Record Nr. UNINA9910791910703321 Advances in intelligent structure and vibration control: selected, peer **Titolo** reviewed papers from the International Conference on Intelligent Structure and Vibration Control (ISVC 2012), March 16-18, 2012, Chongqing, China / / edited by Aimin Yang and Wenjiang Du Pubbl/distr/stampa Durnten-Zurich:,: Trans Tech,, [2012] ©2012 **ISBN** 3-03813-735-9 Descrizione fisica 1 online resource (425 p.) Collana Applied mechanics and materials, , 1662-7490; ; volume 160 Altri autori (Persone) YangAimin **DuWenjiang** Disciplina 620.1 Soggetti Smart structures Smart materials Structural control (Engineering) 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. Advances in Intelligent Structure and Vibration Control; Preface, Nota di contenuto Committees and Reviewers; Table of Contents; Chapter 1: Advanced Intelligent Structure; Thermal Analysis and Cooling Optimization of the Built-In Micro Projector; The Oxygen-Ion Diffusion and Phase Transition in the La2Mo2-xWxO9 Samples Measured by Internal Friction Method; Research and Analysis on Electrolytic Preparation of High Purity Potassium High-Speed Rail Technology; A Simplified Method for Calculating Ultimate Strength of Pressure Hull in Deep-Sea Manned Submersible A Novel Approach of Multiscale Feature Extraction for Gearbox Condition Monitoring Vibration Suppression of Flexible Parallel Manipulator Based on Sliding Mode Control with Reaching Law; Dynamic Characteristics Analysis for Fluid-Solid Coupling of Vertical Lifting Pipe in Transporting Coarse Particles; Analysis of Loads at Crankshaft Bearing for Scroll Compressor; A Way to Improve Eddy Current Sensor Measurement Accuracy; An Obstacle Recognition

Method Based on Improved PSO-WNN for Deicing Robot on Voltage

Transmission Line; An Approximate Algorithm for Shakedown on Gear Contact

Self-Vibration Characteristics of Plane Gate in Inverted Siphon ProjectThe Stress Analysis of Pressurized Cylindrical Shell with a Surface Crack under Laser Irradiation; Chapter 2: Bio-Inspired Smart Materials and Applications; Experimental Study of Kick up Phenomenon in Thermosonic Wire-Bonding; Research Development and Application of Green Cutting Technology: Nonlinear Seismic Response Analysis of Concrete Perforated Brick Masonry Building: Transportation of Droplets within Two Substrates by Help of Surface Acoustic Wave Influences of Heat Treatment on Spinning Process with Large Thinning Rate and Performance of 30CrMnSiAThe DNA Genetic Algorithm Applied for Solving Optimal Placement of Sensors; Research on an Improved Cellular Automata Model; Control Algorithm Research of Electric Actuator Based on Switched Reluctance Motor; Study on Structure Including Interface Based on Interface Stress Element Method: A Probability Assessment Method for Degradation of Bridge Power MOSFET Circuit Based on Common Turn-On State Determining the Soil Water Characteristic Curve in Term of Van Genuchten Parameters by the Particle Swarm Optimization A Novel Peak-Seek Algorithm Used in FBG Sensor Demodulation System for Vibration Monitoring; Nonlinear Vibration Analysis of Viscoelastic Isolator; Automatic Recognition of Aircraft Noise with PLP Method; Test Analysis on the Model of Expression Based on the Thematical Statistic Method: Research on Suppression Technology of OFDM Peak-to-Average Power Ratio; Reduction Algorithms for Multi-Covering Information System Development and Application of Four Typical Rapid Prototyping Technologies

## Sommario/riassunto

The aim of this special volume is to facilitate the exchange of information on the best practices to be adopted in Advanced Intelligent Structure, Bio-inspired Smart Materials and Structures, Active Materials, Mechanics and Behavior, Vibration and Control, Modeling, Simulation, Control and Applications, etc. It provides the opportunity for engineers and scientists in academia, industry and government to address the most innovative research and development, including technical challenges, social and economic issues, and to discuss their ideas, results, work-in-progress and experience in all asp