

Table of Contents

Preface and Organizing Committee

Chapter 1: Computer Engineering

An Expansion Method of Reliable Data Transmission of the Short-Message Communication on Satellite Network J. Huang and G. Li	3
The Study of Personalized Intelligent Cooperative Teaching Service System Based on Grid S.J. Liu and Y.F. Zhang	9
Advanced Optimal Buffer Scheduling Policy in Opportunistic Networks Q.L. Liu, G.D. Li, Y. Li, Y.J. Pan and F.Z. Yu	13
Applications of the Wireless LAN Technology in the Nursing Work J.L. Zhang, H.M. Zhang, C.M. Lian and R. Li	19
A System Framework for LTE SON Z.J. Liu, C. Ren and C.C. Liang	22
Automotive Tire Monitoring and Warning System Based on ZigBee Wireless Network C.S. Luo	27
Wireless Sensor Networks Scheduling Algorithm Based on the Probability of Monitoring J.S. Chen	32
Application of Filtration System in the Network Security J.L. Bian	38
Robust Multiuser Detection in Synchronous DS-CDMA System with MRC Receive Diversity over Nakagami-m Fading Channel R.V. Srinivasa, K.P. Vinay, S. Balaji, K. Habibulla and K.T. Anil	43
The Feasibility Analysis of Using a New Network Architecture to Solve the Tidal Effects W.N. Hou, X.W. Cao and Z.J. Liu	51
Discussion on RFID and Food Cold Chain Logistics Y.X. Liu and W. Shi	56

Chapter 2: Electronic Engineering

Analysis of the Effect of Idle Rollers on Tension Vibration in Discontinuous Web Transport Systems J.K. Chen, Y.A. Huang and Z.P. Yin	61
Harmonic Detection and Suppression of Frequency Doubling of Speed Measuring Radar Based on Closed-Loop Gain Control Q.J. Jin, Z.T. Liu and Q.H. Xu	68
Wind Turbine Development Status and Advices in China W.Y. Liu and Z.F. Wang	74
Research on Modeling and Simulating of Discrete Event System Based on Petri Net X.L. Pan, G. He, C.J. Zhang, T.F. Ming and X.C. Wang	80
Simulation Analysis of Static Recrystallization by Molecular Automaton Y. He and Y.P. Xu	86
Design of a High-Loaded Clarifier and its Application on the Treatment of Overflow Rainwater J.S. Tang, X.H. Huang, F. Zhao, J.S. Qiao and L.X. Li	91
A Novel Control Strategy for Multiple Switches Based on Electro-Rheological Fluid L.N. Xu, H. Li and J.B. Liu	95
A Single Cycle Inverter Welding Power Control System P.F. Huang, Y.Y. Lu, S.J. Bai and Z.Y. Lu	101
Study on Feasibility Evaluation of Wind Power Generation Based on Grey-AHP Z. Tan, F. Fang, B.T. Xu and X. Li	106

Research on CRT Rear-Projection Television Adjustment by Chksrn Software T.H. Li and H. Sun	111
Research and Design of Photoelectric Solar Tracking System T.H. Li and D.Q. Xiang	115
The Research of the Cold Extrusion Shaping Technology of the Tubular Component with Oral Part Having Flange Z.H. Yu	121
Process Realization of Preparing the Plane Transient Diode Y. An and Y.L. Wu	125
Research on Spray Cooling Within Finite Volume Based on Eulerian-Lagrangian Method G. He and X.C. Wang	131
The Sound Field Construction of Dance Hall H.B. Hu	136
Bamboo Timber Mildew and Anti-Mold Technology Y.D. Liu	139
A New Approach to Cutting Temperature Prediction Using Support Vector Regression and Ant Colony Optimization D.H. Zeng, Y. Liu, L.B. Jiang, L. Li and G. Xu	145
Analysis and Prediction of Thermal Resistance for High Power LED Using GA-SVR D.H. Zeng, Y. Liu, L. Li, D.G. Yu and G. Xu	153

Chapter 3: Communication Engineering and Software Engineering

Research on the Art Design College's Computer Network Entrepreneurship Plat From M. Wang and T. Shan	163
Mapping Timer Event from Business Process Model on Windows Workflow Foundation J. Deng, B. Chen and J.Z. Zeng	168
The Commercial Bank Card System Based on SOA L. Zhang and G. Zhang	172
The Design and Implementation of Color-Matching CAD Software Based on Elementary-Weave-Structured Woven Fabric X.J. Zhu and Z.H. Bao	177
A Tensor Based Isometric Projection Algorithm Y. Sun, Z.H. Lin and R.B. Zhang	183
Establishment of Network Platform of Virtuai Teaching Laboratories in Colleges and Universities Based on JSP Technology J. Luo and W.X. Gu	189
Research on 'One-Map' Mineral Resource Management Information System (MRMIS) of China L.F. Wang, X.B. Wu, H. Cao and B.Y. Zhang	193
Attribute Reduction of Service Quality Based on Factor Analysis and Neighborhood Model L. Chen and X. Hu	201
Enhancing Service Discovery via Multi-Ontology Management and Annotation G.H. Han and C. Zeng	208

Chapter 4: Signal Processing

Mixing Matrix Estimation in Blind Source Separation Based on Generalized Gaussian Mixture Modal Y.Q. Chen and J. Liu	217
Weak Signal Detection Based on Stochastic Resonance of Piecewise Model W.L. Zhao, Y.P. Yin and Q. Fang	222
Cooperative Localization Method for AUV Using Acoustic Communication Measurement L.C. Zhang, M.Y. Liu and F.B. Zhang	227
Efficient Radar Emitters Scheme Recognition Based on a Novel SVM Algorithm Q. Liu	232

Acoustic Beam Forming Using Ultrasonic Transducers W.K. Tseng	238
Acoustic Pressure Minimization for Diffuse Fields W.K. Tseng	243
A ECG Waveform Detection Algorithm Based on Differential Threshold and Wavelet Transform Y. Sun, W.C. Ding, Z.H. Lin and R.B. Zhang	249
Targets Detection in Sea Clutter Based on Echo State Network Z. Xu, J.W. Wan, G. Li and F. Su	255
Target Detection within Sea Clutter Based on Multifractal Detrended Fluctuation Analysis Z. Xu, J.W. Wan, G. Li and F. Su	259