

Contents

Vol. 66 No. 8 August 2023

Special Topic: Quantum Information

High-dimensional quantum information processing on programmable integrated photonic chips	180501(18)
Yulin CHI, Yue YU, Qihuang GONG & Jianwei WANG	
Nonadiabatic holonomic quantum computation and its optimal control	180502(22)
Yan LIANG, Pu SHEN, Tao CHEN & Zheng-Yuan XUE	
Low-loss, dual-polarization asymmetric Mach-Zehnder interferometer chips for quantum key distribution	180503(7)
Meizhen REN, Lai ZHOU & Zhiliang YUAN	
Detecting coherence with respect to general quantum measurements.....	180504(9)
Yu-Cheng CHEN, Jiong CHENG, Wen-Zhao ZHANG & Cheng-Jie ZHANG	
Optimizing Raman quantum memory with dynamic phase.....	180505(11)
Sheng MING, Jinxian GUO, Yuan WU, Guzhi BAO, Shuhe WU, Minwei SHI, Liqing CHEN & Weiping ZHANG	
Experimental entanglement quantification for unknown quantum states in a semi-device-independent manner	180506(8)
Yu GUO, Lijinzh LIN, Huan CAO, Chao ZHANG, Xiaodie LIN, Xiao-Min HU, Bi-Heng LIU, Yun-Feng HUANG, Zhaojun WEI, Yong-Jian HAN, Chuan-Feng LI & Guang-Can GUO	
Practical continuous-variable quantum key distribution with feasible optimization parameters.....	180507(12)
Li MA, Jie YANG, Tao ZHANG, Yun SHAO, Jinlu LIU, Yujie LUO, Heng WANG, Wei HUANG, Fan FAN, Chuang ZHOU, Liangliang ZHANG, Shuai ZHANG, Yichen ZHANG, Yang LI & Bingjie XU	
Mitigating quantum errors via truncated Neumann series	180508(11)
Kun WANG, Yu-Ao CHEN & Xin WANG	
Quantum NETwork: from theory to practice	180509(45)
Kun FANG, Jingtian ZHAO, Xiufan LI, Yifei LI & Runyao DUAN	
Novel entanglement compression for QKD protocols using isometric tensors.....	180510(2)
Hong LAI, Josef PIEPRZYK & Lei PAN	
Secret key rate of continuous-variable quantum key distribution with finite codeword length.....	180511(2)
Yan FENG, Runhe QIU, Kun ZHANG, Xue-Qin JIANG, Meixiang ZHANG, Peng HUANG & Guihua ZENG	

RESEARCH PAPER

LINDA: multi-agent local information decomposition for awareness of teammates	182101(17)
Jiahua CAO, Lei YUAN, Jianhao WANG, Shaowei ZHANG, Chongjie ZHANG, Yang YU & De-Chuan ZHAN	
Demand response management of smart grid based on Stackelberg-evolutionary joint game	182201(18)
Jun LI, Tao LI & Daoyi DONG	
Predefined-time stabilization for nonlinear stochastic Itô systems.....	182202(16)
Tianliang ZHANG, Shengyuan XU & Weihai ZHANG	
All-van der Waals stacking ferroelectric field-effect transistor based on In_2Se_3 for high-density memory	182401(8)
Xiaojie WANG, Zeyang FENG, Jingwei CAI, Hao TONG & Xiangshui MIAO	
Active poisoning: efficient backdoor attacks on transfer learning-based brain-computer interfaces	182402(22)
Xue JIANG, Lubin MENG, Siyang LI & Dongrui WU	
How could imperfect device properties influence the performances of spiking neural networks?.....	182403(10)
Jingyang CHEN, Zhihao WANG, Tong WANG, Heming HUANG, Zheyuan SHAO, Zhe WANG & Xin GUO	
Design memristor-based computing-in-memory for AI accelerators considering the interplay between devices, circuits, and system	182404(11)
Junjie AN, Linfang WANG, Wang YE, Weizeng LI, Hanghang GAO, Zhi LI, Zhidao ZHOU, Jinghui TIAN, Jianfeng GAO, Chunmeng DOU & Qi LIU	
Boosted high-temperature electrical characteristics of AlGaN/GaN HEMTs with rationally designed compositionally graded AlGaN back barriers	182405(9)
Haochen ZHANG, Yue SUN, Kunkun HU, Lei YANG, Kun LIANG, Zhanyong XING, Hu WANG, Mingshuo ZHANG, Huabin YU, Shi FANG, Yang KANG & Haidong SUN	

