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Beijing University of posts and telecommunications Beijing, People’s Republic of China

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Kun Qiu (UESTC, China)

Ricky Keang-Po Ho (Nat'l Taiwan University, Taiwan, China)

Ping Shum (NTU, Singapore)

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Advanced Technology Research Centre Shenzhen University Shenzhen, Guangdong, China

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Institute of Computer and Communications, Department of Computer Science and Information Engineering

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Sheng Chen

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School of Physics and Electronic Engineering Yantai Normal University Yantai, Shandong 264025, China

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School of Science Beijing University of Posts and Telecommunications Beijing, China

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Key Laboratory of Metastable Materials Science & Technology, Yanshan University, 066004, China

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Ming Xu, Jianhua Ji  
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Zhonglei Mei  
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OBC-32 (#04_09_11): A New 10Gb/s FP Laser with Mode Field Suppressed Layer  

lxv
Tien-Tsorgng Shih, Chin-Chun Kuo, Tai-Fu Cheng
National Kaohsiung University of Applied Science, Department of Electronic 415,
Chien Kung Road, Kaohsiung 807, Taiwan,

OBC-33 (#04_09_12): Simulation Design for a New Non-Periodic Structure Coaxial Bragg Fiber
Huajun Yang, Yu Hu, Kang Xie, Chenghong Li, Pochi Yeh, Zhongwen Zhou
University of Electronic Science & Technology of China (PC: 610054)

OBC-34 (#04_09_16): An 1x(2N+1) MMI Optical Splitters Based on SOI Rib Waveguide
Chun-Cheng Lin, Shih-Yung Tsai, Chia-Chin Chiang and Shyh-Lin Tsao
Optical Fiber System Laboratory, Institute of Electro-Optical Science and Technology,
National Normal University No. 88, Sec 4, Ting-Chou Rd. Taipei, Taiwan, 116

OBC-35 (#04_09_18): The Effect of Acoustic Flexural Waves in a Tilted Bragg Fiber Grating
Ming-Yue Fu, Wen-Fung Liu
Avionics Engineering Chinese Air Force Academy Kaohsiung, Taiwan.

OBC-36 (#04_09_19): Fused Fiber Coupler Gratings
Wen-Fung Liu, Ying-Pin Chuang, Sheng-Zeng Peng, Ching-Ting Kuo, Tzu-Chiang Chen,
Lung Ai, Ming-Yue Fu
Electrical Engineering Feng-Chia, University Taichung, Taiwan 407

OBC-37 (#04_09_20): Fiber Grating Fabrication Using Ultra-violet-Transparent Fibers
Yi-Chi Liu, Feng-Chia Shen, Wen-Fung Liu, Hsin-Wen Peng, Chuen-Lin Tien, Lung Ai,
I-Wen Wu and Patrick Tsai
Electrical Engineering Feng-Chia University Taichung, Taiwan

OBC-38 (#04_09_21): A Cost Effective Polarization Stable Double-Pass Backward Superfluorescent Fiber
Source
Chia-wei Yu, Hung-Yi Chen, Pin-Chung Lin, Zi-Chiang Hsu, Chang-Hung Ho and
Lon A. Wang
Department of Electrical Engineering and Institute of Electro-Optical Engineering, National
Taiwan University Taipei, Taiwan, China

OBC-39 (#04_09_22): Optical Coupling between a Lensed Photonic Crystal Fiber and a Laser Diode
Zih-Syuan Peng and Lon A. Wang
Graduate Institute of Electro-Optical Engineering National Taiwan University Taipei,
Taiwan, China

OBC-40 (#04_10_01): Research on the Wavelength Rerouting Algorithm to Replace the Wavelength Convertor
ZHOU Tian-hua, Chen Ming-song, He Ning
Dept. of Communication and Information Engineering, GUET, Guilin 541004, China

OBC-41 (#04_10_05): A Fairness Algorithm Based on Flow for RPR
Mingsong Chen, Shengyuan Zhou, Faliang Ao
Dept. of Communications and Information Engineering, Guilin University of Electronic
Technology, Guilin, 541004, China

OBC-42 (#04_10_07): Optimum Design for Optical Antenna of Space Laser Communication System
Huajun Yang, Yu Hu, Chenghong Li, Kang Xie, Jin Fu, Hu Wei
University of Electronic Science & Technology of China (PC: 610054)

