

南京邮电大学学报(自然科学版)

2011年4月 第31卷 第2期(总第133期)

目 次

量子信息科学专题

量子信息

- 一种基于稀疏序列的量子 CSS 码的构造 赵生妹,肖 宇,朱修利,郑宝玉(1)
- MG 模型中纠缠态演化的研究 张 融,陈鹤鸣(6)
- 含噪量子广播信道容量定理的求证与应用 肖 宇,朱修利,赵生妹(9)
- 一种构造量子稳定子码的新方法 朱修利,肖 宇,林少华,赵生妹(14)

量子计算

- 绝热量子计算 吴 楠,宋方敏(19)
- 一种改进的量子 Grover 算法 周立志,李 飞,郑宝玉(27)
- 基于量子遗传算法的多约束 QoS 路由算法 刘 欣,李 飞,郑宝玉(31)
- 量子免疫算法及在 0-1 背包问题中的应用 李兆华,李 飞,郑宝玉(36)
- Impact of Informatics on QIPC Jozef Gruska(40)
- An Efficient Framework to Utilize Grover Search Shigeru Yamashita, Masaki Nakanishi(49)

量子通信

- 基于纠缠交换的第三方密钥分配 许新山,张 军,陈汉武(59)
- 一种基于量子准循环 LDPC 码的 McEliece 公钥密码算法 曹 东,赵生妹,宋耀良(64)
- Unitary Noise and the Mermin-GHZ Game Ivan Fialk(69)

综 合

- 利用超导量子电路中的宏观量子相干性测量弱磁场 陈劲丹,于 扬(74)
- 基于量子算法的 MIMO-OFDM 信号检测研究 周 敏,李 飞,郑宝玉(78)
- 量子光源综述 张晓峰,朱 俊,曾贵华(83)
- Simulation of Grey Scale Ghost Imaging By Labview DING Jian, ZHAO Sheng-mei(94)

本期责任编辑:潘雪松 本期英文审订:赵生妹

期刊基本参数:CN 32-1772/TN * 1960 * b * A4 * 99 * zh * P * ¥8.00 * 1000 * 17 * 2011-04

JOURNAL OF NANJING UNIVERSITY OF POSTS AND TELECOMMUNICATIONS(NATURAL SCIENCE)

Apr. 2011 Vol. 31 No. 2 (Sum. No. 133)

CONTENTS

Special Issue for Quantum Information Science

Quantum Information

- A Construction of Quantum Low-Density-Parity Code Based on Sparse Sequences**
..... ZHAO Sheng-mei, XIAO Yu, ZHU Xiu-li, ZHENG Bao-yu (1)
- Dynamics of Entanglement in Majumdar-Ghost Model** ZHANG Rong, CHEN He-ming (6)
- Proof and Application of Noisy Quantum Broadcast Channels Capacity Theorem**
..... XIAO Yu, ZHU Xiu-li, ZHAO Sheng-mei (9)
- A Novel Construction of Quantum Stabilizer Codes** ZHU Xiu-li, XIAO Yu, LIN Shao-hua, ZHAO Sheng-mei (14)

Quantum Computation

- Adiabatic Quantum Computation** WU Nan, SONG Fang-min (19)
- An Improved Quantum Grover Algorithm** ZHOU Li-zhi, LI Fei, ZHENG Bao-yu (27)
- Multi-Constrained QoS Routing Algorithm Based on Quantum Genetic Algorithm** ... LIU Xin, LI Fei, ZHENG Bao-yu (31)
- The Quantum Immune Algorithm and It's Application on 0-1 Knapsack Problem**
..... LI Zhao-hua, LI Fei, ZHENG Bao-yu (36)
- Impact of Informatics on QIPC** Jozef Gruska (40)
- An Efficient Framework to Utilize Grover Search** Shigeru Yamashita, Masaki Nakanishi (49)

Quantum Communication

- Three-Party Authenticated Quantum Key Distribution Protocol Based on Entangled Swapping**
..... XU Xin-shan, ZHANG Jun, CHEN Han-wu (59)
- Quantum McEliece Public-Key Cryptosystem Based on Quantum QC-LDPC Codes**
..... CAO Dong, ZHAO Sheng-mei, SONG Yao-liang (64)
- Unitary Noise and the Mermin-GHZ Game** Ivan Fialk (69)

Synthesis

- Detect Weak Magnetic Field with Macroscopic Quantum Coherence in Superconducting Quantum Circuits**
..... CHEN Jin-dan, YU Yang (74)
- Research of MIMO-OFDM Detection Based on Quantum Algorithm** ZHOU Min, LI Fei, ZHENG Bao-yu (78)
- Overview of Quantum Light Source** ZHANG Xiao-feng, ZHU Jun, ZENG Gui-hua (83)
- Simulation of Grey Scale Ghost Imaging By Labview** DING Jian, ZHAO Sheng-mei (94)

Editor: PAN Xue-song English Reviser: ZHAO Sheng-mei