1. Record Nr. UNINA9910465605503321 **Titolo** Advances in mechatronics, robotics and automation II: selected, peer reviewed papers from the 2014 2nd International Conference on Mechatronics, Robotics and Automation (ICMRA 2014), March 8-9, 2014, Zhuhai, China / / edited by Prasad Yarlagadda Pubbl/distr/stampa Durnten-Zurich, Switzerland:,: Trans Tech Publications,, 2014 Durnten-Zurich, Switzerland; Enfield, New Hampshire; distributed worldwide by Trans Tech Publications, , [date of distribution not identified] ©2014 **ISBN** 3-03826-459-8 Descrizione fisica 1 online resource (1777 p.) Advanced Materials Research, , 1662-7482;; Volume 536-537 Collana 621 Disciplina Soggetti Mechatronics Robotics Automation Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references at the end of each chapters and indexes. Advances in Mechatronics, Robotics and Automation II; Preface and Nota di contenuto Conference Organization; Table of Contents; Chapter 1: Signal Processing System Design and Implementation; A Method of Multi-Antenna Signal Time-Delay Alignment Algorithm for Cyclostationary Signals; Analysis of Ground-Based Navigation Signal Coverage on Performance-Based Navigation; Detection and Analysis of Rats' Bioelectromagnetic Signal; Fault Diagnosis of Gearbox in Wind Turbine Based on Wavelet Transform and Support Vector Machine: Research of Multi-Channel Audio Data Acquisition System Based on FPGA and ARM Rolling Bearing Fault Diagnosis Approach Based on PPCA Denoising and

Cyclic Bispectrum MethodStudy on Some New Properties of k-Circulant Matrices; The Signal Separation for MIMO Radar Based on Particle Filter Algorithm; Simulation of Underwater Target Echo Based on Highlight Model; Symbol Rate Estimation Method for Digital Signal Based on

Square Timing; Machinery Fault Diagnosis Based on Supervised Locally Linear Embedding; Chapter 2: Voice, Image and Video Processing; A Fractional-Order Laplacian Operator for Image Edge Detection A New Color Fidelity Fast Denoising Algorithm for High-ISO ImagesA New Video Denoising Algorithm Based on Adaptive Polyview Fusion; A Parallel Stereo Matching Algorithm Core for FPGA Modeled by DSP Builder; A Robust Algorithm for the Inspection of Fastener Head; A Video Compression Coding Algorithm for Network Content Transmission; An Efficient Shape Recognition Method Using Multiple Description Fusion; Clonal Selection Algorithm Based on Manifold Distance for Image Compression; Dot Area Coverage Percentage Measurement Method for Plate Microscopic Image Based on Color Segmentation

Emotional Analysis and Synthesis of Human Voice Based on STRAIGHTFusion of Polarization Image Based on Curvelet Transform; Human Face Expression Recognition Based on Feature Fusion; Image Defogging Based on Improved Guided Image Filtering; Image Recognition Based on Shape and Texture Features; Point Cloud Registration Method Based on Face-Mating after Denosing; Research on False Points Removing of Speech Segmentation; Research on Image Saliency Detection Model Based on Calculating the Probability of Objectness Likelihood

Research on the Detection and Tracking Method of Ship Intrusion and RemainingStudy on Image Processing Algorithm for Condom Sorting; Study on Video Transmission System of Central Heating Based on 3G Wireless Network; The Fingerprint Identification Technology is Applied to the Application Research of Web Cloud Storage Safety Certification; Transformation Equipment Voice Reconstruction Based on Fourier Spectrum of Power-Frequency Multiple; Two-Phase Image Segmentation with Nonlocal Mean Filter and Kernel Evolutionary Clustering in Local Learning

Vehicle Association and Tracking in Image Sequences Using Feature-Based Similarity Comparison

## Sommario/riassunto

Collection of selected, peer reviewed papers from the 2014 2 nd International Conference on Mechatronics, Robotics and Automation, (ICMRA 2014), March 8-9, 2014, Zhuhai, China. The 346 papers are grouped as follows: Chapter 1: Signal Processing System Design and Implementation, Chapter 2: Voice, Image and Video Processing, Chapter 3: Sensors, Measurement Techniques and Instruments, Chapter 4: Data Mining and Data Processing, Chapter 5: Artificial Intelligence and Algorithms of Optimization, Chapter 6: Information Technology and Computer Applications, Chapter 7: Communication Technology and Dev