Table Of Content

58SiMn metallographic analysis and mechanical properties in the waste heat recovery system................................. 1  
Yu luming, Liu shikui, CHEN Hui, CHEN Li li, Qin Pan pan

A Watermark Scheme Based on Residual................................................................................................................. 4  
Chunxing Wang, Xiaomei Zhuang

A Co-simulation of Seam Tracking System Based on ADAMS and SIMULINK......................................................... 8  
Yibo Deng, Hua Zhang, Guohong Ma

A Cross Four-Order Cumulants Based Harmonic Retrieval TLS-ESPRIT Method in the estimation of harmonic parameters........................................................................................................... 12  
Long MA

A kind of control method and application of the sluice gate on the lower Yellow River...................................................... 16  
Dong jie

A MICROMECHANICAL DAMAGECONSTITUTIVE MODEL FOR SOLID PROPELLANT........................................... 19  
FENG Guo-fei, peng wei, tang xinan, zhang yingtang

A model of Maneuverability For a Steam-powered Vessel........................................................................................ 25  
Yong Zhu, Jiashan Jin

A Novel Chaotic Neural Network with Morlet-Wavelet Activation Function........................................................... 29  
Jia-hai Zhang

A pilot study of ultrafiltration pretreatment for seawater reverse osmosis desalination in bohai bay.................................................. 33  
Zhfwen Lin, Jinghuan Ma, Jianpeng Shi, Ying Liu

A Stewart Platform-based 3-axis Force Sensor for Robot Fingers............................................................................. 37  
Minghua Luo, Xinhua Luo, Chunwei Pan

A Study on Interaction of High Pressure Gas Jet and Liquid Medium........................................................................ 41  
Yonggang Yu, Xiaochun Xue, Liting Qi

A Universal Kinesiology Modeling of Multi-axis CNC machine.................................................................................. 45  
Yu Yang, Wei Shengming, Liu Ping

Adaptive Bit Loading Algorithm of Shortwave Broadband OFDM System............................................................. 49  
Lei Yang,Long Zhou, Min Yu, Yemao Xu

Agile Product Development Paradigm Based on Mass Customization....................................................................... 53  
Qing Zhao, Chang Xu, Guiyan Lou, Yi Zhang, Zhongxing Wang

Algorithm research on GPS-Based bus-stop auto-announcement system.................................................................. 57  
Yu Rong, Zhao Gengming

Almost surely asymptotic stability of neutral stochastic neural networks with multiple time-varying delays................... 60  
Weiming Tan, Z.T. Huang, X.W. Qin

Analysis and Optimization of the Slide Block of YQK-1250 Hydraulic Machine Based on ANSYS.............................. 64  
Xiaoming Zuo1, Liqiang Zhang, Pei Li

Analysis and Research of Card Ticket? s Security Based on Card Scraping & Vending Technology.......................... 69  
Zhilin Wu, Haitao Ping, Xiaogang Chen, Guozhu Niu

Analysis and structural improvement of the rubber part in packer in a way of non-linearity finite element................... 73  
Zhiping GUO, Yanfei WANG, Biao SUN, Qing’an LI, Shimin ZHANG

Analysis of the Bertoni-Walfisch propagation model for mobile radio........................................................................ 77  
Dong Yuan, Dongya Shen

Analysis on Flexibility of Industrial Welding Robots and Simulation Research.............................................................. 81  
Gengshun Chen

ANALYSIS ON MANAGERS' BEHAVIOR CHOICES UNDER THE FIXED WAGES FORM  
IN STATE-OWNED ENTERPRISE................................................................................................................. 85  
Feng kong, Wei Zhang, Xiao Zhang, Guoping Song
Anti-synchronization of Liu system and Rossler system with unknown parameters based on adaptive control

Jinghui Tao, Jinhui Zhang, Jiajun Zhao

Application In Vehicle Routing Problem of Hybrid Discrete Particle Swarm Optimization

Huaili Wu, Jinhua Wu, Jianhong Shi

Application of Fuzzy and Binary Algorithm to Regulation of Load in Locomotive Load Test

Chongtang Mo, Yimin Zhou, Wenmin

Application of Grey Relational Analysis Method in Evaluation of Bearing Design Projects

Qiang Wan, Xinyue Wu, Zuwei Xie

Application Of Laser Welder LW-21-L in Hot-dip Galvanizing Line

Xiangyin Feng, Jizheng Han, Caihua Fei, Zhiqiang Duan

Approximation of Large Time Delay for MIMO Systems By Using Matrix Pade-Type

Zhe Yan, Fei Fan, Chao Zhang, Shuao Che, Hong Zhao, Xiaoming Cui

Autocorrelation performance Improvement of CML Hyperchaos Sequence based on APAS Theorem

