

## Dr. Zhu Han

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- CONTACT INFORMATION      W302 Engineering Building 2      *Phone:* (713) 743-4437 (o), (301) 996-2011 (c)  
University of Houston      *E-mail:* hanzhu22@gmail.com, zhan2@uh.edu  
Houston, TX 77004, USA      *http:* //www2.egr.uh.edu/~zhan2
- HIGHLIGHT      17 Ph.D. and 4 M.S. graduated, 4 former postdoc, and currently 14 Ph.D. students
- 15 NSF funding** (including **US NSF career award 2010**), >\$4,000,000 with 100% credit, Multidisciplinary University Research Initiative (MURI), Department of Defense, Department of Interior, Gulf of Mexico research, Qatar, and Power Analysis Consortium since 2008
- IEEE Fellow** in 2013 (class of 2014) for contributions to resource allocation and security in wireless communications
- IEEE Distinguished Lecturer**, 2015-present
- Young Outstanding Overseas Researcher, National Science Foundation China, Twice Taiwan Jade Mountain Professor, Republic of China, 2019
- 2016 IEEE Leonard G. Abraham Prize in the field of Communications Systems** (Best Paper Award for IEEE Journal on Selected Areas on Communications).
- 2015 EURASIP Best Paper Award for Journal on Advances in Signal Processing.**
- 2011 IEEE Communications Society Fred W. Ellersick Prize** (Best Paper Award for IEEE Wireless Communications Magazine).
- 13 IEEE conference best paper awards
- Award for Excellence in Research, Scholarship or Creative Activity, Twice, 2010–2011, 2014-2015, the highest in University of Houston, 2 winners per year
- 7 published textbooks/1 edited book/1 textbook in print/1 textbook working in process, all by Cambridge University Press
- 361 published/accepted transactions/magazines/letters,  $\geq 400$  conference papers, 17 book chapters, 10 brief books, and 2 patents
- Web of Science top 1% most cited, Highly Cited Researcher since 2017**  
**google citation** >29,000 and **H factor** 85
- First Chinese in **Grand Slam Marathon Club** to Finish North Pole Marathon and Seven Marathons in Seven Continents (including Antarctica). Half Ironman 2016.
- EDUCATION      **University of Maryland**, College Park, Maryland, USA
- Ph.D. in Electrical and Computer Engineering, November, 2003  
M.S. in Electrical and Computer Engineering, May, 1999
- Tsinghua University**, Beijing, China
- B.S. in Electronic Engineering, June, 1997  
Major: Communication, Minor: English  
**Rank No.7 in Tsinghua New Student Exam 1992**

**National Science Foundation Projects**

1. **CO-Principal Investigator** of “Advanced Mean-Field Game Theory for Complex Physical & Soci-Economical Systems,” collaborative with University of California at Los Angeles, Princeton University, and University of Maryland at College Park, Multidisciplinary University Research Initiative (MURI), Air Force Office of Scientific Research (AFOSR), 18RT0073, \$1,200,000 out of \$7,500,000, 2018-2023.
2. **Principal Investigator** of “NeTS: Small: Collaborative Research: Hierarchical Framework with Distributed Resource Allocation for Mobile Fog Computing,” collaborative with University of North Carolina at Charlotte, National Science Foundation, \$249,999, out of \$500,000, CNS-1717454, 2017-2020.
3. **Principal Investigator** of “Collaborative Research: Energy-Efficient Heterogeneous Network Virtualization with Spectrum-Power Trading,” collaborative with Georgia Tech., National Science Foundation, \$200,000, out of \$500,000, CNS-1731424, 2017-2020.
4. **CO-Principal Investigator** of “WiFIUS: Collaborative Research: Ambient Re-Scatter Inspired Machine Type Communication for Heterogeneous IoT Systems,” collaborative with Aalto University, Finland, National Science Foundation, \$150,000, out of \$300,000, CNS-1702850, 2017-2019
5. **CO-Principal Investigator** of “CPS: Synergy: Collaborative Research: DEUS: Distributed, Efficient, Ubiquitous and Secure Data Delivery Using Autonomous Underwater Vehicles,” collaborative with Missouri University of Science and Technology, National Science Foundation, \$150,000, out of \$600,000, CNS-1646607, 2016-2019.
6. **Principal Investigator** of “EARS: Collaborative Research: Full-Duplex Cognitive Radio: A New Design Paradigm for Enhancing Spectrum Usage,” collaborative with Rice University, National Science Foundation, \$200,000, out of \$400,000, ECCS-1547201, %100 credit, 2015-2018. INTERN Supplementary Funding, \$28,205, 2018.
7. **Principal Investigator** of “Collaborative Research: WiFiUS: Heterogeneous Resource Allocation for Hierarchical Software-Defined Radio Access Networks at the Edge,” collaborative with Arizona State University, University of Oulu, VTT Finland, National Science Foundation, \$140,000, CCF-1456921, 2015-2017.
8. **Principal Investigator** of “Collaborative Research: Proactive Recovery of Electric Power Assets for Resiliency Enhancement (PREPARE)”, collaborative with University of Denver, National Science Foundation, CMMI-1434789, funded, \$249,999 out of a total of \$500,000, 2014-2017.
9. **Principal Investigator** of “EARS: Collaborative Research: Laying the Foundations of Social Network-Aware Cellular Device-to-Device Communications”, collaborative with University of Florida and Virginia Tech., National Science Foundation, CNS-1443917, funded, \$234,001 out of a total of \$680,000, 2015-2017.
10. **Principal Investigator** of “Collaborative Research: CCSS: D2D Wireless Networks: An Interference Nightmare or Resource Allocation Auspice,” collaborative with Georgia Tech, , National Science Foundation, ECCS-1405121, funded, \$185,000 out of a total of \$370,000, 2014-2017.

11. **Principal Investigator** of “EAGER: Collaborative Research: Joint Adaptation of Multiple Cognitive Systems without Explicit Coordination”, collaborative with Virginia Tech., National Science Foundation, CNS-1265268, funded, \$150,000 out of a total of \$500,000, 2013-2015.
12. **Principal Investigator** of “NeTS:Small:Toward Wireless Co-existence For Safety-critical Applications”, National Science Foundation, CNS-1117560, funded, \$300,000 out of a total of \$500,000, 2011-2014 (Co-PI at submission. Change to PI since original PI left).
13. **Principal Investigator** of “IHCS: Collaborative Research: Compressive Spectrum Sensing in Cognitive Radio Networks,” collaborative with Rice University, National Science Foundation, ECCS-1028782, funded, \$256,000 out of a total of \$500,000, 2010-2014.
14. **Principal Investigator** of “CAREER: Mutual Benefit in Cognitive Radio Networks: A Coalitional Game Framework,” Career Award, National Science Foundation, CNS-0953377, funded, \$416,000, 2010-2015.
15. **Principal Investigator** of “NeTS: Medium: Collaborative Research: Cooperative Beamforming for Efficient and Secure Wireless Communication,” collaborative with Drexel University, Princeton University, and Colorado School of Mines, National Science Foundation, CNS-0905556, NeTS, funded, \$150,000 out of a total of \$675,000, 2009-2012.
16. **Principal Investigator** of “Collaborative Research: Trusted Cooperative Transmission: Turning a Security Weakness into a Security Enhancement,” collaborative with the University of Rhode Island, National Science Foundation, CNS-0910461, Cyber Trust, funded, \$108,000 out of a total of \$216,000, 2008-2011.

#### **Other Federal Projects**

17. **Co-Principal Investigator** of “Distributed chemical sensing for sub-surface oil spill sensing”, U.S. Department of Interior - Minerals Management, funded, \$89,670 out of a total of \$896,700, 2014-2015.
18. **Co-Principal Investigator** of “Novel Sensor System for the Early Detection and Monitoring of Offshore Oil Spills”, Gulf of Mexico Research Initiative RFP-II, funded, GoMRI-030, \$112,500 out of a total of \$750,000, 2012-2015.
19. **Co-Principal Investigator** of “Reconfigurable Electronics and Non-Volatile Memory Research,” Air Force Office of Scientific Research, FA9453-8-2-0252, funded, \$100,000 out of a total of \$2,500,000, 2008-2010.

#### **Industrial Projects**

20. **Principal Investigator** of “Optimization Framework for Flow Balance in Edge Computing, based on Big Data Analysis,” gift, Tencent, 2018-2019, \$73,000.
21. **Principal Investigator** of “Deep Learning For Image Analytics In Energy Industry,” Chevron, 2017-2018, \$50,000.
22. **Principal Investigator** of “Data Analysis and Resource Management for Mobile Edge Computing,” gift, Toyota, 2018, \$50,000.
23. **Principal Investigator** of “Hierarchical Architectural Design Alternatives based on Edge Computing for Connected Vehicles,” gift, Toyota, 2017, \$47,500.

24. **Co-Principal Investigator** of “Deep Transfer Learning Enabled Machine Vision Inspection and Its Applications in Exploration Geophysics,” Advanced Geophysical Technology Inc. 2017-2018, based on SBIR 1746824, \$45,000.
25. **Co-Principal Investigator** of “Video Analytics for Quantifying the Cuttings at Shale Shaker,” Shell, 2017-2018, \$50,000.
26. **Founder** of Electric Power Analytics Consortium, 2012. Current members: Centerpoint and Direct Energy, \$200,000.
27. **Principal Investigator** of “Teaching and Research Proposal for Texas Instrument Digital Signal Processor,” Texas Instruments and Micron Technology, funded, \$151,580, 2007.

#### **Other Projects**

27. **CO-Principal Investigator** of “Reconstructing high-resolution infrared spectroscopic images from high-speed multimodal microscopes,” CACDS: Seed Funding For Advanced Computing, University of Houston, \$40,000, 2017-2018.
28. **Principal Investigator** of “A Context Aware Framework for Optimized Resource Management in Fourth Generation Wireless Systems,” collaborative with American University of Beirut and Nanyang Technological University, Qatar National Research Fund, NPRP 4 - 347 - 2 - 127, funded, \$125,000 out of a total of \$400,000, 2012-2015.
29. **Co-Principal Investigator** of “Super-Resolution Signal Processing for Lidar,” Optical Air Data Systems, L.L.C., funded, \$90,433, 2005.
30. **New Faculty Award**, \$6,000, University of Houston, Houston, Texas, 2008.

#### **Participants of Chinese Projects**

31. PI, “A Matching Theory Framework for Device-to-Device Networks”, NSFC 61428101, Host University: Beijing University, 2015-2016.

#### **Participants (Senior Personnel) of European Projects**

32. “Rate Allocation for Satellite Systems with Correlated Channels Based on a Stackelberg Game,” funded, European Space Agency PRESTIGE Programme, 2009-2012.
33. “Theoretical Foundations of Mobile Flexible Networks,” VERDIKT project supported by Research Council of Norway, 2007-2010.
34. “Optimized Heterogeneous Multiuser MIMO Networks - OptiMO,” VERDIKT project supported by Research Council of Norway, 2008-2011.
35. “Mobile-to-Mobile Communication Systems - M2M,” VERDIKT project supported by Research Council of Norway, 2009-2012.

#### **HONORS FOR RESEARCH**

**IEEE Distinguished Lecturer**, 2015-present.

**Best Journal Paper**, IEEE Technical Committee on Green Communications & Computing, 2018

**Best Paper Award**, IEEE Globecom, Singapore, 2017

**Best Paper Award**, IEEE International Conference on Communications in China, Qingdao, China, 2017.

**Best Paper Award** 2016, IEEE Journal on Selected Areas on Communications (IEEE Leonard G. Abraham Prize in the field of Communications Systems).

**Best Paper Award**, IEEE International Conference on Communications, Kuala Lumpur, Malaysia, 2016.

**Best Paper Award**, IEEE International Conference on Communication Systems, Shengzhen, China, 2016.

**Best Paper Award** 2015 EURASIP Best Paper Award for the Journal on Advances in Signal Processing.

**Best Paper Award**, IEEE International Conference on Communications, London, UK, 2015.

**Best Paper Award**, IEEE Globe Communication Conference, Austin, Texas, 2014.

**Best Paper Award**, IEEE Wireless Communication and Networking Conference, Shanghai, China, 2013.

**Best Paper Award**, IEEE International Conference on Smart Grid Communications, Tainan, Taiwan, 2012.

**Best Paper Award**, International Conference on Wireless Communications and Signal Processing (WCSP), Huangshang, China, 2012.

**Best Paper Award**, Two in IEEE Wireless Communication and Networking Conference, Paris, France, 2012.

**The 2011 IEEE Communications Society Fred W. Ellersick Prize**, IEEE Wireless Communications Magazine Best Paper Award.

**Award for Excellence in Research & Scholarship**, the highest level (2 awardees per year) in University of Houston, 2011 and 2015.

**NSF Career Award**, 2010.

**Best Paper Award**, IEEE International Conference on Communications, Dresden, Germany, 2009.

**Best Paper Award**, 7th International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks, (WiOpt09), South Korea, 2009.

ACADEMIA  
EMPLOYMENT

**University of Houston**, Houston, Texas, USA  
*John and Rebecca Moores Professor*

**April, 2018 - Present**

*Full Professor* in ECE Department **September, 2015 - April 2018**  
*Joint Appointment* with CS Department  
*Director of Computer & Systems Engineering Program*

*Associate Professor* in ECE Department **August, 2012 - August, 2015**

*Assistant Professor* in ECE Department **August, 2008 - August, 2012**

**Boise State University**, Boise, Idaho, USA  
*Assistant Professor* in ECE Department **August, 2006 - May, 2008**

**University of Maryland**, College Park, Maryland, USA  
*Faculty Research Associate* **November, 2003 - June, 2006**  
*Faculty Research Assistant* **November, 2002 - November, 2003**  
Advisor: Professor K. J. Ray Liu.

**University of Maryland**, College Park, Maryland, USA  
*Graduate Research Assistant* **August, 1997 - June, 2000**

INDUSTRY **JDS Uniphase Corporation (JDSU)**, Germantown, Maryland, USA  
EMPLOYMENT *Electrical Engineer* **July, 2000 - November, 2002**

**Hughes Network Systems**, Germantown, Maryland, USA  
*Summer Intern* **May 1998 - August, 1998**

**National Meteorology Center**, Beijing, China  
*Intern* **June, 1996 - July, 1997**

VISITING **Beijing University**, Beijing China  
EXPERIENCE **Tsinghua University**, Beijing China  
*Visiting Professor* **August, 2013**

**Hongkong RGC visitor program**, Hong Kong  
*International Visiting Professor* **August, 2012**

**Kyung Hee University**, South Korea  
*International Scholar* **June-July, 2011, January 2012**

Host: Professor Ju Bin Song.

Visiting Korean University, Seoul National University, Sungkyunkwan University, KAIST, Gwangju Institute of Science and Technology, National Taiwan University, National Chiao Tung University, Tsinghua University, Shanghai Jiaotong University, Chinese University of Hongkong, Hong Kong University of Science and Technology, Hong Kong Polytech. Nanyang Technology Singapore, and National University of Singapore.

**Inria**, France

*Visiting Professor* **June, 2010**  
Host: Professor Eitan Altman

**University of Illinois**, Urbana-Champaign, USA  
*Visiting Professor* **July, 2009**  
Host: Professor Tamer Basar

**University of Oslo**, Oslo, Norway; **Supelec**, Paris, France  
*Visiting Professor* **May, 2008 - July, 2008**  
Host: Professor Are Hjørungnes and Professor Mérouane Debbah

**Stanford University**, Stanford, California, USA  
*Visiting Professor* **May, 2007 - August, 2007**  
Host: Professor John M. Cioffi

**Princeton University**, Princeton, New Jersey, USA  
*Visiting Scholar* **July, 2006 - August, 2006**  
Host: Professor H. Vincent Poor

TEACHING  
EXPERIENCE

**University of Houston**, Houston, USA  
*ECE6397 Selective Topics in Optimization* **Fall, 2012**  
*ECE6333 Detection and Estimation* **Spring, 2011, 2013, 2015**  
*ECE6332 Wireless Communication* **Spring, 2010, 2014, 2016, 2017, 2018**  
*ECE6331 Advanced Telecommunications* **Spring, 2009**  
*ECE4371 Introduction to Telecommunication Engineering*  
*ECE4117 Telecommunication Laboratory* **Fall, 2008-present**

**Boise State University**, Boise, Idaho, USA  
*EE 552/452: Wireless Communications and Networks* **Spring, 2007-2008**  
*EE 554/454: Digital Signal Processing* **Fall, 2007**  
*EE 551/451: Communication Systems* **Fall, 2006-2007**

**University of Maryland**, College Park, Maryland, USA  
*Guest Lecturer*, Undergraduate ENES100 **Fall, 2004; Fall, 2005**

CURRENT GROUP  
MEMBER

- Xunsheng Du, Ph.D. student
- Mohamed Elmoossalamy, Ph.D. student
- Neetu Raveendran, Ph.D. student
- Kevin Tsai, Ph.D. student
- Reginald Banez, Ph.D. student

- Dawei Chen, Ph.D. student
- Hao Gao, Ph.D. student
- Jing Li, Ph.D. student
- Wen Xie, Ph.D. student
- Qiuyang Shen, Ph.D. student, joint with Dr. Jiefu Chen
- Nguyen Tran, Ph.D. student, joint with Dr. David Mayerich
- Saeed Ahmadian, Ph.D. student, joint with Dr. Heidar Malki
- Kai-Chu Tsai, Ph.D. student, joint with Dr. Ricardo, Lent

#### ALUMNI

- Mounika Sai Errapotu, Ph.D. 2018, “Secure Computing with Privacy Preservation for Cyber-Physical Systems,” joint with Dr. Miao Pan
- Huaqing Zhang, Ph.D. 2017, “A Hierarchical Game Framework for Distributive Resource Allocation in Future HetNet.”
- Radwa Aly, Ph.D. 2017, “Utilizing Full Duplex Multiple Antenna System in Heterogeneous Networks.”
- Fahira Sangare, Ph.D. 2017, “RF Energy Harvesting and Information Transfer Implementation in the Internet of Things.”
- Hung Nguyen, Ph.D. 2017, “Big Data Optimization for Distributed Resource Management in Smart Grid.”
- Yunan Gu, Ph.D. 2016, “Matching Theory Framework for 5G Wireless Communications.”
- Yanru Zhang, Ph.D. 2016, “Contract Theory Framework for Wireless Networking.”
- Erte Pan, Ph.D. 2016, “Big Data Analysis of Complex Networks using Machine Learning Methods.”
- Ali Arab, Ph.D. 2015, “Asset Management Of Smart Grid Infrastructure For Resiliency Enhancement”, Industrial Engineering, joint with Professor Suresh Khator.
- Ateeth Kumar Thirukkovulur, M.S. 2015, “Novel Infrastructure Quantification For Utility Of Virtualized Network Debugging Using Openflow As Visualization Of Packets And Software Defined Networking,” joint with Professor Deniz Gurkan.
- Lanchao Liu, Ph.D. 2014, “Big Data Optimization for Modern Communication Networks,” winner of National Excellent Ph.D Student Scholarship.
- Najmeh Forouzandeh Mehr, Ph.D. 2013, “Game Theoretical Framework for Dynamic Control in Smart Grid”.
- Nam Tuan Nguyen, Ph.D. 2013, “A Nonparametric Bayesian Framework For Mobile Device Security And Location Based Services”.
- Guanbo Zheng, Ph.D. 2013, joint with professor Rong Zheng, “Toward Reliable and Robust Wireless Personal Area Networks”.
- Mohammad Esmalifalak, Ph.D. 2013, “Attack and Defense Mechanisms for State Estimation in Smart Grid”.
- Thanh Le, M.S. 2013, “Sequential Learning for Passive Monitoring of Multi-Channel Wireless Network”.