LETTER

Trajectory-free dynamic locomotion using key trend states for biped robots with point feet.....	189201(2)
Lianqiang HAN, Xuechao CHEN, Zhangguo YU, Xishuo ZHU, Kenji HASHIMOTO & Qiang HUANG	
Effective distributed algorithm for solving linear matrix equations	189202(2)
Songsong CHENG, Jinlong LEI, Xianlin ZENG, Yuan FAN & Yiguang HONG	

Tracking performance limitations of MIMO discrete-time networked control systems with multiple constraints	189203(2)
Xiaowei JIANG, Bin ZHANG, Xiangyong CHEN & Huacheng YAN	
A novel policy iteration algorithm for solving the optimal consensus control problem of a discrete-time multiagent system with unknown dynamics	189204(2)
Wenkai XU, Li WANG, Shiwen SUN, Chengyi XIA & Zengqiang CHEN	
Joint-decoding-complexity-oriented collaborative design for joint source-channel coding system based on double protograph-LDPC codes	189301(2)
Zhiping XU, Dan SONG, Jiachun ZHENG & Lin WANG	
Demonstration of DSM-OFDM-1024QAM transmission over 400 m at 335 GHz	189302(2)
Kaihui WANG, Jianjun YU, Weiping LI, Junjie DING, Feng WANG, Chen WANG, Wen ZHOU, Jiao ZHANG, Min ZHU, Tangyao XIE, Jianguo YU, Li ZHAO & Feng ZHAO	
DP-GenFL: a local differentially private federated learning system through generative data	189303(2)
Jun LI, Kang WEI, Chuan MA & Feng SHU	
Few-shot RF fingerprinting recognition for secure satellite remote sensing and image processing	189304(2)
Di LIN, Su HU, Weiwei WU & Gang WU	
Continuous-wave 2.9–3.8 μm random lasing via temperature-tunning free difference-frequency generation of random fiber lasers in PPLN crystal.....	189401(2)
Bo HU, Han WU, Kan TIAN & Houkun LIANG	
Highly efficient twin-field quantum key distribution with neural networks	189402(2)
Jingyang LIU, Qingqing JIANG, Huajian DING, Xiao MA, Mingshuo SUN, Jiaxin XU, Chun-Hui ZHANG, Shipeng XIE, Jian LI, Guigen ZENG, Xingyu ZHOU & Qin WANG	

Information for authors

SCIENCE CHINA Information Sciences (Sci China Inf Sci), cosponsored by the Chinese Academy of Sciences and the National Natural Science Foundation of China, and published by Science China Press, is committed to publishing high-quality, original results of both basic and applied research in all areas of information sciences, including computer science and technology, control science and engineering, information and communication engineering, microelectronics and solid state electronics, etc. *Sci China Inf Sci* is indexed in Science Citation Index Expanded (SCIE), Engineering Index (EI), Journal Citation Reports/Science Edition (JCR), Academic OneFile, Astrophysics Data System (ADS), CSA, Cabells, Current Contents/Engineering, Computing and Technology, DBLP, Digital Mathematics Registry, Earthquake Engineering Abstracts, Engineered Materials Abstracts, Gale, Google, INSPEC, Mathematical Reviews, OCLC, ProQuest, SCOPUS, Summon by Serial Solutions, VINITI. *Sci China Inf Sci* is published monthly in both print and electronic forms.

Authors are recommended to use *Science China's* online submission services. To submit a manuscript, please go to www.scichina.com, create an account to log in <http://mc03.manuscriptcentral.com/scis>, and follow the instructions there to upload text and image/table files.

All submissions will be reviewed by referees selected by the editorial board. The decision of acceptance or rejection of a manuscript is made by the editorial board based on the referees' reports. The entire review process may take 90 to 120 days, and the editorial office will inform the author of the decision as soon as the process is completed. If the editorial board fails to make a decision within 90 days, please contact the editorial office.

Authors should guarantee that their submitted manuscript has not been published before and has not been submitted elsewhere for print or electronic publication consideration. Submission of a manuscript is taken to imply that all the named authors are aware that they are listed as coauthors, and they have agreed on the submitted version of the paper. No change in the order of listed authors can be made without an agreement signed by all the authors.

Ethical responsibilities of authors: Authors should refrain from misrepresenting research results which could damage the trust in the journal and ultimately the entire scientific endeavour, and follow the COPE guidelines on how to deal with potential acts of misconduct.

Disclosure of potential conflict of interests: Authors must disclose all relationships or interests that could influence or bias the work. The corresponding author will include a summary statement in the text of the manuscript in a separate section before the reference list.

Once a manuscript is accepted, the authors should send a copyright transfer form signed by all authors to Science China Press. Authors of one published paper will be presented one sample copy. If more sample copies or offprints are required, please contact the managing editor and pay the extra fee. The full text opens free to domestic readers at www.scichina.com, and is available to overseas readers at link.springer.com.