Bin Chen

Characteristic Recognition of Pulse in Frequency Domain Based on Probabilistic Neural Network

Yeqin Wang, Lianghai Chen

Closed-Form Solution Exploration Study for General Second-Order

Yue Li

Combustion Characteristics of Test and Reserch on Electronic Control Fuel Injection System of Cars GDI Engine

Xuefeng Zhao, Wenzhuo Xiong

Crack Processing Technology and Equipment of Research

Mingsong Zhang

cSPACE-Based Data-Driven Control Theory Application for the Linear Servo System

Rongmin Cao, Huixing Zhou, Hongwei Luo, Ang Su

Damage detection based-propagation of the longitudinal guided wave in a bimetal composite pipe

Hui-xing Yun, Wei-wei Zhang

Damage Identification Based on AR Coefficients and PCA

Sen Wu, Zuo-bin Wei

Data Processing System Based on CNC Carpentry Line Trace Mill

Lijuan Yao, Laijie Wu, Ruifen Huang, Jing Wang

Decoupling Research on A Car Suspension Using Principal Coordinate of Oscillation Equations

Long Wu

Delay detached eddy simulation of hydraulic characteristics after a new sudden lateral enlargement and vertical drop at the end of reversion curve of a spillway

Guojing Li, Guanqiong Dai, Qing Yang, MA Xudong

Design and Analysis on the Main Frame of Marine Tensioner

Baozong Li, Zhiping Guo, Lianfei Wang, Chao Zhang, Shimin Zhang

Design and Evolution of Variable Topology Parallel Mechanisms

Li Tiecheng, Cui Rongjiang

Design and Implementation of high-accuracy FOG-IMU

Xiaoying Han, Jianchong Fang, Baiqi Liu

Design and Implementation of the File System

Xuling Hu

Design and optimization for gating system of bearing base molding

Jian Shen, Chuangyang Wang

Design and Realization of Software for a Visibility Measurement System Based on WSN
Effects of Property Parameters and Blank Holding Force on the Deformability of Sheet Metal in Deep Drawing
Niancang Liu, Fang Fang

Electromagnetic Field Models' Building and Simulation in Workpiece of Inductive Disassembling of Bearing Inner Race
Guoja Li, Lihui Yu, Shuxiang Yang

Enhanced nitrogen and phosphorus removal from urban wastewater in a membrane sequencing batch reactor system
Y.Q. Zhang, C.Y. Zhang, Y. Li, W. Li, Y.C. Zhang

Evaluation of Student Dormitory's Design Project Based on Improved AHP
Youzeng Wang, Hongge Zhao

Experimental Analysis of Pinhole on Electrolytic Copper Foil and Its Prevention
Peng Wenyi, Cai Fenmin, Yi Guangbin, He Tian, Yang Xiangjie

Experimental Study and Numerical Simulation of Active Vibration Control on High Order Mode of Piezoelectric Flexible Beam
Dafang Wu, Liang Huang, Bing Pan, Yuewu Wang, Shuang Wu

Experimental Study on the Friction and Wear Performance of New Dual Friction Materials
Du Fei, Ma Tianbing

Experimental Study on Vehicle Speed Estimation Using Accelerometer and Wheel Speed Measurements
Li-jun Wu

Extend UDDI Using Ontology for Automated Service Composition
Xiaoqiang Ren, Ruilian Hou

Finite Element Comparative Analysis of Two Doorframe Structures in Container Crane
Zhijun Wu

Flexible Method Research of Combined Molding and Manufacturing System
Chunping Chen

FRACUTRE ANALYSIS FOR BRAKE DRUM OF THE TRUCK
Gao-lu, Wang Wen-yan, Xie Jing-pei

Freeport Communication Protocol for S7-200 Programmable Controllers
Jinyong Zuo, Zhongkai Chen

Game Theory-Based Research on Cooperative Behavior of Group Robots
Ping Yang, Cui-ming Li, Xiao-xing Shi

Hardware Design of a Full-digital AC-Servo Driver Based on TMS320F2812
Xipeng Yuan, Zuifang Fang, Ran Nie, Heyi Li

Hydraulic sheet metal bending machine hydraulic servo valve synchronization systems research
Yang Jia, Qiu li-jun

Hydraulic Support Entire Strength Research Under Four Kinds of Typical Load Working Conditions
Hongyu Liu, Junqing Liu

Hydrogen sulfide and carbon dioxide to the gas pipeline Corrosion Mechanism and Protection Research
Zhaoiting Fan, Shentao Zhang, Shentao Zhang, Yu Hu