- Yi Huang, Ph.D. 2012, “A Quickest Detection Framework for Smart Grid”.
- Tina Mathews, M.S. 2012, “USRP2 Implementation of Compressive Sensing based Channel Estimation in OFDM”.
- Zhou Yuan, Ph.D. 2012, “A Framework Of Belief Propagation and Game Theory for Cognitive Radio Security and Routing”.
- Jia Meng, Ph.D. 2010, “Compressive Sensing Applications for Wireless Communications”.
- Barsha Shrestha, MS. 2008, “Wireless Access in Vehicular Environments using Bit Torrent and Bargaining,”.
- Yong Xiao, Postdoc, now in Arizona State University, AZ.
- Samir Medina Perlaza, Ph.D. Supelec, France, joint with Princeton University, now in Inria, France.
- Walid Saad, Postdoc, Ph.D. University of Oslo, joint with Princeton University, now in professor in University of Miami.
- Yingying Li, Postdoc, Ph.D. University of California, Los Angeles, joint with Rice University, now in Wall street.

#### VISITORS

- Professor Dusit (Tao) Niyato, School of Computer Engineering, Nanyang University, Singapore, Feb - Mar. 2008, July 2011
- Professor Husheng Li, Department of EECS, University of Tennessee, TN, Oct. 2008
- Professor Are Hjørungnes, UNIK, University of Oslo, Norway, Dec. 2008
- Dr. Nam Tran Nguyen, University of New South Wales, Australia, Jan. 2009
- Dr. Ninoslav Marina, University of Oslo, Norway, Feb. 2009
- Professor Ekram Hossain, University of Manitoba, Canada, Feb. 2009
- Professor Lijun Qian, Prairie View A&M University, TX, Mar. 2009
- Professor Walid, Saad, UNIK, University of Oslo, Norway, University of Miami, Mar. 2009, Mar. 2010
- Professor Ruhai Wang, Lamar University, TX, Sep. 2009
- Professor Ju Bin Song, Kyung Hee University, South Korean, Aug. 2009 - Aug. 2010
- Dr. Quanyan Zhu, University of Illinois at Urbana-Champaign, IL, Jan. 2010
- Dr. Lei Jiang, University Autonomas de Barcelona, Spain, Jan. 2010 - Mar. 2010
- Professor Wotao Yin, Rice University, TX, Jan. 2010; UCLA, CA, Apr. 2015
- Professor Jake Baker, Boise State University, ID, Jan. 2010
- Professor Andres Kwasinski, Rochester Institute of Technology, NY, Mar. 2010
- Professor Ashutosh Sabharwal, Rice University, TX, Apr. 2010
- Professor Tie Liu, Texas A&M University, TX, Apr. 2010
- Professor Wei Zhang, New South Wales University, Australia, Jun. 2010
- Professor Shuguang (Robert) Cui, Texas A&M University, TX, Sep. 2010
- Professor Zixiang Xiong, Texas A&M University, TX, Feb. 2011, Apr. 2012
- Professor Zhi Tian, Michigan Technological University, MI, Feb. 2011
- Professor Yang Xiao, University of Alabama, AL, Feb. 2011
- Professor Yu Cheng, Illinois Institute of Technology, IL, Mar. 2011
- Professor Le Xie, Texas A&M University, TX, Mar. 2011
- Professor Hamed Mohsenian-Rad, Texas Tech University, TX, Apr. 2011
- Dr. Yifan Li, Nanyang Technology University, Singapore, Apr. 2011

- Professor Jianwei Huang, Chinese University of Hong Kong, Dec. 2011
- Professor Angela Zhang, Chinese University of Hong Kong, Dec. 2011
- Professor Guoqiang Mao, National University of Australia, Dec. 2011
- Professor Xinbin Wang, Shanghai Jiaotong University, Dec. 2011
- Professor Eryk Dutkiewicz, Macquarie University, Australia, Dec. 2011
- Mr. Chen Wang, Shanghai Jiaotong University, Jan. 2012 – Jun. 2012
- Professor Thad Welch, Boise State University, Feb. 2012
- Dr. Wooyeol Choi, GIST, South Korea, Mar. 2012
- Professor Hongyi Wu, University of Louisiana at Lafayette, Apr. 2012
- Professor Rao Thammavaram, University of Louisiana at Lafayette, Apr. 2012
- Professor Guowang Miao, KTH, the Royal Institute of Technology, Sweden, Jul. 2012
- Professor Qing Ling, University of Science and Technology of China, Aug. 2012 – Aug. 2013
- Professor Miao Pan, Texas Southern University, Oct. 2012
- Professor Chengshan Xiao, Missouri University of Science and Technology, Jan. 2013
- Professor Mehdi Abolhassani, College of Technology, University of Houston, Dec. 2013
- Professor Qi Su, Newcastle University, UK, Jun., 2014
- Dr. Yangqing Li, Beijing University of Posts and Telecommunications, Aug. 2014- Aug. 2015
- Dr. Jia You, Beijing Jiaotong University, May 2014- May 2015
- Dr. Yingyu Li, Xidian University, Aug. 2014- Aug. 2016
- Dr. Yun Hu, Xidian University, Aug. 2014- Aug. 2015
- Professor Hang Qin, Yangtze University, China, Aug. 2014- Aug. 2015.
- Professor Mingyi Hong, Iowa State University, Nov. 2014
- Professor Nguyen Hoang Tran, Kyung Hee University, South Korea, Dec., 2014
- Professor Zaher Dawy, American University of Beirut, Lebanon, Dec. 2014
- Professor Minming Ni, Beijing Jiaotong University, China, Dec. 2014
- Professor Hui Yang, University of South Florida, Mar. 2015
- Professor Fang Yang, Tsinghua University, China, Apr. 2015
- Professor Amin Khodaei, University of Denver, Apr. 2015
- Professor Chungang Yang, Xidian University, China, Mar. 2015 - Mar. 2016
- Dr. Chufei Ouyang, Wuhan University, Aug. 2015- Sep. 2015.
- Dr. Xiao Tang, Xi'an Jiaotong University, Sep. 2015- Aug. 2016.
- Professor Shaolei Ren, University of California, Riverside, Sep. 2015.
- Professor Husheng Li, University of Tennessee, Sep. 2015- Aug. 2016.
- Professor Guiling Wang, NJIT, Nov. 2015,
- Dr. Huu Ngoc Duy Nguyen, McGill, Nov. - Dec. 2015.
- Professor Liang Xiao, Xiamen University, China, Dec. 2015.
- Dr. Wenbo Wang, Tsinghua University, China, Jan.-Mar. 2016.
- Dr. Xianfu Chen, VTT, Finland, Mar.-Apr. 2016.
- Professor Wei Song, University of New Brunswick, Canada, Mar.-Apr. 2016.
- Professor Yu Wang, University of North Carolina at Charlotte, May 2016.
- Professor Mei Li, China University of Geosciences, August 2016 - July 2017.
- Dr. Minsu Shin, Samsung, Korea, August 2016-November 2016.
- Professor Xuefang Liu, Xidian University, China, September 2016 - September 2017.
- Ye Yu, Beijing Institute of Technology, September 2016 - September 2018.
- Hui Chen, Beijing University of Posts and Telecommunications, September 2016 -

September 2017.

- Professor Haitao Xu, University of Science and Technology Beijing, October 2016 - April 2017.
- Professor YiFei Wei, Beijing University of Posts and Telecommunications, November 2016 - May 2017.
- Dr. Chen-Feng Liu, University of Oulu, Finland, December 2016.
- Dr. Liangliang Zhang, University of Electronic Science and Technology of China, December 2016 - December 2017.
- Professor Shaohua Qin, Shandong Normal University, China, December 2016– December 2017.
- Professor Francis Bui, University of Saskatchewan, Canada, July 2017 – July 2018.
- Professor Francis Bui, University of Ulsan, South Korea, July 2017 – July 2018.
- Dr. Xuelin Cao, Northwestern Polytechnical University, China, September 2017 – September 2018.
- Dr. Zhikun Wu, Beijing Institute of Technology, China, September 2017 – September 2018.
- Dr. Chunxia Su, Harbin Engineering University, China, September 2017 – September 2018.
- Dr. Chuanyin Li, Xidian University, China, September 2017 – September 2018.
- Dr. Di Zhou, Xidian University, China, September 2017 – September 2018.
- Professor Hongyuan Yang, Jilin University, October 2018 - October 2019.
- Dr. Junhua Wang, Chongqing University, October 2018 - October 2019.
- Professor Tingting Liu, Nanjing University of Posts and Telecommunications, November 2017 - November 2018.
- Dr. Ruoguang Li, Beijing University of Posts and Telecommunications, December 2017 - December 2018.
- Dr. Zhongyu Miao, Beijing University of Posts and Telecommunications, December 2017 - December 2018.
- Professor Wu Fang, Suzhou Institute of Trade & Commerce, February 2018- February 2019.
- Professor Jian Zhou, Anhui University of Finance and Economics, China, March 2018 - March 2019
- Professor Lisheng Yang, Congqing University, China, April 2018- April 2019.
- Dr. Benedetta Picano, University of Florence, Italy, May 2018 - May 2019.
- Dr. Zejian Feng, Tsinghua University, China, May 2018- May 2019.
- Dr. Yue Yu, Southeast University, China, September 2018- September 2019.
- Professor Guobin Zhang, Dongguan University of Technology, China, September 2018- September 2019.
- Professor Long Zhang, Hebei University of Engineering, China, September 2018- September 2019.
- Dr. Ziyi Jia, Xidian University, China, October 2018-October 2019.
- Dr. Yan Zhu, Xidian University, China, October 2018-October 2019.
- Dr. Yu Zhang, Tsinghua University, China, October 2018-October 2019.
- Professor Huaizhu Zhang, Jilin University, China, October 2018-October 2019.
- Professor Qixun Zhang, BUPT China, October 2018-October 2019.
- Professor Li Wang, BUPT China, January 2018-February 2019.

#### **Invited Talks**

Southern Methodist University, UT Dallas, UT Arlington, Rice University, Texas A&M

University, UT Austin, Prairie view A&M University, Texas Southern University, University of Washington, MIT, Columbia University, Rutgers University, Wright State University, University of Hawaii, UCLA, UIUC, SUNY Buffalo, University of Miami, Florida International University, Arizona State University, Stanford, Virginia Tech, Kentucky State University, UC Davis, George Mason University, George Washington University, Auburn University, University of North Carolina at Greensboro, Oregon State University, California State University at San Diego, UC Irvine, UC Riverside, Illinois Institute of Technology, Northwestern University, Simon Fraser University, University of British Columbia, University of Toronto, University of Waterloo, McMaster University, Carleton University, Tshinghua University, Shanghai Jiaotong University, Zhejiang University, Beijing University, University of Science and Technology of China, Chinese Academy of Sciences, Xidian University, Xian Jiaotong University, Beijing University of Posts and Telecommunications, Beijing Jiaotong University, Chinese University of Hongkong, Hongkong University of Science and Technology, HongKong Polytech University, Nanyang Technological University of Singapore, National University of Singapore, I2R of Singapore, INFOCOMM of Singapore, National Taiwan University, Taiwan Chiao Tung University, Korean University, SKKU University, Kyung Hee University, Seoul National University, KAIST University, GIST University, Qualcomm Research, Schlumberger Research, Centerpoint, LLC, Inria France, University of Oslo, Supelec France, University of Avignon France, University of Luxembourg, University of Oulu, University of Florence, KTH Sweden, University of New South Wales, American University of Beirut, Qatar University, Texas A&M University at Qatar, Brazil Federal University of Rio de Janeiro.

PROFESSIONAL  
ACTIVITIES

**Editor**

- Associate Editor, IEEE Access, 2016 - Present.
- Associate Editor, Journal of Communications and Networks, 2015 - Present.
- Associate Editor, IEEE Transactions on Wireless Communications, 2010 - 2015.
- Guest Editor, Hindawi Wireless Communications and Mobile Computing, Special issue for Deep Learning Driven Wireless Communications and Mobile Computing.
- Guest Editor, IEEE Signal Processing Magazine Special Issue for Contactless Monitoring of Critical Infrastructure, 2018.
- Guest Editor, IEEE Internet of Things Journal Special Issue on Wireless Energy Harvesting for Internet of Things, 2018.
- Guest Editor, IEEE Wireless Communication Magazine on Content-Centric Collaborative Edge Caching in 5G Mobile Internet, 2017.
- Guest Editor, IEEE Communication Magazine Special Issue on Heterogeneous Ultra Dense Networks, 2017.
- Guest Editor, IEEE Transactions on Emerging Topics in Computing, “Spectrum Sharing and Aggregation for Future Wireless Networks,” 2016.
- Guest Editor, IEEE Transactions on Emerging Topics in Computing, Special Issue on “Big Data Computing for Smart Grid” 2016.
- Guest Editor, IEEE Wireless Communications Magazine, Special Issue on Wireless Powered Communications Networks, 2016.
- Guest Editor, IEEE Access, Special Issue on Ultra-Dense Cellular Networks, 2016.
- Guest Editor, EURASIP Journal on Wireless Communications and Networking thematic series on “Full-Duplex Radio: Theory, Design, and Applications”, 2016.

- Guest Editor, JCN Special Issue On Big Data Over Networks, 2015.
- Guest Editor, JCN Special Issue On Cyber Physical Systems, 2013.
- Guest Editor, IEEE Network Magazine, Special Issue on Security in Cognitive Radio Networks, 2012.
- Guest Editor, IEEE Journal on Selected Areas in Communications, “Cooperative Networking: Challenges and Applications,” 2011.
- Guest Editor, Special Issue on Game Theory in Wireless Networks, EURASIP Journal on Advances in Signal Processing, 2009.
- Guest Editor, Special Issue on Fairness of Radio Resource Management Techniques in Wireless Networks, EURASIP Journal on Wireless Communications and Networking, 2009.
- Guest Editor, Special Issue on Cross-layer Optimized Wireless Multimedia Communications, Journal of Advances in Multimedia, 2007.

### **Conference Organizer**

- General Chair, MobiQuitous, 2019.
- Workshop Organizer, Wireless Energy Harvesting Communication Networks, IEEE Globecom, 2018.
- Workshop Organizer, 5G Ultra Dense Networks, IEEE International Conference on Communications, 2018.
- Publicity Chair, the 23rd Asia Pacific Conference on Communications, 2017.
- Publication Co-Chair, IEEE International Conference on Communications in China, 2017.
- Steering Committee, Wireless Energy Harvesting Communication Networks Workshop, IEEE Globecom, 2016.
- TPC Co-Chair, Wireless Communications Systems Symposium, IEEE International Conference on Communications in China, 2016.
- TPC Chair, IEEE International Conference on Communications, Workshop on Wireless Physical Layer Security, 2016.
- TPC Chair, the 2nd International Conference on Big Data Computing and Communication (BIGCOM), 2016.
- TPC Chair, IEEE Workshop on Wireless Powered Communication Networks (WPC-Nets), together with IEEE WCNC 2016.
- Chair, IEEE GlobalSIP 2014 Workshop on Game Theory for Signal Processing and Communications, 2014.
- Organizing Committee, IEEE International Conference on Communications, Workshop on Wireless Physical Layer Security, 2015.
- Symposium Chair, Wireless Networking, IEEE International Conference on Communications in China, 2013.
- General Chair, 1st IEEE INFOCOM Workshop on Communications and Control for Sustainable Energy Systems: Green Networking and Smart Grids, 2012.
- TPC Chair, IEEE INFOCOM Workshop on Communications and Control for Smart Energy Systems (CCSES), 2013, 2014.
- Program Chair, International Workshop on Practical Issues and Applications in Next Generation Wireless Networks (PINGEN), in conjunction with ACM MOBICOM 2012, Istanbul, Turkey, August 22-26, 2012.
- Organizing Committee, Communications Technologies for Smart Grid, IEEE Globecom Workshop, 2011.

- Wireless Communications Symposia Chair, IEEE International Conference on Computer Communications and Networks (ICCCN) Conference, 2011.
- Wireless Communications Symposia Co-Chair, 74th IEEE Vehicular Technology Conference (VTC), Fall 2011.
- Communication and Information Theory Symposia Co-Chair of the 6th International Wireless Communications and Mobile Computing Conference (IWCMC), 2010 (best symposium), 2012.
- Local Chair of The Seventh International ICST Conference on Heterogeneous Networking for Quality, Reliability, Security and Robustness (QShine), 2010.
- Publicity Co-chair of Conference on Decision and Game Theory for Security (GameSec), 2010.
- Cooperative and Cognitive Networks Workshop Co-Chair of International Wireless Communications and Mobile Computing Conference (IWCMC 2009).
- MAC Symposium Vice Chair of IEEE Wireless Communications and Networking Conference, 2008.
- Publicity Chair of Cognitive Radio Workshop with IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC) 2008, 2012.