OBC-43 (#04_10_08): Design of Collimation System in Space Laser Communication

lxvi
Track 07. **Neural Networks and Computational Intelligence**

**Chair:** Derong Liu (UIC, USA)

**Co-Chairs:**

Zhong Li (Fern University, Germany)

Yi Zhang (UESTC, China)

Xiaofeng Liao (CQU, China)

**NCCI-01 (#07_01_03): Study on the Identification of Loading Materials for Initiating Explosive Device**

Yong Wang, Jianfu Li
Department of Computer Chongqing Education College Chongqing, 400067, China

2030

**NCCI-02 (#07_01_05): Research on FNN Energy Saving Control for Light Load Oil Well with Intermittent Oil Extraction**

DING Bao, TANG Hai-yan, QI Wei-gui
School of Electrical Engineering and Automation Harbin Institute of Technology Harbin, China

2034

**NCCI-03 (#07_01_10): Automated Fault Detection and Diagnosis for an Air Handling Unit Based on a GA-Trained RBF Network**

Yonghong Huang and Nianping Li, Yonghong Huang and Yangchun Shi
College of Civil Engineering Hunan University Changsha, Hunan Province, 410082, China

2038


Xiaobing Zhou, Yue Wu, Yi Li, Yalan Ye
School of Computer Science and Engineering, University of Electronic Science and Technology of China, Chengdu, 610054, China

2042

**NCCI-05 (#07_01_12): Committee Machines with Ensembles of Multilayer Perceptron for the Support of Diagnosis of Heart Diseases**

Jun Zheng, Yingtao Jiang, Hongmei Yan
Department of Computer Science Queens College-CUNY Flushing, NY 11367, USA

2046

**NCCI-06 (#07_01_14): A Robust Blind Source Separation Algorithm without Whitening the Observed Signals**

Hangjun Wang, Luming Fang

2051
NNCI-07 (#07_01_15): A Kalman Filter Based PID Controller for Stochastic Systems
Changyuan Fan, Hui Ju, Baoqiang Wang
Department of Control Engineering Chengdu University of Information Technology Chengdu, Sichuan Province, China

NNCI-08 (#07_01_16): A New Fast ICA Algorithm with Symmetric Orthogonalization
Changyuan Fan, Baoqiang Wang, Hui Ju
Department of Control Engineering, Chengdu University of Information Technology Chengdu, Sichuan Province, China

NNCI-09 (#07_02_01): A Possibilistic C-Means Clustering Algorithm Based on Kernel Methods
Xiao-Hong Wu
College of Electrical & Information Engineering Jiangsu University Zhenjiang, 212013, China

NNCI-10 (#07_02_03): Nonlinear System Identification Based on Adaptive Neural Fuzzy Inference System
HOU Zhi-xiang, LI He-qing
College of Automobile and Mechanical Engineering Changsha University of Science and Technology Changsha, 410076, China

NNCI-11 (#07_03_02): A Hybrid Evaluative Algorithm Applied to Task Scheduling
Li Gao, Shijue Zheng and Wanneng Shu, Xiong Wang
Department of Computer Science, Hua Zhong Normal University, Wuhan 430079, China

NNCI-12 (#07_03_04): Combining Genetic Algorithms Based Task Mapping and Optimal Voltage Selection for Energy-Efficient Distributed System Synthesis
Yongpan Liu, Huazhong Yang, Rong Luo, Hui Wang
Department of Electronics Engineering, Tsinghua University, 100084, Beijing, China

NNCI-13 (#07_03_05): Genetic Network Programming for Artificial Stock Market
Yang Cheng, Sun Shixin, Xie Zhilong
School of Computer Science and Engineering University of Science and Technology of China Chengdu, P.R. China

NNCI-14 (#07_03_06): Study of Differential Evolution on ATPG
XU Chuan Pei, LI Zhi, MO Wei
Dept. of Electronic Engineering GuiLin University of Electronic Technology Guilin, Guangxi, China

NNCI-15 (#07_03_07): Faster and More Stabile-Asymmetric Bidirectional Weighting Topologies on PSO
Tang Puying, Fang Jun
School of Opto-electronic Information University of Electronic Science and Technology of China Chengdu, Sichuan, China

NNCI-16 (#07_03_09): A GA-based Solution to an NP-hard Problem of Clustering Security Events
Jianxin Wang, Hongzhou Wang, Geng Zhao
School of Information, Beijing Forestry University, Beijing, China, 100083