Image Processing Algorithm Of Weld Seam Based On Crawling Robot By Binocular Vision
Jia Qin, Guohong Ma, Pei Liu

Improved Fuzzy Control for Resistance Spot Welding Based on Microcontroller
Jinhong Zhu, Hongdong Zhu, Wenlin Liang

Improved Swing Frame of Mine Trunk Based on Stress and Strain Analysis and Fatigue Life
Aiying Yao, Xiaoyan Xiong, Ruyuan Cao

Indentation test of soft tissue for investigating needle tissue machining
Liyang Gao, Qinhe Zhang, Ming Liu

Influence of processing parameters of semicircular drawbead on the critical blankholder force
for drawing cone part.................................................................352
Jianhua Liu, Huipeng Luo, Zhiheng Wang

INS/GPS integrated navigation technique for intelligent vehicles........................................355
Zeng-yong Shi, Tao Xu, Xiao-hong Kong, Wei Zhang

Instantaneous velocity test system of automatic mechanism driving component based on virtual instrument........................................359
Yi Gao, Guohua Cao

Intelligent Sliding-mode Control Based on Cloud Model for Ship Steering....................................362
Daoqi Xing, Liangxin Zhang, Shiyin Zhang

Inverse identification research for dynamic constitutive parameters of thread material based on MSARS algorithm........................................366
Xu Jianqiu, Lei Zhenbao, Lei Maxi

Investigation of Combination Characteristic of Damage Location and Intensity in Arch Using Wavelet Coefficient........................................370
Jing Zhang, Liang-yan Cheng

Key technologies of the new concept safety system for vehicle automatic anti-collision..........................374
Zhengbao Lei, Xiaoyuan Zhang, Ziju Li, Maxi Lei, Zuo Peng

Laser CAD/CAM........................................................................378
Min Han, Di Zhou, Haiguang Zhou

Loader Transmission Multi-parameters Optimization Design Based on the Satisfactory Degree Theory........................................381
Lv Chang

Low-dimensional approximation strategy for a class of nonlinear distributed parameter systems.................................385
Mianjiang Huadeng

Magnesium Electrolyzer Structural Optimization Based on Energy Balance........................................389
Ze Sun, Hang Chen, Guimin Lu, Xingfu Song, Jianguo Yu

MAGNETIC FIELD ANALYSIS OF MSMA SINGLE-COIL SELF-SENSING ACTUATOR........392
Chengwu Lin, Jun Gui, Danping Jia, Fang Dong

Matching research between ZOTYEAUTO and a new generation of Double-CST..........................396
Yifu Yan, Zhengbao Lei, Maxi Lei, Huimin Guo

Mathematical Model and Analysis on Cycloid Planetary Gear........................................399
Jing Zhang, Bingkui Chen, Sungki Lu

Mechanical design and kinematic analysis of a new kind of palletizing robot........................................403
Xiaoxing Guan, Jidong Wang

Modal Analysis of Construction Hoist Based on ANSYS........................................409
Bo Zhang, Xiaoyu Qin

Modal Analysis of Transmission Gear in Gearbox based on SolidWorks........................................413
Zhaomei Xu

Model to Forecast the Popularity of Electric Vehicles........................................417
Huimin Liu, Tengyu Guo

Modeling and Analysis on Cutting Force in High Speed Milling Aeronautic Aluminum Alloy...............422
Hong Lei, Yanyan Guo, Wantao He

Modeling of the Feed Drive System Basing on Torsion Multi-oscillator........................................426
Yawei Zhang

Modeling Research of a Combined Press Device for Ridge-Till and No-Till Seeders..........................430
Hongqi Luo

Modeling the Region Manufacturing Innovation Ability with ICA and DEA........................................433
Xuanli Lv, DY. Yuan

Motion Model and Dredging Accuracy of Trailing Suction Hopper Dredger........................................437
Yuanzhan Wang

Multi-Integral Identification Based On Feature-Data .................................................. 441
Guiling Qiao, Qingbo Meng

Multi-Port Gear Pump Design Based on Virtual Prototyping Technology .......................... 445
Xiaoyang Yu

Natural Frequency of Truss bridge in Different Support Forms .................................. 449
Weiguo Zhang, Fei Mao, Huiting Qiu

New Vertical Type Reducer with Small Teeth Difference ........................................... 453
Zhenyu Yang, Zhenhe Fan

Nonlinear Numerical Analysis of High Voltage Cable Terminal Rubber Stress Cone ............. 456
Yongqi Ma, WU Feng-lin, XU Cao