### **Tutorials**

- “UAV Applications over Cellular Networks: Sensing, Communication, and Computation,” IEEE International Conference on Communication (ICC) 2019.
- “Signal Processing for Big Data Analytics: Fundamental and Applications,” IEEE Global Communications Conference (Globecom), 2018.
- “Big Data Signal Processing for Communication Networks,” IEEE Global Communications Conference (Globecom), 2017.
- “5G Wireless Communications: Enabling Technologies and Resource Management,” IEEE Global Communications Conference (Globecom), 2016.
- “Full-Duplex Communications and Networks,” IEEE International Conference on Communications in China (ICCC), 2016.
- “Distributed Resource Allocation for 5G Communications and Networks,” IEEE International Conference on Communications (ICC), 2016.
- “Full-Duplex Communications and Networks: Fundamentals, Technologies, and Applications,” IEEE Global Communications Conference (Globecom) 2015.
- “Resource Allocation for Full-Duplex Communication and Networks,” IEEE International Conference on Communication (ICC) 2015.
- “Full-Duplex Wireless Communication and Networks: Key Technologies and Applications”, IEEE International Conference on Communication in China (ICCC) 2014.
- “Game-theoretic Methods for Device-to-Device Communications”, IEEE International Conference on Communication (ICC) 2014.
- “Wireless Device-to-Device Communications and Networks”, IEEE Global Communications Conference (Globecom) 2013.
- “Smart Grid Communications and Networking”, IEEE International Conference on Communication (ICC) 2013.
- “Resource Allocation in Wireless Physical Layer Security,” IEEE Wireless Communications and Networking Conference (WCNC) 2013.
- “Device to Device Communication for Next Generation Wireless Networks”, IEEE International Conference on Communication in China (ICCC) 2013.
- “Smart Grid Communications and Networking,” CHINACOM-2012.

- “Application of Game Theory for Designing Cognitive Radio Networks,” IEEE International Conference and Communication (ICC) 2010.
- “Coalitional Game Theory in Wireless Networks,” IEEE Wireless Communications and Networking Conference (WCNC) 2010.
- “Game Theory for Cognitive Radio Networks,” IEEE Global Communications Conference (Globecom) 2009.

### **Technical Program Committee**

- Member of Technical Program Committee of IEEE/ACM INFOCOM, 2011-2019.
- Member of Technical Program Committee of IEEE Global Communications Conference, 2005-2019.
- Member of Technical Program Committee of IEEE International Conference on Communications, 2004-2019.
- Member of Technical Program Committee of IEEE Wireless Communications and Networking Conference, 2005-2019.
- Member of Technical Program Committee of IEEE SmartGridComm, 2012-2019.
- Member of Technical Program Committee of IEEE GlobalSIP, 2014-2018.
- Member of Technical Program Committee of IEEE International Conference on Distributed Computing Systems (ICDCS) 2019.
- Member of Technical Program Committee of IEEE WiSEE, 2018.
- Member of Technical Program Committee of IEEE COMNETSAT, 2018.
- Member of Technical Program Committee of IEEE 7th International Conference on Cloud Networking (CloudNet), 2018
- Member of Technical Program Committee of International Conference on Computing, Networking and Communications (ICNC), 2019
- Member of Technical Program Committee of IEEE International Conference on Computer Communications and Networks (ICCCN) Conference, 2007, 2009, 2014, 2017.
- Member of Technical Program Committee of IEEE Milcom, 2016, 2017, 2018.
- Member of Technical Program Committee of International Conference on Wireless Communications and Signal Processing, 2017, 2018.
- Member of Technical Program Committee of IEEE International Symposium on New Frontiers in Dynamic Spectrum Access Networks (DYSPAN), 2011.
- Member of Technical Program Committee of IEEE 10th International Symposium of Modeling and Optimization of Mobile, Ad Hoc, and Wireless Networks (WiOpt), 2012, 2013, 2014.
- Member of Technical Program Committee of IEEE Conference on Communications and Network Security, 2013.
- Member of Technical Program Committee of IEEE International Conference on Green Computing and Communications, 2013
- Member of Technical Program Committee of IEEE International Conference on Communications, Workshop SmallNets, 2013.
- Member of Technical Program Committee of 8th international conference on Wireless algorithms, systems, and applications, 2013.
- Member of Technical Program Committee of Conference on Decision and Game Theory for Security (GameSec), 2012.
- Member of Technical Program Committee of IEEE International Conference on Communications in China, 2012, 2014, 2017.
- Member of Technical Program Committee of the 10th IEEE International Conference

- on Mobile Ad hoc and Sensor Systems (MASS), 2013.
- Member of Technical Program Committee of the 8th International workshop on Resource Allocation and Cooperation in Wireless Networks, 2012.
  - Member of Technical Program Committee of 2012 International Conference on Wireless Communications and Signal Processing, 2012, 2014.
  - Member of Technical Program Committee of Fifth International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP), 2011.
  - Member of Technical Program Committee of IEEE Consumer Communications and Networking Conference 2005, 2006, 2008, 2009.
  - Member of Technical Program Committee of Workshop on “Cognitive Wireless Networks and Systems - Cognitive Radio Networking” 2009.
  - Member of Technical Program Committee of ChinaCom 2008, 2009.
  - Member of Technical Program Committee of IEEE International Conference on Wireless and Mobile Computing, Networking and Communications, 2008, 2009.
  - Member of Technical Program Committee of IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC) 2010, 2013, 2014, 2015, 2016, 2017, 2018, 2019.
  - Member of Technical Program Committee of Third IEEE Workshop on Networking Technologies for Software Defined Radio (SDR) Networks, 2008.
  - Member of Technical Program Committee of First ACM International Workshop on Medical-Grade Wireless Networks, 2009.
  - Member of Technical Program Committee of 3rd ICST/ACM International Workshop on Game Theory in Communication Networks, Gamecomm2009, 2009.
  - Member of Technical Program Committee of Cognitive Wireless Communications and Networking (CWCN) Workshop, 2009.
  - Member of Technical Program Committee of IEEE Vehicular Technology Conference Spring, 2004, Fall, 2007, Fall 2008, Spring 2009, Spring 2010, Spring 2011, Fall 2012.
  - Member of Technical Program Committee of International Wireless Communications and Mobile Computing Conference 2007, 2009.
  - Member of Technical Program Committee of The 8th IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (IEEE WoWMoM 2007), 2007.
  - Member of Technical Program Committee of International Symposium on Multimedia over Wireless (WirelessCom), 2005, 2006.
  - Member of Technical Program Committee of International Wireless Communication and Mobile Computing Conference (IWCMC), 2006, 2008, 2014, 2017, 2018, 2019.
  - Member of Technical Program Committee of IEEE Canadian Conference on Electrical & Computer Engineering (CCECE), 2018.
  - Member of Technical Program Committee of 12th Communications and Networking Simulation Symposium (CNS'09).
  - Member of Technical Program Committee of International Conference on Quality of Service in Heterogeneous Wired/Wireless Networks (QShine), 2004, 2005, 2006.
  - Member of Technical Program Committee of Workshop on Game Theory for Networks (GameNets) in First International Conference on Performance Evaluation Methodologies and Tools, 2006.
  - Member of Technical Program Committee of International Conference on Communications, Circuits and Systems, 2005, 2009.
  - Member of Technical Program Committee of the 15th Asia-Pacific Conference on



Communications, 2009.

### **Plenary, Keynote and Invited Talk in Conference**

- Keynote Talk, “Mean Field Game for Ultra Dense Networks,” *8th EAI International Conference on Game Theory for Networks*, Seoul, South Korea, April 2018.
- Invited Talk, “Big Data Analysis for Smart Grid,” *International Conference on Computing, Networking and Communications*, Hawaii, March 2018.
- Plenary Talk, “Case Study of Big Data Analysis for Smart Grid,” IFOST, Ulsan, Korea, May 2017
- Plenary Talk, “Full Duplex Communication and its Impact on Wireless Networking”, *IEEE Globecom Full Duplex Wireless Communications Workshop*, Washington DC, 2016.
- Keynote Speech, “Big Data Analysis: Techniques and Applications,” *DELTA Summer workshop*, Finland, August 2016.
- Invited Talk, “Resource Allocation in Small Cell Networks with Massive MIMO,” *International Conference on Computing, Networking and Communications*, Hawaii, February 2016.
- Invited Talk, “Multi-Block ADMM for Big Data Optimization in Smart Grid,” *International Conference on Computing, Networking and Communications*, Anaheim, CA, February, 2015.
- Keynote Speak, “Wireless Device-to-Device Communications and Game Theoretical Resource Allocation,” *International Workshop on Wireless Networks: Communication, Cooperation and Competition*, Hammamet, Tunisia, May 2014.
- Plenary Talk, “Cooperation for Cognitive Radios,” *the 4<sup>th</sup> International Workshop on Game Theory in Communication Networks (Gamecomm)*, Paris, France, May 2011.

### **Other Services**

- Best Paper Award Committee, IEEE International Conference on Communication, 2018
- Publication Award Committee, IEEE ComSoc Technical Committee on Cognitive Networks (TCCN), 2017, 2018
- Award Board Member, IEEE ComSoc Multimedia Communications Technical Committee (MMTC), 2010-2014.
- Panel, “The Data Scientist: Are they the missing link of analytics-enabled transformation?” Utility Analytics Week, Atlanta, GA, September, 2013.

### **Proposal, Book and Journal Reviewer**

- National Science Foundation Panelist
- The Research Grants Council (RGC) of Hong Kong;
- U.S.-Israel Binational Science Foundation;
- Canada Foundation for Innovation;
- Cambridge University Press; John Wiley & Sons, Inc.;
- IEEE Transactions on Information Theory; IEEE Transactions on Communications; IEEE Journal on Selected Areas on Communications, IEEE Transactions on Wireless Communications; IEEE Transactions on Signal Processing; IEEE Transactions on Mobile Computing; IEEE Transactions on Image Processing; IEEE Transactions on Circuits and Systems for Video Technology; IEEE Communication Letters; IEEE Signal Processing Magazine; IEEE Network Magazine; IEEE Communications Mag-

azine; IEEE Transactions on Broadcasting; IEEE Internet of Things Journal IEEE Transactions on Computational Intelligence and AI in Games; IEEE Transactions on Circuits and Systems I; Optimization and Engineering; Wiley Wireless Communications & Mobile Computing; EURASIP Journal on Applied Signal Processing; ACM Mobile Computing and Communications Review; IEE Proceeding on Communications; Transactions on Computational Intelligence and AI in Games.

### University Services

- Director of Computer System Engineering MS Program.
- Faculty Search Committee
- Graduate Course Committee
- Graduate Admission Committee
- ECE Faculty Goal Setting Committee

### PUBLICATIONS

#### Books

1. Zhu Han and K. J. Ray Liu, *Resource Allocation for Wireless Networks: Basics, Techniques, and Applications*, Cambridge University Press, UK, April, 2008.
2. Ekram Hossain, Dusit Niyato, and Zhu Han, *Dynamic Spectrum Access and Management in Cognitive Radio Networks*, Cambridge University Press, UK, 2009.
3. Zhu Han, Dusit Niyato, Walid Saad, Tamer Basar, and Are Hjørungnes, *Game Theory in Wireless and Communication Networks: Theory, Models and Applications*, Cambridge University Press, UK, 2011.
4. Zhu Han, Husheng Li, and Wotao Yin, *Compressive Sensing for Wireless Networks*, Cambridge University Press, UK, 2013 (Chinese version by Tsinghua University Press Limited 2014).
5. Lingyang Song, Dusit Niyato, Zhu Han, and Ekram Hossain, *Wireless Device-to-Device Communications and Networks*, Cambridge University Press, UK, 2015 (Chinese version by China Machine Press 2016).
6. Zhu Han, Mingyi Hong, and Dan Wang, *Signal Processing and Networking for Big Data Applications*, Cambridge University Press, UK, 2017.
7. Lingyang Song, Risto Wichman, Yonghui Li, and Zhu Han, *Full-Duplex Communications and Networks*, Cambridge University Press, UK 2017.
8. Zhu Han, Dusit Niyato, Walid Saad, and Tamer Basar, *Game Theory for Next-Generation Wireless and Communication Networks: Modeling, Analysis, and Design*, in print Cambridge University Press, UK.
9. Dusit Niyato, Nguyen Cong Luong, Ping Wang, and Zhu Han, *Auction Theory for Data Communications and Networking: Fundamentals and Applications*, contract with Cambridge University Press, UK.

#### Edited Book

10. Ekram Hossain, Zhu Han, and Vincent Poor, *Smart Grid Communications and Networking*, Cambridge University Press, UK, 2012 (Chinese version by Publishing House of Electronic Industry, China, 2013).

#### Brief Books

1. Hongliang Zhang, Lingyang Song, and Zhu Han, "UAV Communications over Cellular Networks," submitted to Springer Science + Business Media, LLC.
2. Miao Pan, Jinyi Wang, Sai Mounika Errapotu, Xinyue Zhang, Jiahao Ding, and Zhu Han, "Big Data Analytics: Privacy for Cyber-Physical Systems," contract with Springer Science + Business Media, LLC.
3. Huaqing Zhang, Sami Khairy, Lin X. Cai, and Zhu Han, "Resource Allocation in Unlicensed Long Term Evolution HetNets," Springer Science + Business Media, LLC, 2017.
4. Zhu Han, Yunan Gu, and Walid Saad, "Matching Theory for Wireless Networks," Springer Science + Business Media, LLC, 2017.
5. Yanru Zhang and Zhu Han, "Contract Theory For Wireless Networks," Springer Science + Business Media, LLC, 2017.
6. Hongliang Zhang, Lingyang Song, Zhu Han, and Yingjun (Angela) Zhang, "Hypergraph Theory in Wireless Communication Networks," Springer Science + Business Media, LLC, 2017.
7. Tianyu Wang, Lingyang Song, Walid Saad, and Zhu Han, "Overlapping Coalition Formation Games in Wireless Communication Networks," Springer Science + Business Media, LLC, 2016.
8. Yun Liao, Tianyu Wang, Lingyang Song and Zhu Han, "Listen and Talk: Full-duplex Cognitive Radio Networks," Springer Science + Business Media, LLC, 2016.
9. Dan Wang and Zhu Han, "Sublinear Algorithms for Big Data Applications," Springer Science + Business Media, LLC, 2015.
10. Chen Xu, Lingyang Song and Zhu Han, "Resource Management for Device-to-Device Underlay Communication," Springer Science + Business Media, LLC, 2013.

### Book Chapters

1. Haijun Zhang, George K. Karagiannidis, and Zhu Han, "Power Control in Full Duplex Ultra-Dense Networks," *Ultra-Dense Networks*, Cambridge University Press, Cambridge, UH, editors: Haijun Zhang, Jemin Lee, Tony S. Quek and Chih-Lin I, 2019
2. Mbazingwa E. Mkiramweni, Chungang Yang, Zhu Han, "Mean Field Games for 5G Ultra-Dense Networks: A Resource Management Perspective," *Ultra-Dense Networks for 5G and Beyond: Modelling, Analysis and Design*, Wiley, Hoboken, NJ, editors: Trung Q. Duong, Xiaoli Chu, and Himal A Suraweera, 2019.
3. Huaqing Zhang and Zhu Han, "Distributed Resource Allocation for Network Virtualization," *Handbook of Cognitive Radio*, Springer, editors: Lingyang Song and Wei Zhang, 2019.
4. Neetu Raveendran, Kaigui Bian, Lingyang Song, and Zhu Han, "A Social Choice Theoretic Approach for Analyzing User Behavior in Online Streaming Mobile Applications," *Game Theory for Networking Applications*, EAI/Springer, editors: Ju Bin Song, Husheng Li, and Marceau Coupechoux, 2019.
5. Fahira Sangare and Zhu Han, "RF Energy Harvesting Networks: Existing Techniques and Hardware Technology," *Wireless Energy Harvesting for Future Wireless*

- Communications*, Springer-Verlag New York, USA, editors: Nalin Jayakody, John Thompson, Symeon Chatzinotas, and Salman Durrani, 2018.
6. Yunan Gu, Lin Cai, Lingyang Song, and Zhu Han, "LTE-Unlicensed and Corresponding Distributed Resource Allocation," *Emerging Technologies for 5G Wireless Systems*, Cambridge University Press, editors: Vincent Wong, Robert Schober, Wing Kwan Ng and Li-Chun Wang, 2017
  7. Lanchao Liu, Zhu Han, Shuguang Cui, and Vincent Poor, "Big Data Processing for Smart Grid Security," *Big Data over Networks*, Cambridge University Press, edited by Alfred Hero, Jose' Moura, Tom Luo, and Shuguang Cui, 2014.
  8. Ju Bin Song and Zhu Han, "Nonparametric Bayesian prediction of primary users' air traffics in cognitive radio networks," *Software-Defined and Cognitive Radio Technologies for Dynamic Spectrum Access and Management*, IGI-Global, editors: Naima Kaabouch and Wen Chen Hu, 2014.
  9. Rongqing Zhang, Lingyang Song, Zhu Han, and Bingli Jiao, "Relay and Jammer Cooperation as a Coalitional Game," *Physical Layer Security in Wireless Communications*, Auerbach Publications, CRC Press, Taylor&Francis Group, editors: Sean Zhou, Lingyang Song, and Yan Zhang, 2013.
  10. Rongqing Zhang, Lingyang Song, Zhu Han, and Bingli Jiao, "Ascending Clock Auction for Physical Layer Security," *Physical Layer Security in Wireless Communications*, Auerbach Publications, CRC Press, Taylor&Francis Group, editors: Sean Zhou, Lingyang Song, and Yan Zhang, 2013.
  11. Tianyu Wang, Lingyang Song, Zhu Han, and Bingli Jiao, "Dynamic Resource Allocation in Cognitive Radio Relay Networks Using Sequential Auctions," *Mechanisms and Games for Dynamic Spectrum Allocation*, Cambridge University Press, editors: H. Vincent Poor, Holger Boche, Tansu Alpcan, and Michael Honig, 2013.
  12. Walid Saad, Zhu Han, and Are Hjørungnes, "Coalitional Games for Cooperative Wireless Cellular Networks," *Cooperative Cellular Wireless Networks*, Cambridge University Press, editors: Ekram Hossain, Dong In Kim, and Vijay K. Bhargava, 2011.
  13. Ninoslav Marina, Walid Saad, Zhu Han, and Are Hjørungnes, "Modeling Malicious Behavior in Cooperative Cellular Wireless Networks," *Cooperative Cellular Wireless Networks*, Cambridge University Press, editors: Ekram Hossain, Dong In Kim, and Vijay K. Bhargava, 2011.
  14. Guan-Ming Su and Zhu Han, "Auction Based Resource Allocation for Cooperative Wireless Video Transmission," *Multimedia Analysis, Processing, and Communications*, Springer, editors: Weisi Lin, Dacheng Tao, Janusz Kacprzyk, Zhu Li, Ebroul Lzquierdo, and Haohong Wang, 2011.
  15. Rajatha Raghavendra and Zhu Han, "Friend or Foe in OFDM Interference Channel," *Game Theory for Wireless Communication and Theory*, Auerbach Publications, Taylor & Francis Group, editors: Yan Zhang and Mohsen Guizani, 2011.
  16. Jianwei Huang and Zhu Han, "Game Theory for Dynamic Spectrum Access," invited, *Cognitive Radio Networks: Architectures, Protocols and Standards*, Auerbach Publications, Taylor & Francis Group, editors: Yan Zhang, Jun Zheng and Hsiao-Hwa Chen, 2010.

