

| | |
|-------------------------|---|
| 1. Record Nr. | UNINA9910787102903321 |
| Titolo | Dynamics and control of technical systems // edited by Jose M. Balthazar |
| Pubbl/distr/stampa | Switzerland : , : Trans Tech Publications Ltd, , 2015 Enfield, New Hampshire : , : Trans Tech Publications Inc., , [date of distribution not identified] ©2015 |
| ISBN | 3-03826-738-4 |
| Descrizione fisica | 1 online resource (241 p.) |
| Collana | Applied Mechanics and Materials, , 1662-7482 ; ; Volume 706 |
| Disciplina | 003.74 |
| Soggetti | Control theory - Data processing Control theory - Mathematical models |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | "Special topic volume with invited peer reviewed papers only"--Cover. Includes indexes. |
| Nota di contenuto | Dynamics and Control of Technical Systems; Table of Contents; Editorial Dynamics and Control of Aerospace and Vertical Transportation Systems; Chaotic Vibrations in Multi-Mass Discrete-Continuous Systems Torsionally Deformed with Local Nonlinearities; Design of Satellite Attitude Control System Considering the Interaction between Fuel Slosh and Flexible Dynamics during the System Parameters Estimation; Suppressing Chaos in a Nonideal Double-Well Oscillator Using an Based Electromechanical Damped Device; Nonlinear Analysis of Unbalanced Mass of Vertical Conveyerwith Non-Ideal Exciters The Nonlinear Analysis of Vibrational Conveyers with Non-Ideal Crank-and-Rod ExcitersThe Effect of Internal Flowing Fluid on the Non-Linear Behavior of Orthotropic Circular Cylindrical Shells; Nonlinear Ball and Beam Control System Identification; Nonlinear Dynamics of Shrouded Turbine Blade System with Impact and Friction; Mathematical Modelling of a Rotating Nonlinear Flexible Beam-Like Wing; Investigation and Assessment of the Electromechanical Fatigue of Electronic Components of Forklift Trucks; Design of Semi-Active Roller Guides for High Speed Elevators |

Modelling, Simulation and Experimental Validation of Nonlinear Dynamic Interactions in an Aramid Rope System; Influence of the Load Occupancy Ratio on the Dynamic Response of an Elevator Car System; Phase Characterization in Experimental Chaotic Systems; On the Delayed van der Pol Oscillator with Time-Varying Feedback Gain; Influence of Nonlinear Stiffness on the Dynamics of a Slender Elastic Beam under Torsional Oscillations; Current and Speed Control Operating Modes of a Reaction Wheel; Least Squares Method for Attitude Determination Using the Real Data of CBERS-2 Satellite High Order and Degree Geopotential and Derivatives Computation Based on the Clenshaw Summation; Satellite Orbit Determination Using Short Arcs of GPS Data; The Rigid-Flexible Two Link Manipulator with Joint Friction and Different Number of Modes for the Flexible Link Discretization; Keywords Index; Authors Index

Sommario/riassunto

The main topics of this Special Issue are linear and, mainly, nonlinear dynamics, chaos and control of systems and structures and their applications in different field of science and engineering. According to the goal of the Special Issue, the selected contributions are divided into three major parts: "Vibration Problems in Vertical Transportation Systems", "Nonlinear Dynamics, Chaos and Control of Elastic Structures" and "New Strategies and Challenges for Aerospace and Ocean Structures Dynamics and Control". The discussion of real problems in aerospace and how these problems can be unde