Numerical Comparative Analysis of Hybrid Ventilation System and Single Fresh Air System .......................................................... 460
Jianfang Chen, Bichao Ye

Numerical Investigation on Shock Wave Interaction in a Turbine Cascade ....................... 464
Zhonghe Han, Baiwang Chen, Zhi Wang

Numerical Simulation of Electromagnetic Stirring in Purification of Polysilicon .................. 468
Guolei Cui, Xiangyang Xu, Jinfeng Shi

Numerical Simulation of Fluid-solid Coupling Properties for Underwater Buoy by Taking into Account Virtual Mass ........................................................ 472
Kongde He, Yourong Li, Zifan Fang, Weihua Yang

Numerical Simulation on Air-Flow Field in the milling Chamber of Hammer Mill ............... 476
Liying Cao, Chundong Li

Numerical simulation on the determining technological parameters of vibratory aging treating for large-sized welding box-section beam structures ................................................... 480
Jianke Fu, Xiaohui Huang

Numerical Simulation Research on Flow Pattern of Gas-Water Two-Phase Flow in Horizontal Pipeline .......................................................... 484
Jie Kou, Shasha Gong, Wen Yang

On Self-diagnosis Technique of Wear in Auto Cylinder-Piston System .......................... 488
Chuan sheng Si

Open NC System Design Based on Embedded Flexible Manufacturing System .......................... 492
Xiaoqing Tian, Aiming Lu, Yongshuai Bai, Chong Zhang, Lian Xia

Optimization Of Hydrogen Cooled Turbo-Generator Rotor Wedge Cooling Method ............. 497
Mingqing Fan, CHEN Shu-xin

Oracle Transaction Processing Method in MES ............................................................. 501
Deyu Zhao

Parameters and Process of Electrochemical Machining of Blades .................................. 504
Qiu li-jun, Yang Jia

Parametric Design Research of Cam Drive Mechanism .................................................. 508
Xiaoming Han, Youcheng Bo

Performance Research of Increasing-friction Herringbone Driving Roller Based on Finite Element Analysis .......................................................... 511
SUI Xiu-hua, WANG Shao-bo, MIAO De-jun

Periodic Solutions for Higher Order Neutral Type Delay Functional Differential Equation .......................................................... 514
huiqing wang

Phase-field simulations of non-isothermal binary alloys solidification with Neumann boundary conditions .......................................................... 517
Qiang Liu, Xiang-Jie Yang, Zhi-Ling Liu

Power Management and Energy Harvesting for Indoor Photovoltaic Cells System ............. 521
Hua Yu, Qiuqing Yue, Hanzhong Wu
Prediction of Rural Electricity Consumption Based on Grey-Markov Model ......................................................... 525
Lihua Zhou, Daowen Xie

Predictive Functional Control Simulation of Boiler Combustion Control System ..................................................... 529
Zhang Jiaying, Wu Xinmei

Process Prediction Model for Wood Plastic Composites Pencil Boards Based on BP Neural Network ........................ 533
Chiwu BU

Processing Methods of Thread of Sucker Rod Joints Connection ................................................................................ 536
Jia Yang, Song-ge Yang

Remote Distributed Control and Management System for Power Devices Based on GPRS ........................................ 540
Xinquan Ye, Tao He, Wenzhu Zheng, Lin Shengrong

Research and application on thermal dispatch supporting system .............................................................................. 543
Xinhui Du, Yanhong Zhang, Jianwei Zhang

Research and experiment on the drive frequency control of the MEMS gyroscope .................................................... 547
Xiaolei Wang, Hongsheng Li, Guoming Xia, Bing Liu, Bo Yang

Research for Fuzzy Control System of Recoil Tension ............................................................................................. 551
Di Lu, Chen Liu, Lei Zhu

Research of Automobile Panel Dies Deformation based on Similitude Theory .......................................................... 554
Yujun Cai, Jinwen Dou, Dehua Miao

Research of Conceptual Design of Electromechanical Products Based on KBE ............................................................ 558
Huabo He, Ke Wang, Yinmin Deng

Research of Continuous Variable Camshaft Timing System Based on Fuzzy-PID Control Method .......................... 562
Wenhu Qin, Jianrong Zhou, Cheng Li

Research of Energy Optimization Dispatching Model in EMS of Iron and Steel Enterprises ..................................... 566
Zhi Li, Zhi Wen, Guofeng Lou

Research of Game-Theoretic Approach for Aircraft Ground Deicing Operation Scheduling .................................... 570
Zhiwei Xing, Junhui Li