17. Yan Sun and Zhu Han, “Trusted Cooperative Transmission: Turning a Security Weakness into Security Enhancement,” *Securing Wireless Communications at the Physical Layer*, editors: Ruoheng Liu and Wade Trappe, Springer-Verlag, 2009.
18. Zhu Han and H. Vincent Poor, “Impact of Cooperative Transmission over Network Routing,” *Cooperative Wireless Communications*, Auerbach Publications, Taylor and Francis Group, editors: Yan Zhang, Hsiao-Hwa Chen and Mohsen Guizani, 2009.
19. Zhu Han, “Degrees of Cooperation in Dynamic Spectrum Access for Distributed Cognitive Radios,” invited, *Cognitive Wireless Communication Networks*, Springer, editors: Ekram Hossain and Vijay K. Bhargava, 2007.

### Transaction/Magazine/Letter Publications

#### *Published or Accepted*

1. Hui Chen, Xiaofeng Tao, Na Li, and Zhu Han, “Secrecy Performance Analysis for Hybrid Wiretapping System Using Random Matrix Theory,” to appear *IEEE Transactions on Wireless Communications*.
2. Tuan LeAnh, Nguyen H. Tran, Duy Trong Ngo, Zhu Han, and Choong Seon Hong, “Orchestrating Resource Management in LTE-Unlicensed Systems with Backhaul Link Constraints,” to appear *IEEE Transactions on Wireless Communications*.
3. Zehui Xiong, Shaohan Feng, Dusit Niyato, Ping Wang, Amir Leshem, and Zhu Han, “Joint Sponsored and Edge Caching Content Service Market: A Game-Theoretic Approach,” to appear *IEEE Transactions on Wireless Communications*.
4. Tra Huong Thi Le, Nguyen H. Tran, Phuong Luu Vo, Zhu Han, Mehdi Bennis, Choong Seon Hong, “Joint Cache Allocation with Incentive and User Association in Cloud Radio Access Networks Using Hierarchical Game,” to appear *IEEE Access*.
5. Neetu Raveendran, Huaqing Zhang, Dusit Niyato, Fang Yang, Jian Song, and Zhu Han, “VLC and D2D Heterogeneous Network Optimization: Equilibrium Problem with Equilibrium Constraints and Learning Approaches,” to appear *IEEE Transactions on Wireless Communications*.
- 6.
7. Zheng Chang, Di Zhang, Timo Hamalainen, Zhu Han, and Tapani Ristaniemi, “Incentive Mechanism for Resource Allocation in Wireless Virtualized Networks with Multiple Infrastructure Providers,” to appear *IEEE Transactions on Mobile Computing*.
8. Xiaoyuan Liang, Xunsheng Du, Guiling Wang, and Zhu Han, “A Deep Q Learning Network for Traffic Lights’ Cycle Control in Vehicular Networks,” to appear *IEEE Transactions on Vehicular Technology*.
9. Xinyue Zhang, Jingyi Wang, Hongning Li, Qingqi Pei, Miao Pan, and Zhu Han, “TPP: Trajectory Privacy Preservation against Tensor Voting Based Inference Attacks,” to appear *Access*.
10. Xinyue Zhang, Jingyi Wang, Yong Li, Riku Jantti, Miao Pan, and Zhu Han, “Catching All Pokemon: Virtual Reward Optimization with Tensor Voting Based Trajectory Privacy,” to appear *IEEE Transactions on Vehicular Technologies*.

11. Dong Wang, Bo Bai, Wenbo Zhao, and Zhu Han, "A Survey of Mathematical Optimization on Wireless Physical Layer Security," to appear *IEEE Communications Survey & Tutorials*.
12. Linling Kuang, Chi Zhang, Chunxiao Jiang, Jin Jin, Yuanzhi He, and Zhu Han, "Spatial Spectrum Sharing for Satellite and Terrestrial Communication Networks," to appear *IEEE Transactions on Aerospace & Electronic Systems*, Special Section on Spectrum Sharing Systems.
13. Yifei Wei, Da Guo, F. Richard Yu, and Zhu Han, "Joint Optimization of Caching, Computing, and Radio Resources for Mobile Edge Networks Using Natural Actor-Critic Deep Reinforcement Learning," to appear, *IEEE Internet of Things Journal*, Special Issue on AI-Enabled Cognitive Communications and Networking for IoT.
14. Ye Yu, Xiangyuan Bu, Kai Yang, Zhikun Wu, and Zhu Han, "Green Large-Scale Fog Computing Resource Allocation using Joint Benders Decomposition, Dinkelbach Algorithm, ADMM, and Branch-and-bound," to appear, *IEEE Transactions on Internet of Things*, special issue on Emerging Computing Offloading for IoTs: Architectures, Technologies, and Applications.
15. Muhammad Waqas, Yong Li, Manzoor Ahmed, Depeng Jin, and Zhu Han, "Mobility-Aware Fog Computing in Dynamic Environments: Understandings and Implementation," to appear *IEEE Access*.
16. Liqin Shi, Liqiang Zhao, Gan Zheng, and Zhu Han, "Incentive Design for Cache-Enabled D2D Underlaid Cellular Networks Using Stackelberg Game," to appear *IEEE Transactions on Vehicular Technology*.
17. Sai Mounika Errapotu, Hongning Li, Rong Yu, Shaolei Ren, Qingqi Pei, Miao Pan, and Zhu Han, "Clock Auction Inspired Privacy Preserving Emergency Demand Response in Colocation Data Centers," to appear *IEEE Transactions on Dependable and Secure Computing*.
18. Yutong Ai, Li Wang, Zhu Han, Ping Zhang, and Lajos Hanzo, "Social Networking and Caching Aided Collaborative Computing for the Internet of Things," to appear *IEEE Communications Magazine*.
19. Zehui Xiong, Shaohan Feng, Wenbo Wang, Dusit Niyato, Ping Wang, and Zhu Han, "Cloud/Fog Computing Resource Management and Pricing for Blockchain Networks," to appear *IEEE Internet of Things Journal*.
20. Wenbo Wang, Zehui Xiong, Dusit Niyato, Ping Wang, and Zhu Han, "A Hierarchical Game with Strategy Evolution for Mobile Sponsored Content and Service Markets," to appear *IEEE Transactions on Communications*.
21. Zheng Chang, Zhongyu Wang, Xijuan Guo, Tapani Ristaniemi, and Zhu Han, "Distributed Resource Allocation for Energy Efficiency in OFDMA Multi-cell Networks with Wireless Power Transfer," to appear *IEEE Journal on Selected Areas in Communications*, special issue on Wireless Transmission of Information and Power.
22. Lixin Li, Yang Xu, Ziheng Zhang, Jiaying Yin, Wei Chen, and Zhu Han, "A Prediction-based Charging Policy and Interference Mitigation Approach for Ultra-dense Wireless Powered Sensor Networks," to appear *IEEE Journal on Selected Areas on Communications*, Special Issue on Wireless Transmission of Information and Power.

23. Hongtao Zhang, Ying Chen, and Zhu Han, "Explicit Modelling and Performance Analysis of Cell Group Selection with Backhaul-Aware Biasing," *IEEE Wireless Communication Letter*.
24. Guangming Nie, Linyuan Zhang, Guoru Ding, Qihui Wu, and Zhu Han, "Byzantine Attacker Identification in Collaborative Spectrum Sensing: A Robust Defense Framework," to appear *IEEE Transactions on Mobile Computing*
25. Lanchao Liu, Dusit Niyato, Ping Wang and Zhu Han, "Scalable Traffic Management for Mobile Cloud Services in 5G Networks," to appear, *IEEE Transactions on Network and Service Management*.
26. Xiaofei Wang, Min Chen, Victor C. M. Leung, Zhu Han, Kai Hwang, "Integrating Social Networks with Mobile Device-to-Device Services," to be published in *IEEE Transactions on Service Computing*, 2018
27. Anupam Kumar Bairagi, Nguyen H. Tran, Zhu Han and Choong Seon Hong, "A Game-Theoretic Approach for Fair Coexistence between LTE-U and Wi-Fi Systems," to appear *IEEE Transactions on Vehicular Technology*.
28. Tai M. Ho, Nguyen H. Tran, Zhu Han, Long Bao Le, and Choong Seon Hong, "Network Virtualization with Energy Efficiency Optimization for Wireless Heterogeneous Networks," to appear *IEEE Transactions on Mobile Computing*.
29. Sami Khairy, Mengqi Han, Lin X. Cai, Yu Cheng, and Zhu Han, "A Renewal Theory based Analytical Model for Multi-channel Random Access in IEEE 802.11ac/ax," to appear *IEEE Transactions on Mobile Computing*.
30. Nguyen Cong Luong, Ping Wang, Dusit Niyato, and Zhu Han, "Applications of Economic and Pricing Models for Resource Management in 5G Wireless Networks: A Survey," to appear *IEEE Communications Surveys & Tutorials*.
31. Haichao Wang, Jinlong Wang, Jin Chen, Guoru Ding, Yuzhou Li, and Zhu Han, "Spectrum Sharing Planning for Full Duplex UAV Relaying Systems with Underlaid D2D Communications," to appear *IEEE Journal on Selected Areas in Communications*, Special Issue on Airborne Communication Networks.
32. Zijie Zheng, Lingyang Song, Zhu Han, Geoffrey Ye Li and H. Vincent Poor, "Game Theory for Big Data Processing: Multi-Leader Multi-Follower Game-based ADMM," to appear *IEEE Transactions on Signal Processing*.
33. Ying He, F. Richard Yu, Nan Zhao, Hongxi Yin, and Zhu Han, "Trust-based Social Networks with Computing, Caching and Communications: A Deep Reinforcement Learning Approach," to appear *IEEE Transactions on Network Science and Engineering*.
34. Tengjiao Wang, Jingbo Tan, Wenbo Ding, Yanru Zhang, Fang Yang, Jian Song, and Zhu Han, "Inter-Community Detection Scheme for Social Internet of Things: A Compressive Sensing Over Graphs Approach," accepted *IEEE Internet of Things Journal*.
35. Sai Mounika Errapotu, Jingyi Wang, Yanmin Gong, Jin-Hee Cho, Member, IEEE, Miao Pan, and Zhu Han, "SAFE : Secure Appliance Scheduling for Flexible and Efficient Energy Consumption for Smart Home IoT," *IEEE Internet of Things Journal*, special issue on AI Powered Network Management: Data Driven Approaches under Resource Constraints.

36. Haichao Wang, Jinlong Wang, Guoru Ding, and Zhu Han, "Joint Time Scheduling and Power Control for Energy Harvesting-Powered D2D Communications Underlying Cellular Networks," accepted *IEEE Transactions on Vehicular Technology*.
37. Zehui Xiong, Yang Zhang, Dusit Niyato, Ping Wang, and Zhu Han, "When Mobile Blockchain Meets Edge Computing: Challenges and Applications," to appear *IEEE Communication Magazine*.
38. Kuo Chun Tsai, Li Wang, and Zhu Han, "Caching for Mobile Social Networks with Deep Learning: Twitter Analysis for 2016 U.S. Election," to appear, *IEEE Transactions on Network Science and Engineering*, special issue on Special Issue on Learning-based Modeling, Management and Control for Computer and Communication Networks.
39. Manzoor Ahmed, Yong Li, Muhammad Waqas, Muhammad Sheraz, Depeng Jin, and Zhu Han, "A Survey on Social-Aware Device-to-Device Communications," to appear *IEEE Communication Surveys & Tutorials*.
40. S. M. Ahsan Kazmi, Nguyen H. Tran, Walid Saad, Zhu Han, Tai Manh Ho, Thant Zin Oo, and Choong Seon Hong, "Decentralized Spectrum Allocation for Interference Management in D2D underlying Cellular Networks," accepted, *IEEE Transactions on Mobile Computing*.
41. Sicong Liu, Fang Yang, Xianbin Wang, Jian Song, and Zhu Han, "Structured Compressed Sensing Based Impulsive Noise Cancellation for MIMO Systems," to appear *IEEE Transactions on Vehicular Technology*.
42. Huaqing Zhang, Yong Xiao, Shengrong Bu, Richard Yu, Dusit Niyato, and Zhu Han, "Distributed Resource Allocation for Data Center Networks: A Hierarchical Game Approach," accepted *IEEE Transactions on Cloud Computing*.
43. Jun Du, Chunxiao Jiang, Zhu Han, Shui Yu, Qiang Guo and Yong Ren, "Resource Allocation in Space Multi-Access Systems," to appear *IEEE Transactions on Aerospace and Electronic Systems*.
44. Tingting Liu, Jun Li, Feng Shu, Guowei Shi, and Zhu Han, "Distributed Resource Allocation in Caching-enabled Heterogeneous Cellular Networks based on Matching Theory," invited, *CCF Transactions on Networking*
45. Yiming Zhao, Wei Song, and Zhu Han, "Social-Aware Data Dissemination via Device-to-Device Communications: Fusing Social and Mobile Networks with Incentive Constraints," to appear *IEEE Transactions on Services Computing*.
46. Lei Xu, Chunxiao Jiang, Nengqiang He, Zhu Han, and Abderrahim Benslimane, "Trust-based Collaborative Privacy Management in Online Social Networks," *IEEE Transactions on Information Forensics and Security*, vol. 14, no. 1, p.p. 48-60, January 2019.
47. Hung Khanh Nguyen, Amin Khodaei, and Zhu Han, "Incentive Mechanism Design for Integrated Microgrids in Peak Ramp Minimization Problem," *IEEE Transactions on Smart Grid*, vol. 9, no. 6, p.p. 5774-5785 November 2018.
48. Duy H. N. Nguyen, Yanru Zhang, and Zhu Han, "Contract-Based Spectrum Allocation for Wireless Virtualized Networks," *IEEE Transactions on Wireless Communications*, vol. 17, no. 11, p.p. 7222-7235, November 2018.



49. Xiaohan Wei, Ling Qing, and Zhu Han, “Robust Group Lasso: Model and Recoverability,” *Linear Algebra and its Applications*, vol. 557, p.p. 134-173, November 2018.
50. Shuai Yu, Rami Langar, Xiaoming Fu, Li Wang, and Zhu Han, “Computation Offloading with Caching Enhancement for Mobile Edge Computing,” *IEEE Transactions on Vehicular Technology*, vol. 67, no. 11, p.p. 11098-11112, November 2018.
51. Reginald A. Banez, Haitao Xu, Nguyen H. Tran, Ju Bin Song, Choong Seon Hong, and Zhu Han, “Network Virtualization Resource Allocation and Economics Based on Prey-Predator Food Chain Model,” *IEEE Transactions on Communications*, vol. 66, no. 10, p.p. 4738–4752, October 2018.
52. Dinh Thai Hoang, Dusit Niyato, Diep Nguyen, Eryk Dutkiewicz, and Zhu Han, “A Dynamic Edge Caching Framework for Mobile 5G Networks,” *IEEE Communication Magazine*, vol. 25, no. 5, p.p. 95-103, October 2018.
53. Haitao Xu, Hung Khanh Nguyen, Lixin Li, Long Zhang, Xianwei Zhou, and Zhu Han, “Charging Control of Electric Vehicles in Smart Grid: A Stackelberg Differential Game based Approach,” invited, *MONET*, special issue on Game Theory for Networks, September 2018.
54. Jingbo Tan, Fang Yang, Changyong Pan, Jian Song, Zhu Han, “Block-Wise Compressive Sensing Based Multiple Line Outage Detection for Smart Grid”, *IEEE Access*, vol. 6, p.p. 50984–50993, September 2018.
55. Sai Mounika Errapotu, Jingyi Wang, Xuanheng Li, Zaixin Lu, Wei Li, Miao Pan, and Zhu Han, “Bid Privacy Preservation in Matching Based Multi-Radio Multi-Channel Spectrum Trading,” *IEEE Transactions on Vehicular Technology*, vol. 67, no. 9, p.p. 8336-8347, September 2018.
56. Ruozhou Yu, Guoliang Xue, Mehdi Bennis, Xianfu Chen, and Zhu Han, “HS-DRAN: Hierarchical Software-Defined Radio Access Network for Distributed Optimization,” *IEEE Transactions on Vehicular Technology*, vol. 67, no. 9, p.p. 8623–8636, September 2018.
57. Yiming Xu, Hui-Ming Wang, and Zhu Han, “Cooperative Secure Transmission by Exploiting Social Ties in Random Networks,” *IEEE Transactions on Communications*, vol. 66, no. 8, p.p. 3610–3622, August 2018.
58. Amjad Ali, Doug Young Suh, Nguyen H. Tran, Zhu Han, Dusit Niyato, and Syed Asad Hussain, “RaptorQ-Based Efficient Multimedia Transmission over Cooperative Cellular Cognitive Radio Networks,” *IEEE Transactions on Vehicular Technology*, vol. 67, no. 8, p.p. 7275-7289, August 2018.
59. Zijie Zheng, Lingyang Song, Zhu Han, Geoffrey Ye Li, and H. Vincent Poor, “A Stackelberg Game Approach to Proactive Caching in Large-Scale Mobile Edge Networks,” *IEEE Transactions on Wireless Communications*, vol. 17, no. 8, p.p. 5198-5211, August 2018.
60. Xiuhua Li, Xiaofei Wang, Peng-Jun Wan, Zhu Han, and Victor C. M. Leung, “Hierarchical Edge Caching in Device-to-Device Aided Mobile Networks: Modeling, Optimization, and Design,” *IEEE Journal on Selected Areas in Communications*, special issue on Caching for Communication Systems and Networks, vol. 36, no. 8, p.p. 1768–1785, August 2018.

