Record Nr. UNINA9910808200803321 Advanced engineering solutions: selected, peer reviewed papers from **Titolo** the 4th international conference on intelligent structure and vibration control (ISVC 2014), July 25-28, 2014, Chongqing, China / / edited by Yuhang Yang and Maode Ma Pubbl/distr/stampa Switzerland:,: Trans Tech Publications,, 2014 Switzerland: .: Trans Tech Publications Ltd. . [date of distribution not identified] ©2014 **ISBN** 3-03826-431-8 Descrizione fisica 1 online resource (983 p.) Applied Mechanics and Materials, , 1660-9336; ; Volume 539 Collana Disciplina 624.1 Soggetti Smart structures Smart materials Structural control (Engineering) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes indexes. Note generali Advanced Engineering Solutions; Preface, Committees and Reviewers; Nota di contenuto Table of Contents; Chapter 1: Dynamics of Mechanisms and Machines; Research on Dynamic Model of Rotors with Bearing Misalignment; Research on the Structure Design of Double Eccentric Coaxial Spherical Robot: Research on Vibration Reduction Mechanism for Robot Joints by Imitating the Owl Surface Characteristics; Vibration Control on Shells through Theoretical and Numerical Analysis; Chapter 2: Application of CAD in Mechanical Engineering; Mathematical Model Design on Online Virtual Processing Platform of Machinery Manufacturing Study on the Length Changes of Bearings in Continuous Motion of Complex Mechanical System Based on ADMAS Simulation Study on the NC Machining Theory and Simulation of Hypoid Gear; Three-Dimensional Modeling and Simulation Analysis of the Outer Planets

Cycloid; Design of Gear Parameters Visual System Based on LISP; Study of Rhino and Fast ship in Calculation of Ship Hydrostatic; Part Design

and Analysis of Cycloid Installation Systems; Design of Natural

Ventilation and Analysis of Ventilation Safety in Commercial Building;

Drawing Threaded Programs with AutoCAD Secondary Development Chapter 3: Measure and Diagnosis, Algorithms and Methods for Processing Data and Signals Design and Implementation of DDFS Based on CORDIC in FPGA; Design and Implementation of Detection System Based on IC; Design and Implementation of Portable Intelligent LCF Measuring Instrument; Design of Digital Filter Based on Numerical Simulation; Multi-Channel SSVEP Pattern Recognition Based on MUSIC; Diagnostic Analysis of Ignition System Fault of Polaris Engine; Design of Reliable Serial Port Transmission Mechanism Based on Zigbee; Improved Statistical Algorithm in Digital Terrain Electromagnetic Spider Web Application in Earthquake Prediction Tracking Target Identification Model Based on Multiple Algorithms; Comparison of Gas Chromatography and Liquid Chromatogram Detecting Pesticide Residue: Fingerprint Identification Scheme Based on Distribution Density; GPU Parallel Computing Algorithm in Target Tracking of Space: Image Processing Algorithm Based on Solitary Wave: Image Restoration of Depth of Field Extension Imaging System Based on Genetic Algorithm; Research of Speech Recognition Based on Neural Network; Research on Improvement Algorithm of Image Edge Detection Research on Recognition Technology of 2-Dimensional Barcode Study on the Iris Recognition Technology Based on 2D-Gabor Filter; Design and Implementation of Diamond Press'S Pressure Hammer Protection Based on Voiceprint Recognition; Study on 3D Seismic Data Field Hybrid Rendering Technique of Natural Gas Hydrate; Precise Measurement of Temperature Based on Self-Correcting Technique; Design of Quantum Communication Broadband Amplifier Based on Photoelectric Diode: Application and Research of Land Changes Based on GIS and RS Design of High Precision Temperature Sensor Based on Platinum Resistance

## Sommario/riassunto

Collection of selected, peer reviewed papers from the 4th International Conference on Intelligent Structure and Vibration Control (ISVC) 2014, July 25-28, 2014, Chongqing, China. The 199 papers are grouped as follows: Chapter 1: Dynamics of Mechanisms and Machines, Chapter 2: Application of CAD in Mechanical Engineering, Chapter 3: Measure and Diagnosis, Algorithms and Methods for Processing Data and Signals, Chapter 4: Communication and Networks, Chapter 5: Network Security and Digital Surveillance, Chapter 6: Applied Information Technologies, Chapter 7: Multimedia Technologies, Chapter 8: