

Special Focus on Wireless Communications with Unmanned Aerial Vehicles (UAVs)

A survey of prototype and experiment for UAV communications140301(21)
Qingheng SONG, Yong ZENG, Jie XU & Shi JIN

Application of NOMA for cellular-connected UAVs: opportunities and challenges140302(14)
Wee Kiat NEW, Chee Yen LEOW, Keivan NAVAIE, Yanshi SUN & Zhiguo DING

Energy-efficient design for mmWave-enabled NOMA-UAV networks140303(14)
Xiaowei PANG, Jie TANG, Nan ZHAO, Xiuyin ZHANG & Yi QIAN

Resource and trajectory optimization in UAV-powered wireless communication system140304(14)
Weidang LU, Peiyuan SI, Fangwei LU, Bo LI, Zilong LIU, Su HU & Yi GONG

Leveraging partially overlapping channels for intra- and inter-coalition communication in cooperative UAV swarms140305(16)
Kailing YAO, Yuhua XU, Hong LI, Jin CHEN, Shihua ZHANG & Xingyue YU

A large-scale clustering and 3D trajectory optimization approach for UAV swarms140306(16)
Ting MA, Haibo ZHOU, Bo QIAN & Aiyong FU

Performance analysis of dual-hop UAV relaying systems over mixed fluctuating two-ray and Nakagami-*m* fading channels140307(3)
Yongshun ZHANG, Jiayi ZHANG, Kostas P. PEPPAS & Bo AI

Special Focus on Two-Dimensional Materials and Device Applications

Filling the gap: thermal properties and device applications of graphene140401(17)
Rui WU, Rui-Zhi ZHU, Shi-Hui ZHAO, Gang ZHANG, He TIAN & Tian-Ling REN

Properties and photodetector applications of two-dimensional black arsenic phosphorus and black phosphorus140402(14)
Ruyue HAN, Shun FENG, Dong-Ming SUN & Hui-Ming CHENG

Efficient graphene in-plane homogeneous p-n-p junction based infrared photodetectors with low dark current140403(8)
Junru AN, Tian SUN, Bin WANG, Jianlong XU & Shaojuan LI

Bi₂O₂Se/BP van der Waals heterojunction for high performance broadband photodetector140404(7)
Xing LIU, Wenhui WANG, Fang YANG, Shaopeng FENG, Zhenliang HU, Junpeng LU & Zhenhua NI

Optical emission enhancement of bent InSe thin films140405(8)
Jiahao XIE & Lijun ZHANG

Raman spectra evidence for the covalent-like quasi-bonding between exfoliated MoS₂ and Au films140406(9)
Xinyu HUANG, Lei ZHANG, Liwei LIU, Yang QIN, Qiang FU, Qiong WU, Rong YANG, Jun-Peng LV, Zhenhua NI,
Lei LIU, Wei JI, Yeliang WANG, Xingjiang ZHOU & Yuan HUANG

Interface engineering of ferroelectric-gated MoS₂ phototransistor140407(8)
Shuaiqin WU, Xudong WANG, Wei JIANG, Luqi TU, Yan CHEN, Jingjing LIU, Tie LIN, Hong SHEN, Jun GE, Weida HU,
Xiangjian MENG, Jianlu WANG & Junhao CHU

A compact model for transition metal dichalcogenide field effect transistors with effects of interface traps140408(3)
Yifei XU, Weisheng LI, Dongxu FAN, Yi SHI, Hao QIU & Xinran WANG

REVIEW

Sunway supercomputer architecture towards exascale computing: analysis and practice141101(21)
Jiangang GAO, Fang ZHENG, Fengbin QI, Yajun DING, Hongliang LI, Hongsheng LU, Wangquan HE, Hongmei WEI,
Lifeng JIN, Xin LIU, Daoyong GONG, Fei WANG, Yan ZHENG, Honghui SUN, Zhou ZHOU, Yong LIU & Hongtao YOU

RESEARCH PAPER

Resolution limit of mode-localised sensors142401(10)
Zhao ZHANG & Honglong CHANG

A bidirectional threshold switching selector with a symmetric multilayer structure142402(6)
Qingjiang LI, Kun LI, Yongzhou WANG, Sen LIU & Bing SONG

MOOP

Name disambiguation in AMiner144101(3)
Jing ZHANG & Jie TANG

LETTER

SPAR: set-based piecewise aggregate representation for time series anomaly detection	149101(3)
Peng ZHAN, Yupeng HU, Lin CHEN, Wei LUO & Xueqing LI	
Cooperative prediction guidance law in target-attacker-defender scenario	149201(3)
Heng SHI, Jihong ZHU, Minchi KUANG & Xiaming YUAN	
Finite element approach to continuous potential games	149202(3)
Yaqi HAO & Daizhan CHENG	
Queue estimation for isolated signalized intersections in intelligent vehicle-infrastructure cooperation systems	149203(3)
Yunpeng WANG, Ge GUO & Wei YUE	
Bipartite consensus problem on matrix-valued weighted directed networks	149204(3)
Lulu PAN, Haibin SHAO, Yugeng XI & Dewei LI	
Performance analysis of fuzzy BLS using different cluster methods for classification	149205(3)
Shuang FENG & C. L. Philip CHEN	
Estimation of vector miss distance for complex objects based on scattering center model	149301(3)
Jie WU, Kunyi GUO, Biyi WU & Xinqing SHENG	
Simulations of single event effects on the ferroelectric capacitor-based non-volatile SRAM design	149401(3)
Jianjian WANG, Jinshun BI, Gang LIU, Hua BAI, Kai XI, Bo LI, Sandip MAJUMDAR, Lanlong JI, Ming LIU & Zhangang ZHANG	
High mobility germanium-on-insulator p-channel FinFETs.....	149402(2)
Huan LIU, Genquan HAN, Jiuren ZHOU, Yan LIU & Yue HAO	

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.