61. Wei Huang, Wei Chen, Bo Bai, and Zhu Han, "Wiretap Channel with Full-Duplex Proactive Eavesdropper: A Game Theoretic Approach," *IEEE Transactions on Vehicular Technology*, vol. 67, no. 8, p.p. 7658–7663, August 2018.
62. Yunan Gu, Zheng Chang, Miao Pan, Lingyang Song, and Zhu Han, "Joint Radio and Computational Resource Allocation in IoT Fog Computing," *IEEE Transactions on Vehicular Technology*, vol. 67, no. 8, p.p. 7475–7484, August 2018.
63. Yue Meng, Chunxiao Jiang, Zhu Han, Tony Q. S. Quek, and Yong Ren, "Social Learning Based Inference for Crowdsensing in Mobile Social Networks," *IEEE Transactions on Mobile Computing*, vol. 17, no. 8, p.p. 1966–1979, August 2018.
64. Xiao Tang, Pingyi Ren and Zhu Han, "Hierarchical Competition as Equilibrium Program with Equilibrium Constraints Towards Security-Enhanced Wireless Networks," *IEEE Journal On Selected Areas In Communications*, special issue on Physical Layer Security For 5G Wireless Networks, vol. 36, no. 7, pp. 1564–1578, July 2018.
65. Xu Ma, Fang Yang, Sicong Liu, Jian Song, and Zhu Han, "Sparse Channel Estimation for MIMO-OFDM Systems in High-Mobility Situations," *IEEE Transactions on Vehicular Technology*, vol. 67, no. 7, pp. 6113–6124, July 2018.
66. Biling Zhang, Chunxiao Jiang, Jung-Lang Yu, and Zhu Han, "A Contract Game for Direct Energy Trading in Smart Grid," *IEEE Transactions on Smart Grid*, vol. 9, no. 3, pp. 2873–2884, July 2018.
67. Muhammad Waqas, Ming Zeng, Yong Li, Depeng Jin, and Zhu Han, "Mobility Assisted Content Transmission For Device-to-Device communication Underlying Cellular Networks," *IEEE Transactions on Vehicular Technology*, vol. 67, no. 7, p.p. 6410–6423, July 2018.
68. Biling Zhang, Xingwang Mao, Jung-Lang Yu, and Zhu Han, "Resource Allocation for 5G Heterogeneous Cloud Radio Access Networks with D2D Communication: A Matching and Coalition Approach," *IEEE Transactions on Vehicular Technology*, vol. 67, no. 7, p.p. 5883-5894, July 2018.
69. Anselme Ndikumana, Nguyen H. Tran, Tai Manh Ho, Dusit Niyato, Zhu Han, and Choong Seon Hong, "Joint Incentive Mechanism for Paid Content Caching and Price Based Cache Replacement Policy in Named Data Networking," *IEEE Access*, vol. 6, p.p. 33702-33717, June 2018.
70. Nam Tuan Nguyen, Kae Won Choi, Lingyang Song, and Zhu Han, "Roommates: An Unsupervised Indoor Peer Discovery Approach for LTE D2D Communications," *IEEE Transactions on Vehicular Technology*, vol. 67, no. 6, p.p. 5069–5083, June 2018.
71. Masud Arnob, Wei-Chuan Shih, Hung Nguyen, and Zhu Han, "Compressed sensing hyperspectral imaging in the 0.9-2.5  $\mu\text{m}$  short-wave infrared wavelength range using digital micro-mirror device and InGaAs linear array detector," *Applied Optics*, vol. 57, no. 18, p.p. 5019-5024, June 2018.
72. Hang Qin and Zhu Han, "Stochastic Resource Allocation for Well Control With Digital Oil Field Infrastructure," *IEEE System Journals*, vol. 12, no. 2, p.p. 1295–1306, June 2018.

73. Haowei Wang, Xiaofeng Tao, and Zhu Han, "Polar Coding for the Wiretap Channel with Shared Key," *IEEE Transactions on Information Forensics and Security*, vol. 13, no. 6, pp. 1351–1360, June 2018.
74. Yali Chen, Yong Niu, Bo Ai, and Zhu Han, "Resource Allocation for Device-to-Device Communications Underlying Heterogeneous Cellular Networks Using Coalitional Games," *IEEE Transactions on Wireless Communications*, vol. 17, no. 6, p.p. 4163–4176, June 2018.
75. Jingyi Wang, Sai Mounika Errapotu, Yanmin Gong, Lijun Qian, Riku Jantti, Miao Pan, and Zhu Han, "Data-Driven Optimization Based Primary Users' Operational Privacy Preservation," *IEEE Transactions on Cognitive Communications and Networking*, vol. 4, no. 2, p.p. 357-367, June 2018.
76. Jingyi Wang, Yunan Gu, Yanru Zhang, Hongyan Li, Miao Pan, and Zhu Han, "D-FROST: Distributed Frequency Reuse Based Opportunistic Spectrum Trading via Matching with Evolving Preferences," *IEEE Transactions on Wireless Communications*, vol. 17, no. 6, p.p. 3794–3806, June 2018.
77. Feng Shu, Yaolu Qin, Tingting Liu, Linqing Gui, Yijin Zhang, Jun Li, and Zhu Han, "Low-Complexity and High-Resolution Direction of Arrival Estimation for Hybrid Analog and Digital Massive MIMO Receive Array," *IEEE Transactions on Communications*, vol. 66, no. 6, p.p. 2487–2501, June 2018.
78. Xiaoran Fan, Han Ding, Yanyong Zhang, Wade Trappe, Zhu Han, and Richard Howard, "Energy-Ball: Wireless Power Transfer for Batteryless Internet of Things through Distributed Beamforming," *ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies*, vol. 2, no. 2, June 2018.
79. Wenbo Wang, Andres Kwasinski, Dusit Niyato, and Zhu Han, "Learning for Robust Routing Based on Stochastic Game in Cognitive Radio Networks," *IEEE Transactions on Communications*, vol. 66, no. 6, p.p. 2588-2602, June 2018.
80. Yaodong Zhang, Chunxiao Jiang, Zhu Han, Jian Yuan, and Jiannong Cao, "Green WiFi Management: Implementation on Partially Overlapped Channel," *IEEE Transactions on Green Communications and Networking*, vol. 2, no. 2, p.p. 346-359, June 2018.
81. Sean Xiao Lu, Niyato Dusit, Yong Xiao, Dong In Kim, and Zhu Han, "Ambient Backscatter Assisted Wireless Powered Communications," *IEEE Wireless Communications*, vol. 25, no. 2, p.p. 170-177, April 2018.
82. Jingjing Wang, Chunxiao Jiang, Zhu Han, Yong Ren, and Lajos Hanzo, "Internet of Vehicles: Sensing Aided Transportation Information Collection and Diffusion," *IEEE Transactions on Vehicular Technology*, vol. 67, no. 5, p.p. 3813-3825, May 2018.
83. Yaodong Zhang, Chunxiao Jiang, Jian Yuan, Zhu Han, and Merouane Debbah, "Coalition Formation Game Based Access Point Selection for LTE-U and Wi-Fi Coexistence," *IEEE Transactions on Industrial Informatics*, vol. 14, no. 4, pp. 1552-1563, April 2018 (*Best Journal Paper of IEEE Technical Committee on Green Communications & Computing*).
84. Yaodong Zhang, Chunxiao Jiang, Jingjing Wang, Zhu Han, Jian Yuan and Jiannong Cao, "Green WiFi Implementation and Management in Dense Autonomous

- Environments for Smart Cities”, *IEEE Transactions on Industrial Informatics*, special issue on Energy Informatics for Green Cities, vol. 14, no. 4, pp. 1552–1563, April 2018.
85. Qian Yang, Hui-Ming Wang, Tong-Xing Zheng, and Zhu Han, “Wireless Powered Asynchronous Backscatter Networks with Sporadic Short Packets: Performance Analysis and Optimization,” *IEEE Transactions on Internet of Things*, vol. 5, no. 2, p.p. 984–997, April 2018.
  86. Xianfu Chen, Zhu Han, Honggang Zhang, Guoliang Xue, Yong Xiao, and Mehdi Bennis, “Wireless Resource Scheduling in Virtualized Radio Access Networks Using Stochastic Learning,” *IEEE Transactions on Mobile Computing*, vol. 17, no. 4, pp. 961–974, April 2018.
  87. Linyuan Zhang, Guoru Ding, Qihui Wu, and Zhu Han, “Spectrum Sensing under Spectrum Misuse Behaviors: A Multi-Hypothesis Test Perspective,” *IEEE Transactions on Information Forensics and Security*, vol. 13, no. 4, p.p. 993–1007, April 2018.
  88. Li Wang, Huaqing Wu, Zhu Han, Ping Zhang, and H. Vincent Poor, “Multi-hop Cooperative Caching in Social IoT Using Matching Theory,” *IEEE Transactions on Wireless Communications*, vol. 17, no. 4, pp. 2127–2145, April 2018.
  89. Yanru Zhang, Yunan Gu, Miao Pan, Zaher Dawy, Nguyen Tran, and Zhu Han, “Multi-Dimensional Incentive Mechanism in Mobile Crowdsourcing with Moral Hazard,” *IEEE Transactions on Mobile Computing*, vol. 17, no. 3, p.p. 602–616, March 2018.
  90. Yingyu Li, Guangming Shi, Wotao Yin, Lanchao Liu, and Zhu Han, “A Distributed ADMM Approach with Decomposition Coordination for Mobile Data Offloading,” *IEEE Transactions on Vehicular Technology*, vol. 67, no. 3, pp. 2514–2530, March 2018.
  91. Yong Niu, Yu Liu, Yong Li, Zhangdui Zhong, and Zhu Han, “Exploiting Device-to-Device Communications to Achieve Energy Efficient Multicast Scheduling in mmWave Small Cells,” *IEEE Transactions on Communications*, vol. 66, no. 3, pp. 1093–1109, March 2018.
  92. Xiao Lu, Hai Jiang, Dusit Niyato, Dong In Kim, and Zhu Han, “Wireless-Powered Device-to-Device Communications with Ambient Backscattering: Performance Modeling and Analysis,” *IEEE Transactions on Wireless Communications*, vol. 17, no. 3 pp. 1528–1544, March 2018.
  93. Liang Xiao, Xiaoyue Wan, and Zhu Han, “PHY-Layer Authentication with Multiple Landmarks with Reduced Overhead,” *IEEE Transactions on Wireless Communications*, vol. 17, no. 3, pp 1676–1687, March 2018.
  94. Lingyang Song, Yun Jiang, and Zhu Han, “Stackelberg-type Channel State Information Feedback Control Game for Energy Efficiency in Wireless Networks,” *IET Communications*, vol. 12, no. 3, pp. 297–303, March 2018.
  95. Mohammad Esmalifalak, Huy Nguyen, Rong Zheng, Le Xie, Lingyang Song, and Zhu Han, “Stealthy Attack Against Electricity Market Using Independent Component Analysis,” *IEEE System Journal*, vol. 12, no. 1, p.p. 297–307, March 2018.

96. Yuzhe Yang, Zijie Zheng, Kaigui Bian, Lingyang Song, and Zhu Han, "Realtime Profiling of Fine-Grained Air Quality Index Distribution using UAV Sensing," *IEEE Transactions on Internet of Things*, vol. 5, no. 1, pp. 186–198, February 2018.
97. Qiuyang Shen, Xuqing Wu, Jiefu Chen, and Zhu Han, "Solving Geosteering Inverse Problems by Stochastic Hybrid Monte Carlo Method," *Journal of Petroleum Science and Engineering*, vol. 161, p.p. 9-16, February 2018.
98. Hung Khanh Nguyen, Amin Khodaei, and Zhu Han, "A Big Data Scale Algorithm for Optimal Scheduling of Integrated Microgrids," *IEEE Transactions on Smart Grid*, vol. 9, no. 1, pp. 274–282, January 2018.
99. Chungang Yang and Zhu Han, "Distributed Interference-Aware Power Control in Ultra-Dense Small Cell Networks: A Robust Mean Field Game," *IEEE Access*, vol. 6, pp. 12608–12619, January 2018.
100. Xiao Tang, Pinyi Ren, and Zhu Han, "Jamming Mitigation via Hierarchical Security Game for IoT Communications," *IEEE Access*, vol. 6, pp. 5766–5779, January 2018.
101. Yifei Wei, Mei Song, F. Richard Yu, Zhu Han, "User Scheduling and Resource Allocation in HetNets with Hybrid Energy Supply: An Actor-Critic Reinforcement Learning Approach," *IEEE Transactions on Wireless Communications*, vol. 17, no. 1, p.p. 680-692, January 2018.
102. Nguyen Cong Luong, Dinh Thai Hoang, Ping Wang, Dusit Niyato, and Zhu Han, "Applications of Economic and Pricing Models for Wireless Network Security: A Survey," *IEEE Communications Surveys & Tutorials*, vol. 19, no. 4, pp. 2735–2767, fourth quarter, 2017.
103. Zheng Chang, Xin Hou, Xijuan Guo, Zhu Han, and Tapani Ristaniemi, "Secure and Energy Efficient Resource Allocation for Wireless Power Enabled Full/Half Duplex Multiple-Antenna Relay Systems," *IEEE Transaction on Vehicular Communication*, vol. 66, no. 12, p.p. 11208-11219, December 2017.
104. Boya Di, Lingyang Song, Yonghui Li, and Zhu Han, "V2X Meets NOMA: Non-Orthogonal Multiple Access for 5G Enabled Vehicular Networks," *IEEE Wireless Communications*, special issue on Emerging Technology for 5G Enabled Vehicular Networks, vol. 4, no. 6, p.p. 13-21, December 2017.
105. Dusit Niyato, Dong In Kim, Marco Maso and Zhu Han, "Wireless Powered Communication Networks: Research Directions and Technological Approaches," *IEEE Wireless Communication Magazine*, vol. 24, no. 6, p.p. 88-97, December 2017.
106. Xiao Tang, Pingyi Ren and Zhu Han, "Power-Efficient Secure Transmission Against Full-Duplex Active Eavesdropper: A Game-Theoretic Framework," *IEEE Access*, vol. 5, p.p. 24632-24645, November 2017.
107. Zheng Chang, Shan Zhang, Zhongyu Wang, Xijuan Guo, Zhu Han, and Tapani Ristaniemi, "Energy Efficient Optimization for Large-Scale Multiple Antenna System with Wireless Power Transfer," *IET Communications*, October 2017.
108. Xiuhua Li, Xiaofei Wang, Keqiu Li, Zhu Han, and Victor C. M. Leung, "Collaborative Multi-tier Caching in Heterogeneous Networks: Modeling, Analysis, and Design", *IEEE Transactions on Wireless Communications*, vol. 16, no. 10, p.p. 6926-6939, October 2017.

109. Yun Hu, S Hongyan Li, Zheng Chang, and Zhu Han, "End-to-End Backlog and Delay Bound Analysis based on Martingale Theory for Multi-Hop Vehicular Ad Hoc Networks," *IEEE Transactions on Wireless Communications*, vol. 16, no. 10, p.p. 6808-6821, October 2017.
110. Tingting Liu, Jun Li, Feng Shu, Meixia Tao, Wen Chen, Zhu Han, "Design of Contract-Based Trading Mechanism for A Small-Cell Caching System," *IEEE Transactions on Wireless Communications*, vol. 16, No. 10, p.p. 6602-6617, October 2017.
111. Biling Zhang, Yan Chen, Jung-Lang Yu, Bin Chen, and Zhu Han, "Indirect-Reciprocity Data Fusion Game and the Application to Cooperative Spectrum Sensing," *IEEE Transactions on Wireless Communications*, vol. 16, no. 10, p.p. 6571-6585, October 2017.
112. Huaqing Zhang, Yong Xiao, Shengrong Bu, Dusit Niyato, F. Richard Yu, and Zhu Han, "Computing Resource Allocation in Three-Tier IoT Fog Networks: a Joint Optimization Approach Combining Stackelberg Game and Matching", *IEEE Internet Of Things Journal, Special Issue on Fog Computing in the Internet of Things*, vol. 4, no. 5, p.p. 1204-1215, October 2017.
113. Sicong Liu, Fang Yang, Jian Song, and Zhu Han, "Block Sparse Bayesian Learning Based NB-IoT Interference Elimination in LTE-Advanced Systems," *IEEE Transactions on Communications*, vol. 65, no. 10, p.p. 4559-4571, October 2017.
114. Zhenyu Zhou, Fei Chen, Yunjian Jia, Kimfung Tsang, Guangyi Liu, and Zhu Han, "Unlicensed Spectrum Sharing: From Coexistence to Convergence," *IEEE Wireless Communication Magazine, Special Issue on Dynamic Spectrum Management in 5G* RE:Unlicensed Spectrum Sharing: From Coexistence to Convergence, vol. 24, no. 5, p.p. 94-101, October 2017.
115. Xiao Tang, Pinyi Ren, and Zhu Han, "Distributed Power Optimization for Security-Aware Multi-Channel Full-Duplex Communications: A Variational Inequality Framework," *IEEE Transactions on Communications*, vol. 65, no. 9, p.p. 4065-4079, September 2017.
116. Dinh Thai Hoang, Dusit Niyato, Ping Wang, Dong In Kim, and Zhu Han, "Ambient Backscatter: A New Approach to Improve Network Performance for RF-Powered Cognitive Radio Networks," *IEEE Transactions on Communications*, vol. 65, no. 9, pp. 3659-3674, September 2017.
117. Jingjing Zhao, Yuanwei Liu, Kok Keong Chai, Arumugam Nallanathan, Yue Chen, and Zhu Han, "Spectrum Allocation and Power Control for Non-Orthogonal Multiple Access in HetNets," *IEEE Transactions on Wireless Communications*, vol. 16, no. 9. vol. 5825-5837, September 2017.
118. Mohammad Esmalifalak, Lanchao Liu, Nam Nguyen, Rong Zheng, and Zhu Han, "Detecting Stealthy False Data Injection Using Machine Learning in Smart Grid," *IEEE Systems Journal*, vol. 11, no. 3, pp. 1644-1652, September 2017.
119. Jingjing Wang, Chunxiao Jiang, Zhu Han, Yong Ren, and Hanzo Lajos, "Taking Drones to the Next Level: Cooperative Distributed Unmanned-Aerial-Vehicular Networks for Small and Mini Drones," *IEEE Vehicular Technology Magazine*, vol. 12, no. 3, pp. 73-82, September 2017 **IEEE Spotlight**.

120. Simon Scott, Zaheer Khan, Zhu Han, and Marwan Krunz, "Distributed and Coordinated Spectrum Access Methods for Heterogeneous Channel Bonding," *IEEE Transactions on Cognitive Communications and Networking*, vol. 3, no. 3, p.p. 267-281, September 2017.
121. Huaqing Zhang, Yanru Zhang, Yunan Gu, Dusit Niyato, and Zhu Han, "A Hierarchical Game Framework for Resource Management in Fog Computing," *IEEE Communications Magazine*, special issue on Fog Computing and Networking, vol. 55, no. 8, p.p. 52-57, August 2017.
122. Mohammad Abu Alsheikh, Yutao Jiao, Dusit Niyato, Ping Wang, Derek Leong, and Zhu Han, "The Accuracy-Privacy Tradeoff of Mobile Crowdsensing," *IEEE Communications Magazines*, special issue on Sustainable Incentive Mechanisms For Mobile Crowdsensing, vol. 55, no. 6, pp. 132-139, August 2017.
123. Thant Zin Oo, Nguyen H. Tran, Walid Saad, Dusit Niyato, Zhu Han, and Choong Seon Hong, "Offloading in HetNet: A Coordination of Interference Mitigation, User Association, and Resource Allocation," *IEEE Transactions on Mobile Computing*, vol. 16, no. 8, pp. 2276-2291, August 2017.
124. Fahira Sangare, Yong Xiao, Niyato Dusit, and Zhu Han, "Mobile Charging in Wireless-Powered Sensor Networks: Optimal Scheduling and Experimental Implementation," *IEEE Transactions on Vehicular Technology*, vol. 66, no. 8, pp. 7400-7410, August 2017.
125. Hui-Ming Wang, Kewen Huang, Qian Yang, and Zhu Han, "Joint Source-Relay Secure Precoding for MIMO Relay Networks with Direct Links," *IEEE Transactions on wireless Communications*, vol. 65, no. 7, pp. 2781-2793, July 2017.
126. Xu Ma, Fang Yang, Sicong Liu, Jian Song, and Zhu Han, "Design and Optimization on Training Sequence for MmWave Communications: A New Approach for Sparse Channel Estimation in Massive MIMO," *IEEE Journal on Selected Areas in Communications*, special issue on Millimeter Wave Communications for Future Mobile Networks, vol. 35, no. 7, pp. 1486-1497, July 2017.
127. Zijie Zheng, Lingyang Song, Dusit Niyato, and Zhu Han, "Resource Allocation in Wireless Powered Relay Networks: A Bargaining Game Approach," *IEEE Transactions on Vehicular Technology*, vol. 66, no. 7, pp. 6310-6323, July 2017.
128. Md. Jalil Piran, Nguyen H. Tran, Doug Young Suh, Ju Bin Song, and Zhu Han, "QoE-Driven Channel Allocation and Handoff Management for Seamless Multimedia in Cognitive 5G Cellular Networks," *IEEE Transactions on Vehicular Technology*, vol. 66, no. 7, pp. 6569-6585, July 2017.
129. Chuhan Gao, Yong Li, Yong Niu, Depeng Jin, Zhu Han, and Sheng Chen, "Evaluating the Impact of User Behavior on D2D Communications in Millimeter-wave Small Cells," *IEEE Transactions on Vehicular Technology*, vol. 66, no. 8, pp.6362-6377, July 2017.
130. Zijie Zheng, IEEE, Lingyang Song, Zhu Han, Geoffrey Ye Li, and H. Vincent Poor, "Game Theoretic Approaches to Massive Data Processing in Wireless Networks," *IEEE Wireless Communications*, special issue on Wireless Big Data: Technologies and Applications, vol. 9, no. 7, p.p. 601-615, July 2017.
131. Yunan Gu, Chunxiao Jiang, Lin X. Cai, Miao Pan, Lingyang Song, and Zhu Han, "Dynamic Path To Stability in the LTE-Unlicensed with User Mobility: A Dynamic

- Matching Framework,” *IEEE Transactions on Wireless Communications*, vol. 15, no. 7, p.p. 4547-4561, July 2017.
132. Zheng Chang, Zhongyu Wang, Xijuan Guo, Zhu Han, and Tapani Ristaniemi, “Energy Efficient Resource Allocation for Wireless Powered Massive MIMO System with Imperfect CSI,” *IEEE Transactions on Green Communications and Networking*, vol. 1, no. 2, p.p. 121-130, June 2017.
  133. Tong-Xing Zheng, Hui-Ming Wang, and Zhu Han, “Physical Layer Security in Wireless Ad Hoc Networks Under A Hybrid Full-/Half-Duplex Receiver Deployment Strategy,” *IEEE Transactions on Wireless Communications*, vol. 16, no. 6, pp. 3827-3839. June 2017.
  134. Yanru Zhang, Miao Pan, Lingyang Song, Zaher Dawy, and Zhu Han, “A Survey of Contract Theory Based Incentive Mechanism Design in Wireless Networks,” *IEEE Wireless Communication Magazine*, vol. 24, no. 3, pp. 80-85, June 2017.
  135. Yangqing Li, Wei Chen, Changchuan Yin, and Zhu Han, “Approximate Message Passing for Recovering Structured Low-Rank Matrix from Compressive Measurements,” *IEEE Access*, vol. 5, p.p. 10093-10107, May 2017.
  136. Qiuyang Shen, Jiefu Chen, Xuqing Wu, and Zhu Han, “Distributed Markov Chain Monte Carlo Method on Big-Data Platform for Large-Scale Geosteering Inversion Using Directional Electromagnetic Well Logging Measurements,” *The Applied Computational Electromagnetics Society Journal*, special issue on big data in electromagnetics, vol. 32, no. 5, pp. 405–412, May 2017.
  137. Nguyen Cong Luong, Ping Wang, Dusit Niyato, and Zhu Han, “Resource Management in Cloud Networking Using Economic Analysis and Pricing Models: A Survey,” *IEEE Communications Surveys & Tutorials*, vol. 19, no. 2, pp. 954-1001, Second Quarter 2017.
  138. Francesco Chiti, Romano Fantacci, Yunan Gu, and Zhu Han, “Content sharing in Internet of Vehicles: Two matching-based user-association approaches,” *Vehicular Communications*, vol. 8, p.p. 35-44, April 2017.
  139. Yanru Zhang, Chunxiao Jiang, Lingyang Song, Miao Pan, Zaher Dawy, and Zhu Han, “Incentive Mechanism for Mobile Crowdsourcing Using an Optimized Tournament Model,” *IEEE Journal on Selected Areas in Communications*, Special Issue on Human-In-The-Loop Mobile Networks, vol. 35, no. 4, p.p. 880-892, April 2017.
  140. Mohammad Abu Alsheikh, Dusit Niyato, Derek Leong, Ping Wang, and Zhu Han, “Privacy Management and Optimal Pricing in People-Centric Sensing,” *IEEE Journals on Selected Areas on Communications*, Special issue on Human-In-The-Loop Mobile Networks, vol. 35, no. 4, p.p. 906-920, April 2017.
  141. Hung Khanh Nguyen, Hamed Mohsenian-Rad, Amin Khodaei, and Zhu Han, “Decentralized Reactive Power Compensation using Nash Bargaining Solution,” *IEEE Transactions on Smart Grid*, vol. 8, no. 4, p.p. 1679-1688, April 2017.
  142. Zheng Chang, Tapani Ristaniemi, and Zhu Han, “Energy Efficient Optimization for Wireless Virtualized Small Cell Networks with Large Scale Multiple Antenna,” *IEEE Transactions on Communications*, vol. 65, no. 4, pp. 1696-1707, April 2017.



143. Yang Zhang, Dusit Niyato, Ping Wang, Dong In Kim, and Zhu Han, "Optimal Wireless Energy Charging for Incentivized Content Transfer in Mobile Publish-Subscribe Networks," *IEEE Transactions on Vehicular Technology*, vol. 66, no. 4, pp. 3420–3434, April 2017.
144. Yun Hu, Hongyan Li, Zheng Chang, Jiandong Li, and Zhu Han, "Scheduling Strategy for Multimedia Heterogeneous High-Speed Train Networks," *IEEE Transactions on Vehicular Technology*, vol. 66, no. 4, pp. 3264–3279, April 2017.
145. Tuan LeAnh, Nguyen H. Tran, Mui Van Nguyen, Zhu Han, and Choong Seon Hong, "Distributed Power and Channel Allocation for Cognitive Femtocell Network using a Coalitional Game in Partition Form Approach," *IEEE Transactions on Vehicular Technology*, vol. 66 no. 4, pp. 3475–3490, April 2017.
146. Dusit Niyato, Dinh Thai Hoang, Ping Wang, and Zhu Han, "Cyber Insurance for Plug-In Electric Vehicle (PEV) Charging in Vehicle-to-Grid (V2G) Systems," *IEEE Network*, vol. 31, no. 2, pp. 38-46, March 2017.
147. Xiao Tang, Pinyi Ren, and Zhu Han, "Combating Full-Duplex Active Eavesdropper: A Game-Theoretical Perspective," *IEEE Transactions on Communications*, vol. 65, no. 3, pp. 1379–1395, March 2017.
148. Hung Khanh Nguyen, Yanru Zhang, Zheng Chang, and Zhu Han, "Parallel and Distributed Resource Allocation with Minimum Traffic Disruption for Wireless Network Virtualization," *IEEE Transactions on Communications*, vol. 65, no. 3, pp. 1162-1175, March 2017.
149. Yanru Zhang, Lingyang Song, Miao Pan, Zaher Dawy, and Zhu Han, "Non-Cash Auction for Spectrum Trading in Cognitive Radio Networks : A Contract Theoretical Model with Joint Adverse Selection and Moral Hazard," *IEEE Journals on Selected Areas on Communications*, Special Issue on Game Theory for Networks, vol. 35, no. 3, pp. 643-653, March 2017.
150. Chunxiao Jiang, Xiqin Wang, Zhu Han, Yong Ren, and Lajos Hanzo, "Information Credibility Modeling in Cooperative Networks: Equilibrium and Mechanism Design," *IEEE Journals on Selected Areas on Communications*, Special Issue on Game Theory for Networks, vol. 35, no. 2, pp. 432-448, February 2017.
151. Huici Wu, Xiaofeng Tao, and Zhu Han, "Secure Transmission in MISOME Wiretap Channel with Multiple Assisting Jammers: Maximum Secrecy Rate and Optimal Power Allocation," *IEEE Transactions on Wireless Communications*, vol. 65, no. 2, pp. 775-789, February 2017.
152. Zijie Zheng, Lingyang Song, and Zhu Han, "Bridge the Gap between ADMM and Stackelberg Game: Incentive Mechanism Design for Big Data Networks," *IEEE Signal Processing Letters*, vol. 24, no. 2, pp. 191-195, February 2017.
153. Zaheer Khan, Janne J. Lehtomaki, Stefano Iellamo, Risto Vuotoniemi, Ekram Hossain, and Zhu Han, "IoT Connectivity in Radar Bands: A Shared Access Model Based on Spectrum Measurements," *IEEE Communications Magazine*, special issue on Practical Perspectives on IoT in 5G Networks: From Theory to Industrial Challenges and Business Opportunities, vol.55, no.2, pp.88-96, February 2017.
154. Chungang Yang, Jiandong Li, Ekram Hossain, Prabodini Semasinghe, Samir Medina Perlaz, and Zhu Han, "Distributed Interference and Energy-Aware Power Con-

- trol for Ultra-Dense D2D Networks: A Mean Field Game,” *IEEE Transactions on Wireless Communications*, vol. 16, no. 2, pp. 1205-1217, February 2017.
155. Yanru Zhang, Lingyang Song, Chunxiao Jiang, Nguyen H. Tran, Zaher Dawy, and Zhu Han, “Social-Aware Framework for Efficient Information Dissemination in Wireless Ad Hoc Networks,” *IEEE Communications Magazine*, Special issue on social and mobile solutions in ad hoc and sensor networking, vol. 55, no. 1, pp. 174-179, January 2017.
  156. Radwa Sultan, Lingyang Song, Karim G. Seddik, and Zhu Han, “Full-Duplex Meets Multiuser MIMO: Comparisons and Analysis,” *IEEE Transactions on Vehicular Technology*, vol. 66, no. 1, pp.455–467, January 2017.
  157. Huaqing Zhang, Yong Xiao, Lin X. Cai, Dusit Niyato, Lingyang Song, and Zhu Han, “A Multi-Leader Multi-Follower Stackelberg Game for Resource Management in LTE Unlicensed”, *IEEE Transactions on Wireless Communications*, vol. 16, no. 1, pp. 348-361, January 2017.
  158. Yuan Liu, Rui Wang, and Zhu Han, “Interference-Constrained Pricing for D2D Networks,” *IEEE Transactions on Vehicular Technology*, vol. 16, no. 1, pp. 475-486, January 2017.
  159. Yun Liao, Tianyu Wang, Lingyang Song, and Zhu Han, “Listen-and-Talk: Protocol Design and Analysis for Full-duplex Cognitive Radio Networks,” *IEEE Transactions on Vehicular Technology*, vol. 16, no. 1, pp. 656-667, January 2017.
  160. Boya Di, Tianyu Wang, Lingyang Song, and Zhu Han, “Collaborative Smartphone Sensing using Overlapping Coalition Formation Games,” *IEEE Transactions on Mobile Computing*, vol. 16, no. 1, pp. 30-43, January 2017.
  161. Yaodong Zhang, Chunxiao Jiang, Zhu Han, Shui Yu, and Jian Yuan, “Interference-Aware Coordinated Power Allocation in Autonomous Wi-Fi Environment,” *IEEE Access*, vol 4, pp. 3489-3500, 2016.
  162. Nguyen Cong Luong, Dinh Thai Hoang, Ping Wang, Dusit Niyato, Dong In Kim, and Zhu Han, “Data Collection and Wireless Communication in Internet of Things (IoT) Using Economic Analysis and Pricing Models: A Survey,” *IEEE Communications Surveys and Tutorials*, vol. 18, no. 4, pp. 2546–2590, Fourth Quarter, 2016.
  163. Jingjing Wang, Chunxiao Jiang, Zhu Han, Yong Ren, and Hanzo Lajos, “Network Association Strategies for an Energy Harvesting Aided Super-WiFi Network Relying on Measured Solar Activity,” *IEEE Journal on Selective Areas on Communications*, Special issue on Green Communications, vol.34, no.12, pp.3785-3797, December 2016.
  164. Zaixin Lu, Wei Li, Yawei Pang, Miao Pan, Weili Wu, and Zhu Han, “Collaborative Data and Energy Transmission for Energy-rechargeable Mobile Devices,” *IEEE Transactions on Wireless Communications*, vol.15, no.12, pp.8525-8536, December 2016.
  165. Chunxiao Jiang, Haijun Zhang, Zhu Han, Yong Ren, Victor C. M. Leung, and Hanzo Lajos, “Sharing Genuine Road Traffic Information in Vehicular Networks,” *IEEE Transactions on Vehicular Technology*, vol.65, no.12, pp.9479-9492, December 2016.