NNCI-17 (#07_03_11): A Self-Adaptive Genetic Algorithm for Tasks Scheduling in Multiprocessor System
Lan Zhou, Sun Shi-Xin
College of Computer Science and Engineering University of Electronic Science and Technology, Zhejiang Forestry University, Lin’an 311300, China
Technology of China Chengdu, Sichuan 610054, China

NNCI-18 (#07_04_02): Adaptive Clonal Algorithm and Its Application for Optimal PMU Placement
Xiaomeng Bian and Jiaju Qiu
Dept. of Electrical Engineering University of Zhejiang Hangzhou, Zhejiang Province, China

NNCI-19 (#07_06_01): Stabilize Unstable Equilibrium Points for A New Class of Simple 3-Neuron Chaotic Cellular Neural Network
Ping Zhou, Qiong Huang, Jiang-Tao Li
Institute for Nonlinear Systems Chongqing University of Posts and Telecommunications Chongqing, 400065, China

NNCI-20 (#07_06_03): A Rigorous Verification of Chaos in a 3D Neural Network
Fangyan Yang and Ping Zhou, Qingdu Li
Institute for Nonlinear Systems Chongqing University of Postsand Telecomm, Chongqing, 400065, China

NNCI-21 (#07_06_04): Design and FPGA Implementation of a Pseudo-Random Bit Sequence Generator Using Spatiotemporal Chaos
Yaobin Mao, Liu Cao, Wenbo Liu
Department of Automation Nanjing University of Sci. & Tech. Nanjing, P.R.China 210094

NNCI-22 (#07_07_01): Rules Mining From Large Datasets Based on Rough Set
Hong Xiang-gong, Wang Zhiyan, Guo Sen, Wang Ping
School of Information Engineering, Nan Chang University, Nan Chang, JiangXi, China

NNCI-23 (#07_07_02): A Novel Substation Fault Diagnosis Approach Based on RS and ANN and ES
Hongsheng Su, Feng Zhao
School of Information and Electrical Engineering, Lanzhou Jiaotong University, Lanzhou, Gansu, China

NNCI-24 (#07_07_03): Network Connection Based Intrusion Detection Using Rough Set Classification
Hongmei Zhang, Xingyu Wang, Yong Wang
School of Information Science and Engineering, East China University of Science & Technology Shanghai, P.R.China

NNCI-25 (#07_08_01): Palmprint Recognition Using Wavelet Decomposition and 2D Principal Component Analysis
Jiwen Lu, Erhu Zhang, Xiaobin Kang, Yanxue Xue, Yajun Chen
Department of Information Science Xi’an University of Technology Xi’an, Shannxi, China

NNCI-26 (#07_08_02): An Optimal Text Categorization Algorithm Based on SVM
Ziqiang Wang and Xia Sun, Dexian Zhang
School of Information and Engineering Henan University of Technology Zheng Zhou 450052, Henan Province, China

NNCI-27 (#07_08_03): A Simple Method for Chinese License Plate Recognition Based on Support Vector Machine
Xiaojun Chi, Junyu Dong, Aihua Liu, Huiyu Zhou
Department of Computer Science, Ocean University of China, Qingdao, 266071

NNCI-28 (#07_09_01): Link Travel Time Estimation Model Fusing Data from Mobile and Stationary Detector Based on BP Neural Network
Zou Liang, Zhu Ling-xiang
NNCI-29 (#07_09_03): Video Hierarchical Structure Mining
Chang-Jian FU, Guo-Hui LI, Jun-Tao WU, Chang-Jian FU
School of Information System and Management National University of Defense Technology,
Changsha 410073, Hunan, China

NNCI-30 (#07_09_06): An Algorithm for Time Series Data Mining Based on Clustering
Shaozhi Wu, Yue Wu, Ying Wang, Yalan Ye
School of Computer Science and Engineering, University of Electronic Science and
Technology of China Chengdu 610054, China

NNCI-31 (#07_10_02): Using Artificial Neural Network to Control the Temperature of Fuel Cell
Yanjun Li, Houjun Wang, Zhijian Dai
College of Automation Engineering University of Electronic Science and Technology of
China Chengdu, Sichuan, China

NNCI-32 (#07_10_05): A Novel Modified Particle Swarm Optimization
Haiming Jiang, Kang Xie, Cheng Ren and Yafei Wang
School of Opto-Electronic Information University of Electronic Science and Technology of
China Chengdu, Sichuan Province, China