Research of security analysis based on Subjective Bayesian Networks ......................................................................... 575
Zhuli Chu, Zichun Yang, Maolin Peng, Wencai Sun

Research on CAD and CAE Integration Technology in Driving Axle Design System ............................................... 578
Fengyuan Wang, Rufeng Sun, Chuanxuan Wang, Jianyi Ji, Guoqing Ji

Research on CAD/CAM Technology of High-order Elliptical Gears .......................................................................... 582
yongping liu, pengfei meng, chibing hu

Research on Calculation of Transport Resistance of Piping Dense Paste ................................................................. 586
Changyong GONG, Xiiedi HAO, Miao WU

Research on COTDR for Measuring Distributed Temperature and Strain .................................................................. 590
Zhi Yang, Fengxiang Shi, Yongqian Li

Research on embedded fingerprint identification system ............................................................................................ 594
Zhang Jinhai

Research on Feed Servo System of CNC Machine Based on ControlLogix System .................................................... 598
Feng Jin, Liang Dong

Research on Fuzzy Random Reliability Based on Wear Prediction Model ................................................................. 601
yunfeng zhang, yang liu, weidong liu

Research on high speed sprag overrunning clutch ................................................................................................. 605
Chunmei Zhu, Wei Kong, Xiaoli Xu

Research on material removal rate of each element of chemical mechanical polishing ............................................. 608
Zhixue Guo, Qingzhong Li, Hui Zhang, Jing Zhai
Research on New Magnetic Roller for Magnetite Preselection with Discarding Tailings
Hongguang Jiao, Song Liu, Jiao Ma

Research on New Method of Automobile Developing Process Reengineering
Ding Zhi-hua, Lei Zheng-bao, Lei Mu-xi

Research on New Vibratory Energy-Recycling Hydraulic Damping System
Ding Zhi-hua, Lei Zheng-bao, Lei Mu-xi

Research on Precision Testing and Error Compensation for B-axis of Turning and Milling Composite Machine Tool
Jun Han

Research on Signal Processing of Continuous Wave Mud Pulse
Fang Yuan, Xianfeng Gong

Research on Simulation for Fracture Process of T-type Adhesive Bonded Joint under Peel Load
Huafeng Wang, Hongyan Wang and Junyi Chen

Research on speech characteristics based on compressed sensing theory
Yue Gao, Guqing Liu, Gaimei Wang, Gang Min, Jia Du

Research on the Dynamic Characteristics of the Dynamic Track Stabilizer Side Searing
Lihua Wang, Guangwei Liu, Yanxin Huang, Dongyu Liu

Research on the Method of Testability Modeling Based on Bayesian Networks
Jingchun Guo, Jianmin Liu, Xinyong Qiao, Huaying Li, Yupeng Shi

Research on the roller feed track during spinning of hollow part with triangle cross-section
Zhouyi Lai, Qinxiang Xiao, Zheng Huang, Xiuquan Cheng

Scientific Analysis on the Comparison of Several Physics Textbooks
Jing Wang, Qionghui Wang

Short-term load forecasting based on wavelet transform and BP neural network
Wei Sun, Yinglian Bai

Simulation Analysis of New Safety Impact Regulation on Cab of Commercial Vehicle
Dengfeng Wang, Liya Liu, Yumin Hao, Hongjian Li, Hongbin Tang

Simulation and Research of Reliability Enhancement Testing about the Pulley Mechanism
Yanfeng Yang, Jian Zheng, Changchun Di, Junhui Yin

Simulation and Test Study on Particulate Materials Flow in Rotary Dryers
Zhigang Huang, Hui Zhu, Xue Huang, Ling Yan

Simulation for Structure Optimization Design on Truck Rollover Test
Dengfeng Wang, Liya Liu, Yumin Hao, Hongjian Li, Hongbin Tang

Simulation on Actuating Input-combinations of 5-UPS/PRPU Parallel Machine Tool
Jian-She Gao

Stepwise Confidence Interval Method for Dose-response and Effectiveness Studies
Xiaoqing Tang, Nianzu Liu, Haixing Wang

Strength Finite Element Analysis of 130t Liquid Iron Tank Lifting Lug
Hongyu Liu, Junqing Liu

Strong convergence theorems of relaxed hybrid steepest-descent methods for variational inequalities
Qian-Fen Gong

Studies on the Limiting Resistant Torque Characteristics of the Skewed-Roller Slipping Clutch
Ming Feng, Guangrong Yan

Study of active ultrasonic localization in LED street light controller
Ying Zhang, Fenglan Shao

Study of NURBS-based multi-axis NC Milling Tool Path Generation Algorithm
Xiao-ling Yan, Wang-long Wang