166. Boya Di, Siavash Bayat, Lingyang Song, Yonghui Li, and Zhu Han, "Joint User Pairing, Subchannel and Power Allocation in Full-Duplex Multi-User OFDMA Networks," *IEEE Transactions on Wireless Communications*, vol.15, no.12, pp.8260-8272, December 2016.
167. Nguyen H. Tran, Shaolei Ren, Zhu Han, Eui-Nam Huh, and Choong Seon Hong, "Reward-to-Reduce: An Incentive Mechanism for Economic Demand Response of Colocation Data Centers," *IEEE Journal on Selective Areas on Communications*, Special issue on Green Communications, vol.34, no.12, pp.3438-3450, December 2016.
168. Zheng Chang, Jie Gong, Yingyu Li, Zhenyu Zhou, Tapani Ristaniemi, Guangming Shi, Zhu Han, and Zhisheng Niu, "Energy Efficient Resource Allocation for Wireless Power Transfer Enabled Collaborative Mobile Clouds," *IEEE Journal on Selective Areas on Communications*, Special issue on Green Communications, vol.34, no.12, pp.3941-3953, December 2016.
169. Yue Meng, Chunxiao Jiang, Lei Xu, Yong Ren, and Zhu Han, "User Association in Heterogeneous Networks: A Social Interaction Approach," *IEEE Transactions on Vehicular Technology*, vol. 65, no. 12, p.p. 9982-9993, December 2016.
170. Yang Cao, Tao Jiang, and Zhu Han, "A Survey of Emerging M2M Systems: Context, Task, and Objective," *IEEE Internet of Things Journal*, vol.3, no.6, pp.1246-1258, December 2016.
171. Yunan Gu, Yanru Zhang, Lin X. Cai, Miao Pan, Lingyang Song, and Zhu Han, "LTE-Unlicensed Co-existence Mechanism: A Matching Game Framework," *IEEE Wireless Communications*, special issue for LTE in Unlicensed Spectrum, vol.23, no.6, pp.54-60, December 2016.
172. Siavash Bayat, Yonghui Li, Zhu Han, and Lingyang Song, "Matching Theory: Applications in wireless communications," *IEEE Signal Processing Magazine*, vol. 33, no. 6, p.p. 1053-5888, November 2016.
173. Chengchao Liang, F. Richard Yu, Haipeng Yao, and Han Zhu, "Virtual Resource Allocation in Information-Centric Wireless Networks with Virtualization," *IEEE Transactions on Vehicular Technology*, vol. 65, no. 11, pp.9319-9329, November, 2016.
174. Lei Xu, Chunxiao Jiang, Yanyao Shen, Tony Q. S. Quek, Yong Ren, and Zhu Han, "Energy Efficient D2D Communications with Pricing Mechanism and Matching Methodology," *IEEE Transactions on Wireless Communications*, vol. 15, no. 11, pp. 7272-7285, November 2016.
175. Qian Yang, Hui-Ming Wang, Yi Zhang, and Zhu Han, "Physical Layer Security in MIMO Backscatter Wireless Systems," *IEEE Transactions on Wireless Communications*, vol. 15, no. 11, pp. 7547-7560, November 2016.
176. Qing Yang, Ting Jiang, Chunxiao Jiang, Zhu Han, and Zheng Zhou, "Joint Optimization of User Grouping and Transmitter Connection on Multi-cell SNR Blind Interference Alignment," *IEEE Access*, special issue on Optimization for Emerging Wireless Networks: IoT, 5G and Smart Grid Communication Networks, vol. 4, pp. 4974-4988, 2016.
177. Chunxiao Jiang, Haijun Zhang, Yong Ren, Zhu Han, Kwang-Cheng Chen, and Lajos Hanzo, "Next Generation of Software Defined Radio: Radio Learning in

- 5G Networks,” *IEEE Wireless Communications*, vol. 65, no. 10, pp. 7857-7867, October 2016.
178. Ali Arab, Eylem Tekin, Amin Khodaei, Suresh K. Khator, and Zhu Han, “System Hardening and Condition-Based Maintenance for Electric Power Infrastructure Under Hurricane Effects,” *IEEE Transactions on Reliability*, vol. 65, no. 3, pp.1457–1470, September 2016.
  179. Tianyu Wang, Lingyang Song, Zhu Han, and Walid Saad, “Overlapping Coalition Formation Games for Emerging Communication Networks,” *IEEE Network Magazine*, vol. 30, no. 5, p.p. 46-53, September 2016.
  180. Erte Pan, Dan Wang, and Zhu Han, “Analyzing Big Smart Metering Data towards Differentiating User Services: A Sublinear Approach,” *IEEE Transactions on Big Data*, vol. 2, no. 3, pp. 249–261, September 2016.
  181. Bo Bai, Li Wang, Zhu Han, Wei Chen, and Tommy Svensson “Caching Based Socially-Aware D2D Communications in Wireless Content Delivery Networks: A Hypergraph Framework,” *IEEE Wireless Communication Magazine*, special issue on Device-to-Device (D2D) Communications with Social Awareness, vol. 23, no. 4, pp. 74–81, August 2016.
  182. Yong Xiao, Dusit Niyato, Kwang-Cheng Chen, Zhu Han, and Luiz A. DaSilva, “Enhance Device-to-Device Communication with Social-Awareness: A Belief-based Stable Marriage Game Framework,” *IEEE Wireless Communication Magazine*, special issue on Device-to-Device (D2D) Communications with Social Awareness, vol. 23, no. 4, pp. 36–44, August 2016.
  183. Dusit Niyato, Lu Xiao, Ping Wang, Dong In Kim, and Zhu Han, “Economics of Internet of Things (IoT): An Information Market Approach,” *IEEE Wireless Communications*, vol. 23, no. 4, pp. 136–145, August 2016.
  184. Wenbo Wang, Andres Kwasinski, Dusit Niyato, and Zhu Han, “A Survey on Applications of Model-Free Strategy Learning in Cognitive Wireless Networks,” *IEEE Communications Surveys & Tutorials*, vol. 18, no.3, pp. 1717-1757, Third Quarter, 2016.
  185. Yong Niu, Chuhan Gao, Yong Li, Depeng Jin, Li Su, and, Zhu Han, “Exploiting Device-to-Device Communications to Enhance Spatial Reuse for Popular Content Downloading in Directional mmWave Small Cells,” *IEEE Transactions on Vehicular Technology*, vol. 65, no. 7, pp. 5538-5550, July 2016.
  186. Bentaο Zhang, Yong Li, Depeng Jin, and Zhu Han, “Network Science Approach for Device Discovery in Mobile Device-to-Device Communications,” *IEEE Transactions on Vehicular Technology*, vol. 65, no. 7, pp. 5665–5679, July 2016.
  187. Bidushi Barua, Zaheer Khan, Zhu Han, Abouzeid Alhussein, and Matti Latva-aho, “Incentivizing Selected Devices to Perform Cooperative Content Delivery: A Carrier Aggregation based Approach,” *IEEE Transactions on Wireless Communications*, vol. 15, no. 7, pp. 5030-5045, July 2016.
  188. Hongliang Zhang, Lingyang Song, and Zhu Han, “Radio Resource Allocation for Device-to-Device Underlay Communication Using Hypergraph Theory,” *IEEE Transactions on Wireless Communications*, vol. 15, no. 7, pp. 4852–4861, July 2016.

189. Cuong T. Do, Nguyen H. Tran, Eui-Nam Huh, Choong Seon Hong, Dusit Niyato, and Zhu Han, "Dynamics of Service Selection and Provider Pricing Game in Heterogeneous Cloud Market," *Journal of Network and Computer Applications*, vol. 69, pp. 152–165, July 2016.
190. Lingyang Song, Yonghui Li, and Zhu Han, "Game-Theoretic Resource Allocation for Full-Duplex Communications," *IEEE Wireless Communications Magazine*, vol. 23, no. 3, pp. 50-56, June 2016.
191. Yi Huang, Jin Tang, Yu Cheng, Husheng Li, Kristy Campbell, and Zhu Han, "Real-time Detection of False Data Injection in Smart Grid Networks: An Adaptive CUSUM Method and Analysis," *IEEE Systems Journal*, vol. 10, no. 2, pp. 532–543, June 2016.
192. Xiao Lu, Ping Wang, Dusit Niyato, Dong In Kim, and Zhu Han, "Wireless Charging Technologies: Fundamentals, Standards, and Network Applications," *IEEE Communications Surveys & Tutorials*, vol. 18, no. 2, pp. 1413–1452, Second Quarter 2016.
193. Mohammad Abu Alsheikh, Dusit Niyato, Shaowei Lin, Hwee-Pink Tan, and Zhu Han, "Mobile Big Data for Context-Awareness Using Deep Learning and Apache Spark," *IEEE Network Magazine*, special issue on Mobile Big Data, vol. 30, no. 3, pp. 22-29, May-June 2016.
194. Jun Du, Chunxiao Jiang, Yi Qian, Zhu Han, and Yong Ren, "Resource Allocation with Video Traffic Prediction in Cloud-based Space Systems," *IEEE Transactions on Multimedia*, special issue on Cloud-based Video Processing and Content Sharing, vol. 18, no. 5, pp. 820–830, May 2016.
195. Dong Wang, Bo Bai, Wei Chen, and Zhu Han, "Secure Green Communication via Untrusted Two-Way Relaying: A Physical Layer Approach," *IEEE Transactions on Communications*, vol. 64, no. 5, pp. 1861–1874, May 2016.
196. Li Wang, Huaqing Wu, and Zhu Han, "Wireless Distributed Storage in Socially Enabled D2D Communications," *IEEE Access*, vol. 4, pp. 1971–1984, May 2016.
197. Dusit Niyato, Ping Wang, Dong In Kim, Walid Saad, and Zhu Han, "Mobile Energy Sharing Networks: Performance Analysis and Optimization," *IEEE Transactions on Vehicular Technology*, vol. 65, no. 5, pp. 3519–3535, May 2016.
198. Thant Zin Oo, Nguyen H. Tran, Duc Ngoc Minh Dang, Zhu Han, Long Bao Le, and Choong Seon Hong, "OMF-MAC: An Opportunistic Matched Filter-based MAC in Cognitive Radio Networks," *IEEE Transactions on Vehicular Technology*, vol. 65, no. 4, pp 2544-2559, April 2016.
199. Liwei Song, Yun Liao, Lingyang Song, and Zhu Han, "Cross-Layer Protocol Design for CSMA/CD in Full-Duplex WiFi Networks," *IEEE Communication Letter*, vol. 20, no. 4, pp. 792–795, April 2016.
200. Ali Arab, Amin Khodaei, Suresh K. Khtor, and Zhu Han, "Electric Power Grid Restoration Considering Disaster Economics," *IEEE Access*, vol. 4, pp. 639–649, April 2016.
201. Dusit Niyato, Dinh Thai Hoang, Nguyen Cong Luong, Ping Wang, Dong In Kim, and Zhu Han, "Smart Data Pricing Models for Internet-of-Things (IoT): A Bundling Strategy Approach," *IEEE Network*, special issue on smart data pricing, vol. 30, no. 2, pp. 18–25, March-April 2016.

202. Nguyen H. Tran, Dai H. Tran, Shaolei Ren, Zhu Han, and Choong Seon Hong, "How Geo-distributed Data Centers Do Demand Response: A Game-Theoretic Approach," *IEEE Transactions on Smart Grid*, vol. 7, no. 2, pp.937-947, March 2016.
203. Hang Zhang, Tianyu Wang, Lingyang Song, and Zhu Han, "Interference Improves PHY Security for Cognitive Radio Networks," *IEEE Transactions on Information Forensics & Security*, vol. 11, no. 3, p.p. 609–620, March 2016.
204. Huaqing Zhang, Dusit Niyato, Lingyang Song, Tao Jiang, and Zhu Han, "Zero-determinant Strategy for Resource Sharing in Wireless Cooperations," *IEEE Transactions on Wireless Communications*, vol. 15, no. 3, pp. 2179–2192, March 2016.
205. Najmeh Forouzandeh Mehr, Rong Zheng, and Zhu Han, "Stochastic Dynamic Game between Hydropower Plant and Thermal-Power Plant in Smart Grid Network," *IEEE System Journal*, vol. 10, no. 1, pp. 88–96, February 2016.
206. Qiumin Dong, Dusit Niyato, Ping Wang, and Zhu Han, "The PHEV Charging Scheduling and Power Supply Optimization for Charging Stations," *IEEE Transactions on Vehicular Technology*, Vol. 65, No. 2, pp. 556-580, February 2016.
207. Yan Xu, Murad Megjhani, Kristen Trett, William Shain, Badrinath Roysam, and Zhu Han, "Unsupervised Profiling of Microglial Arbor Morphologies and Distribution using a Nonparametric Bayesian Approach," *IEEE Selected Topics in Signal Processing*, Special Issue on Advanced Signal Processing in Microscopy and Cell Imaging, vol. 10, no. 1, pp. 115-129, February, 2016.
208. Joseph Kamto, Lijun Qian, Wei Li, and Zhu Han, " $\lambda$ -Augmented Tree for Robust Data Collection in Advance Metering Infrastructure," *IEEE International Journal of Distributed Sensor Networks*, special issue on Smart Grid: ICT Control for Distributed Energy Resources, Volume 2016 (2016), Article ID 9821289.
209. Yong Li, Depeng Jin, Pan Hui, and Zhu Han, "Optimal Base Station Scheduling for Device-to-Device Communication Underlying Cellular Networks," *IEEE Journal on Selected Areas on Communications*, Special Issue on Device-to-Device Communications in Cellular Networks, vol. 34, no.1, p.p. 27-40, January 2016.
210. Dong Wang, Bo Bai, Wei Chen, and Zhu Han, "Achieving High Energy Efficiency and Physical-Layer Security in AF Relaying," *IEEE Transactions on Wireless Communications*, vol. 15, no. 1, p.p. 740–752, January 2016.
211. Qiang Xu, Rong Zheng, Walid Saad, and Zhu Han, "Device Fingerprinting in Wireless Networks: Challenges and Opportunities," *IEEE Communications Surveys and Tutorials*, vol. 18, no. 1, pp. 94–104, First Quarter 2016.
212. Yong Xiao, Zhu Han, Chau Yuen, Luiz A. DaSilva, "Carrier Aggregation between Operators in Heterogeneous Networks: A Stable Roommate Market," *IEEE Transactions on Wireless Communications*, vol.15, no. 1, pp. 633–650, January 2016.
213. Qiumin Dong, Dusit Niyato, Ping Wang, and Zhu Han, "Deferrable Load Scheduling under Imperfect Data Communication Channel," *Wireless Communications and Mobile Computing*, vol. 15, no. 17, pp. 2049–2064, December 2015.
214. Dinh Thai Hoang, Lu Xiao, Dusit Niyato, Ping Wang, and Zhu Han, "Applications of Repeated Games in Wireless Networks: A Survey," *IEEE Communications Surveys and Tutorials*, vol. 17, no. 4, p.p. 2102-2135, Fourth Quarter, 2015.

215. Tianyu Wang, Yue Sun, Lingyang Song, and Zhu Han, "Social Data Offloading in D2D-Enhanced Cellular Networks by Network Formation Games," *IEEE Transactions on Wireless Communications*, vol. 14, no. 12, pp. 7004-7015, December 2015.
216. Yong Xiao, Dusit Niyato, and Zhu Han, "Dynamic Energy Trading for Energy Harvesting Communication Networks: A Stochastic Energy Trading Game," *IEEE Journal on Selected Areas on Communications, Series on Green Communications and Networking*, vol. 33, no. 12, pp. 2718-2734, December 2015.
217. Erte Pan, Miao Pan, and Zhu Han, "Tensor Voting Techniques and Applications in Mobile Trace Inference," *IEEE Access*, special issue on Artificial Intelligence Enabled Networking, December 2015.
218. Nguyen H. Tran, Cuong T. Do, Shaolei Ren, Zhu Han, and Choong Seon Hong, "Incentive Mechanisms for Economic and Emergency Demand Responses of Colocation Datacenters," *IEEE Journal on Selective Areas on Communications, Series on Green Communications and Networking*, vol. 33, no. 12, pp. 2892-2905, December 2015.
219. Hung Khanh Nguyen, Ju Bin Song, and Zhu Han, "Distributed Demand Side Management with Energy Storage in Smart Grid," *IEEE Transactions on Transactions on Parallel and Distributed Systems*, vol. 26, no. 12, pp. 3346-3357, December 2015.
220. Zheng Chang, Tapani Ristaniemi, and Zhu Han, "Queueing Game For Spectrum Access in Cognitive Radio Networks," *IEEE Communication Letters*, vol. 19, no. 11, p.p. 2017-2020, November 2015.
221. Yanru Zhang , Lanchao Liu , Yunan Gu , Dusit Niyato, Miao Pan, and Zhu Han, "Offloading in Software Defined Network at Edge with Information Asymmetry: A Contract Theoretical Approach," invited, *Journal of Signal Processing Systems, Special Issue on Signal Processing for Ultra High Performance and High Efficiency in 5G Mobile Networks*, vol. 81, no. 2, pp. 1-13, November 2015.
222. Samir M. Perlaza, Ravi Tandon, H. Vincent Poor, and Zhu Han, "Perfect Output Feedback in the Two-User Decentralized Interference Channel," *IEEE Transactions on Information Theory*, vol. 61, no. 10, pp. 5441-5462, October 2015.
223. Yunan Gu, Yanru Zhang, Miao Pan, and Zhu Han, "Matching and Cheating in Device to Device Communications Underlying Cellular Networks," *IEEE Journal on Selected Areas on Communications, Special Issue on Recent Advances in Heterogeneous Cellular Networks*, vol. 33, no. 10, pp. 2156-2166, October 2015.
224. Yanru Zhang, Lingyang Song, Walid Saad, Zaher Dawy, and Zhu Han, "Contract-Based Incentive Mechanisms for Device-to-Device Communications in Cellular Networks," *IEEE Journal on Selected Areas on Communications, Special Issue on Recent Advances in Heterogeneous Cellular Networks*, vol.33, no. 10, p.p. 2144-2155, October 2015.
225. Ashkan Kalantari, Gan Zheng, Zhen Gao, Zhu Han, and Bjorn Ottersten, "Secrecy Analysis on Network Coding in Bidirectional Multibeam Satellite Communications," *IEEE Transactions on Information Forensics and Security*, vol. 10, no. 9, pp. 1862-1874, September 2015.

226. Jinghuan Ma, Yuting Liu, Lingyang Song, and Zhu Han, "Multi-Act Dynamic Game Strategy for Jamming Attack in Electricity Market," *IEEE Transactions on Smart Grid*, vol. 6, no. 5, p.p. 2273–2282, September 2015.
227. Lanchao Liu and Zhu Han, "Multi-Block ADMM for Big Data Optimization in Modern Communication Networks," invited *Journal of Communications*, Special Issue on Research Frontier in Computing, Networking and Communications, vol. 10, no. 9, September 2015.
228. Yong Xiao, Zhu Han, Kwang-Cheng Chen, Chau Yuen, Luiz A. DaSilva, "A Bayesian Overlapping Coalition Formation Game for Device-to-Device Spectrum Sharing in Cellular Networks," *IEEE Transactions on Wireless Communications*, vol. 14, no. 7, p.p. 4020-4033, July 2015.
229. Zhiyuan Yin, F. Richard Yu, Shengrong Bu, and Zhu Han, "Joint Cloud and Wireless Networks Operations in the Mobile Cloud Computing Environment with Telecom Operator Cloud," *IEEE Transactions on Wireless Communications*, vol. 14, no. 7, p.p. 4020-4033, July 2015.
230. Yun Liao, Kaigui Bian, Lingyang Song, and Zhu Han, "Full-duplex MAC Protocol Design and Analysis," *IEEE Communication Letter*, vol. 19, no. 7, p.p. 1185-1188, July 2015.
231. Linyuan Zhang, Qihui Wu, Guoru Ding, Yulong Zou, Zhu Han, and Jinlong Wang, "Byzantine Attack and Defense in Cognitive Radio Networks: A Survey," *IEEE Communications Surveys & Tutorials*, vol. 17, no. 3, p.p. 1342–1363, third quarter 2015.
232. Yun Liao, Lingyang Song, Zhu Han, and Yonghui Li, "Full-Duplex Cognitive Radio: A New Design Paradigm for Enhancing Spectrum Usage," *IEEE Communications Magazine*, vol. 53, no. 5, p.p. 138-145, May 2015.
233. Yunan Gu, Walid Saad, Merouane Debbah, Mehdi Bennis, and Zhu Han, "Matching Theory for Emerging Wireless Networks: Fundamentals and Applications," *IEEE Communication Magazine*, special issue on Emerging Applications, Services and Engineering for Cognitive Cellular Systems, vol. 53, no. 5, p.p. 52-59, May 2015.
234. Bentao Zhang, Yong Li, Depeng Jin, Pan Hui, and Zhu Han, "Social-Aware Peer Discovery for D2D Communications Underlying Cellular Networks," *IEEE Transactions on Wireless Communications*, vol. 14, no. 5, pp. 2426–2439, May 2015.
235. Nguyen H. Tran, Long Bao Le, Shaolei Ren, Zhu Han, and Choong Seon Hong, "Joint Pricing and Load Balancing for Cognitive Spectrum Access: Non-Cooperation vs Cooperation," *IEEE Journal on Selected Areas on Communications*, special issue on cognitive radios, vol. 33, no. 5, pp. 972–985, May 2015.
236. Yong Xiao, Zhu Han, Kwang-Cheng Chen, and Luiz A. DaSilva, "Bayesian Hierarchical Mechanism Design for Cognitive Radio Networks," *IEEE Journal on Selected Areas on Communications*, special issue on cognitive radios, vol. 33, no.5, pp. 986–1001, May 2015.
237. Sean Xiao Lu, Niyato Dusit, Ping Wang, Dong In Kim, and Zhu Han, "Wireless Networks with RF Energy Harvesting: A Contemporary Survey," *IEEE Communications Surveys and Tutorials*, vol 17, no.2, Second quarter 2015.



