampa	Stafa-Zurich, Switzerland : , : Trans Tech Publications Ltd., , [2008] ©2008
ISBN	3-03813-210-1
Descrizione fisica	1 online resource (176 p.)
Collana	Applied mechanics and materials, , 1660-9336 ; ; volume 9
Altri autori (Persone)	UhlTadeusz ChudzikiewiczAndrzej
Disciplina	621.8 623/.045
Soggetti	Mechanics Transport theory Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	New Trends in Mechanics and Transport; Preface; Table of Contents; Chaotic Zones in Triple Pendulum Dynamics Observed Experimentally and Numerically; Geometric Instability vs. Lyapunov's Exponents of a Double Physical Pendulum; Dynamics of Continuous Systems Subjected to Traveling Loads; Interface Conditions and Loss of Stability for Stepped Columns; Decomposition of Symptom Observation Matrix and its Optimization in Vibration Condition Monitoring of Machines; Application of Computer Simulation Methods for Running Safety Assessment of Railway Vehicles in Example of Freight Cars Mechanics of Track Structure with Y-Shaped Steel Sleepers in Sharp CurvesWave Propagation Modelling in Composite Plates ; A Dynamic Friction Law Describing Heat and Wear in Contact Zones; On Pain Detection in Multibody Systems; Simulation of Guided Waves Propagation in Axial Transmission Measurements in Human Radius; Modal Analysis of Bridges for the SHM Purposes; An Internal Variable Update Procedure for the Treatment of Inelastic Material Behavior within an ALE-Description of Rolling Contact; Keywords Index; Authors Index

## Sommario/riassunto

Nowadays, one of the most rapidly growing sectors of industry is that of the infrastructure and vehicles of transportation systems. This discipline needs new, innovative and economically proven initiatives. The domain of transport is an interdisciplinary one which brings together many different scientific and engineering strands. The synergy between mechanics and transportation science offers the possibility of finding new and effective solutions to design, manufacturing and servicing problems. Due to globalization of the market-place, international cooperation in applied research is very fruit

---