238. Feiran Wang, Chen Xu, Lingyang Song, and Zhu Han, "Energy-Efficient Resource Allocation for Device-to-Device Underlay Communication," *IEEE Transactions on Wireless Communications*, vol. 14, no. 4, p.p. 2082–2092, April 2015.
239. Tian Zhang, Wei Chen, Zhu Han, and Zhigang Cao, "A Cross-layer Perspective on Energy Harvesting Aided Green Communications over Fading Channels," *IEEE Transactions on Vehicular Technology*, vol. 64, no.4, p.p. 1519-1534, April 2015.
240. Xiao Lu, Dusit Niyato, Ping Wang, Dong In Kim, and Zhu Han, "Wireless Charger Networking for Mobile Devices: Fundamentals, Standards, and Applications," *IEEE Wireless Communication Magazine*, vol. 22, no. 2, pp. 126–135, April 2015.
241. Ali Arab, Amin Khodaei, Zhu Han, and Suresh K. Khator, "Proactive Recovery of Electric Power Assets for Resiliency Enhancement," *IEEE Access*, vol. 3, pp.99-109, March 2015.
242. Dong Wang, Bo Bai, Wei Chen, and Zhu Han, "Energy Efficient Secure Communication over Decode-and-Forward Relay Channels," *IEEE Transactions on Communications*, vol. 63, no. 3, p.p. 892–905, March 2015.
243. Ali Arab, Amin Khodaei, Suresh K. Khtor, and Zhu Han, "Stochastic Pre-Hurricane Restoration Planning for Electric Power Systems Infrastructure," *IEEE Transactions on Smart Grid*, special issue on Special Issue on Asset Management and Aging Infrastructure in Smart Grid, vol. 6, no. 2, pp. 1046–1054, March 2015.
244. Nam Tuan Nguyen, Rong Zheng, Jie Liu and Zhu Han, "GreenLocs: An Energy Efficient Indoor Place Identification Framework," *ACM Transactions on Sensor Networks*, vol. 11, no. 3, article 43, February 2015.
245. Kae Won Choi and Zhu Han, "Device-to-Device Discovery for Proximity-Based Service in LTE-Advanced System," *IEEE Journal on Selected Areas on Communications*, Special Issue on Device-to-Device Communications in Cellular Networks, vol. 33, no. 1, pp. 55–66, January 2015.
246. Najmeh Forouzandehmehr, Mohammad Esmalifalak, Hamed Mohsenian-Rad, and Zhu Han, "Autonomous Demand Response Using Stochastic Differential Games," *IEEE Transactions on Smart Grid*, vol. 6, no. 1, p.p. 291–300, January 2015.
247. Yanru Zhang, Erte Pan, Lingyang Song, Walid Saad, Zaher Dawy, and Zhu Han, "Social Network Aware Device-to-Device Communication in Wireless Networks," *IEEE Transactions on Wireless Communications*, vol. 14, no. 1, p.p. 177–190, January 2015.
248. Behrouz Maham, Walid Saad, Merouane Debbah, and Zhu Han, "Interference Analysis and Management for Spatially Reused Cooperative Multihop Wireless Networks," *IEEE Transactions on Communications*, vol. 62, no. 11, p.p. 3778–3790, November 2014.
249. Ya-Chiou Shiu, Jason Sheng-Hong Tsai, Leang-San Shieh, and Zhu Han, "Fault-Tolerant Tracker for a Class of Unknown Interconnected Large-Scale Sampled-Data Nonlinear Systems with Input Constraint and Actuator Failure," *Journal of Vibration and Control*, vol. 20, no. 16, pp. 2417-2442, November 2014.
250. Tian Zhang, Wei Chen, Zhu Han, and Zhigang Cao, "Hierarchic Power Allocation for Spectrum Sharing in OFDM-Based Cognitive Radio Networks," *IEEE Transactions on Vehicular Technology*, vol. 63, no. 8, p.p. 4077–4091, October 2014.

251. Tianyu Wang, Lingyang Song, Zhu Han, and Walid Saad, "Distributed Cooperative Sensing in Cognitive Radio Networks: An Overlapping Coalition Formation Approach," *IEEE Transactions on Communications*, vol. 62, no. 9, p.p. 3144–3160, September 2014.
252. M. Ejaz Ahmed, Ju Bin Song, and Zhu Han, "Sensing-Transmission Edifice using Bayesian Nonparametric Traffic Clustering in Cognitive Radio Networks," *IEEE Transactions on Mobile Computing*, vol. 13, no. 9, p.p. 2141–2155, September 2014.
253. Husheng Li, Aleksandar Dimitrovski, Ju Bin Song, Zhu Han and Lijun Qian, "Communication Infrastructure Design in Cyber Physical Systems with Applications in Smart Grids: A Hybrid System Framework," *IEEE Communications Surveys and Tutorials*, Special Issue on Energy and Smart Grid, vol. 16, no. 3, p.p. 1689–1708, third quarter 2014.
254. Siavash Bayat, Raymond Louie, Zhu Han, Branka Vucetic, and Yonghui Li, "Distributed User Association and Femtocell Allocation in Heterogeneous Wireless Networks", *IEEE Transactions on Communications*, vol. 62, no. 8, p.p. 3027–3043, August 2014.
255. Tian Zhang, Wei Chen, Zhu Han, and Zhigang Cao, "Charging Scheduling of Electric Vehicles with Local Renewable Energy under Uncertain Electric Vehicle Arrival and Grid Power Price," *IEEE Transactions on Vehicular Technology*, vol. 63, no. 6, p.p. 2600–2612, July 2014.
256. Yong Li, Depeng Jin, Jian Yuan, and Zhu Han, "Coalitional Games for Resource Allocation in the Device-to-Device Uplink Underlying Cellular Networks," *IEEE Transactions on Wireless Communications*, vol. 13, no. 7, p.p. 3965–3977, July 2014.
257. Mehdi Bennis, Samir M. Perlaza, Pol Blasco, Zhu Han and H. Vincent Poor, "Learning to Self-Organize in Small Cell Networks," *IEEE Transactions on Wireless Communications*, vol. 12, no. 7, p.p. 3202–3212, July 2014.
258. Tianyu Wang, Lingyang Song, Zhu Han, and Bingli Jiao, "Popular Content Distribution in CR-VANETs with Joint Spectrum Sensing and Channel Access," invited *EAI Endorsed Transactions on Wireless Spectrum*, vol. 01, no. 2, e4, Jul. 2014.
259. Husheng Li, Aleks Dimitrovski, Zhu Han, and Zhenghao Zhang, "Data Traffic Scheduling for Cyber Physical Systems with Application in Voltage Control of Microgrids: A Hybrid System Framework," *IEEE Systems Journal*, Special Issue on Smart Grid Communications Systems, vol. 8, no. 2, p.p. 542–552, June 2014.
260. Walid Saad, Xiangyun Zhou, Zhu Han, and H. Vincent Poor, "On the Physical Layer Security of Backscatter Wireless Systems," *IEEE Transactions on Wireless Communications*, vol. 13, no. 6, p.p. 3442–3451, June 2014.
261. Yi Huang, Mohammad Esmalifalak, Yu Cheng, Husheng Li, Kristy A. Campbell, and Zhu Han, "Adaptive Quickest Estimation Algorithm for Smart Grid Network Topology Error," *IEEE Systems Journal*, Special Issue on Smart Grid Communications Systems, vol. 8, no. 2, p.p. 430–440, June 2014.
262. Lingyang Song, Dusit Niyato, Zhu Han, and Ekram Hossain, "Game-theoretic Resource Allocation Methods for Device-to-Device (D2D) Communication," *IEEE Wireless Communications Magazine*, vol. 21, no. 3, p.p.136–144, June 2014.

263. Jinghuan Ma, Jun Deng, Lingyang Song, Zhu Han, "Incentive Mechanism for Demand Side Management in Smart Grid Using Auction," *IEEE Transactions on Smart Grid*, vol. 5, no. 3, p.p. 1379–1388, May 2014.
264. Zengfeng Zhang, Lingyang Song, Zhu Han, and Walid Saad, "Coalitional Games with Overlapping Coalitions for Interference Management in Small Cell Networks," *IEEE Transactions on Wireless Communications*, vol. 13, no.5, p.p. 2659-2669, May 2014.
265. Yunpeng Wang, Walid Saad, Zhu Han, H. Vincent Poor, and Tamer Basar, "A Game-Theoretic Approach for Energy Trading in Smart Grid," *IEEE Transactions on Smart Grid*, vol. 5, no. 3, p.p. 1439–1450, May 2014.
266. Cuong T. Do, Nguyen H. Tran, Zhu Han, Long Bao Le, Sungwon Lee, Choong Seon Hong, "Optimal Pricing for Duopoly in Cognitive Radio Networks: Cooperate or Not Cooperate?" *IEEE Transactions on Wireless Communications*, vol. 13, no. 3, p.p. 2574–2587, May 2014.
267. Yong Xiao, Dusit Niyato, Zhu Han, and Kwang-Cheng Chen, "Secondary Users Entering the Pool: A Joint Optimization Framework for Spectrum Pooling" *IEEE Journal on Selected Areas in Communications*, special issue on cognitive radio, vol. 32, no. 3, p.p. 572–588, March 2014.
268. Lanchao Liu, Mohammad Esmalifalak, Qifeng Ding, Valentine A. Emesih, and Zhu Han, "Detecting False Data Injection Attacks on Power Grid by Sparse Optimization," *IEEE Transactions on Smart Grid*, vol. 5, no. 2, p.p. 612–632, March 2014.
269. Rong Zheng, Thanh Le, and Zhu Han, "Approximate Online Learning Algorithms for Optimal Monitoring in Multi-channel Wireless Networks," *IEEE Transactions on Wireless Communications*, vol. 13, no. 2, p.p. 1023–1033, February 2014.
270. Lanchao Liu, Zhu Han, Zhiqian Wu, and Lijun Qian, "Spectrum Sensing and Primary User Localization in Cognitive Radio Networks via Sparsity," invited *EAI Endorsed Transactions on Wireless Spectrum*, vol. 01, no. 01, e2, January 2014.
271. Nguyen H. Tran, Choong Seon Hong, Zhu Han, and Sungwon Lee, "Optimal Pricing Effect on Equilibrium Behaviors of Delay-Sensitive Users in Cognitive Radio Networks," *IEEE Journal on Selected Areas in Communications*, special issue on cognitive radio, vol. 31, no. 11, p.p. 2566 - 2579, November 2013.
272. Zhou Yuan, Ju Bin Song, and Zhu Han, "Interference Aware Routing Using Network Formation Game in Cognitive Radio Mesh Networks," *IEEE Journal on Selected Areas in Communications - Cognitive Radio Series*, vol. 31, no. 11, p.p. 2494 - 2503, November 2013.
273. Tianyu Wang, Lingyang Song, and Zhu Han, "Coalitional Graph Games for Popular Content Distribution in Cognitive Radio VANETs," *IEEE Transactions on Vehicular Technology*, Special Section: Graph Theory and Its Application in Vehicular Networking, vol. 62, no. 8, p.p. 4010 - 4019, October 2013.
274. Jun Deng, Rongqing Zhang, Lingyang Song, Zhu Han, and Bingli Jiao, "Truthful Mechanisms for Secure Communication in Wireless Cooperative Systems," *IEEE Transactions on Wireless Communications*, vol. 12, no. 9, p.p. 4236 - 4245, September 2013.

275. Chen Xu, Lingyang Song, Zhu Han, Qun Zhao, Xiaoli Wang, Xiang Cheng, and Bingli Jiao, "Efficiency Resource Allocation for Device-to-Device Underlay Communication Systems: A Reverse Iterative Combinatorial Auction Based Approach," *IEEE Journal on Selected Areas in Communications*, Special Issue on Emerging Technologies in Communications, Area 2: Peer-to-peer Networking, vol. 31, no. 9, p.p. 348 - 358, September 2013 (**IEEE Leonard G. Abraham Prize in the field of Communications Systems, JSAC Best Paper Award, 2016**).
276. Jin Li, Ju Bin Song, and Zhu Han, "Network Connectivity Optimization for Device-to-Device Wireless System with Femtocells," *IEEE Transactions on Vehicular Technology*, vol. 62, no. 7, p.p. 3098 - 3109, September 2013.
277. Husheng Li, Ju-Bin Song and Zhu Han, "Transient Analysis of Data Traffic in Cognitive Radio Networks: A Non-equilibrium Statistical Mechanics Approach," *IEEE Transactions on Wireless Communications*, vol. 12, no. 9, p.p. 4658 - 4667, September 2013.
278. Tianyu Wang, Lingyang Song, Zhu Han, and Bingli Jiao, "Dynamic Popular Content Distribution in Vehicular Networks using Coalition Formation Games," *IEEE Journal on Selected Areas in Communications*, Special Issue on Emerging Technologies in Communications, Area 3: Vehicular Networks and Telematics Applications, vol. 31, no. 9, p.p. 538 - 547, September 2013.
279. Arsenia Chorti, Samir M. Perlaza, Zhu Han, H. Vincent Poor, "On the Resilience of Wireless Multiuser Networks to Passive and Active Eavesdroppers," *IEEE Journal on Selected Areas in Communications*, special issue on cognitive radio, vol. 31, no. 9, p.p. 1850 - 1863, September 2013.
280. Zhou Yuan, Zhu Han, Yan Sun, Husheng Li, and Ju Bin Song, "Routing-Toward-Primary-User Attack and Defense by Belief Propagation in Cognitive Radio Networks," *IEEE Transactions on Mobile Computing*, vol. 12, no. 9, p.p. 1750 - 1760, September 2013.
281. Dan Xu, Xin Liu, and Zhu Han, "Decentralized Bargain: A Two-Tier Market for Efficient and Flexible Dynamic Spectrum Access," *IEEE Transactions on Mobile Computing*, vol. 12, no. 9, p.p. 1697 - 1711, September 2013.
282. Ephraim Zehavi, Amir Leshem, Ronny Levanda, and Zhu Han, "Weighted Max-Min Resource Allocation for Frequency Selective Channels," *IEEE Transactions on Signal Processing*, special issue on Signal Processing Techniques for Wireless Physical Layer Security, vol. 61, no. 15, p.p. 3723 - 3732, August 2013.
283. Yifan Li, Ping Wang, Dusit Niyato, and Zhu Han, "A Hierarchical Cooperation Formation Model for Downlink Data Transmission in Mobile Infostation Networks," *IEEE Wireless Communications Magazine*, vol. 20, no. 3, p.p. 144 - 152, June 2013.
284. Siavash Bayat, Raymond H. Y. Louie, Zhu Han, Branka Vucetic, and Yonghui Li, "Physical Layer Security in Distributed Wireless Network using Matching Theory," *IEEE Transactions on Information Forensics and Security*, vol. 8, no. 5, p.p. 717 - 732, May 2013.
285. Huy Nguyen, Guanbo Zheng, Zhu Han, and Rong Zheng, "Binary Inference for Primary User Separation in Cognitive Radio Networks," *IEEE Transactions on Wireless Communications*, vol. 12, no. 4, p.p. 1532 - 1542, April 2013.

286. Ankur Bansal, Manav R. Bhatnagar, Are Hjørungnes, and Zhu Han, "Low Complexity Decoding in DF MIMO Relaying System," *IEEE Transactions on Vehicular Technology*, vol. 62, no. 3, p.p. 1123 - 1137, March 2013.
287. Mohammad Esmalifalak, Ge Shi, Zhu Han, and Lingyang Song, "Bad Data Injection Attack and Defense in Electricity Market using Game Theory Study," *IEEE Transactions on Smart Grid*, Special Issue on Cyber, Physical, and System Security for Smart Grid, vol. 4, no. 1, p.p. 160 - 169, March 2013.
288. Yi Huang, Mohammad Esmalifalak, Huy Nguyen, Rong Zheng, Zhu Han, Husheng Li, and Lingyang Song, "Bad Data Injection in Smart Grid: Attack and Defense Mechanisms," *IEEE Communication Magazine*, vol. 51, no. 1, p.p. 27-33, January 2013.
289. Zhou Yuan, Dusit Niyato, Husheng Li, Ju Bin Song, and Zhu Han, "Defeating Primary User Emulation Attacks Using Belief Propagation in Cognitive Radio Networks," *IEEE Journal on Selected Areas in Communications*, special issue on Cognitive Radio Series, vol. 30, no. 10, p.p. 1850-1860, November 2012.
290. Quanyan Zhu, Zhou Yuan, Ju Bin Song, Zhu Han, and Tamer Basar, "Interference Aware Routing Game for Cognitive Radio Multi-hop Networks," *IEEE Journal on Selected Areas in Communications*, special issue on Cognitive Radio Series, vol.30, no.10, p.p. 2006-2015, November 2012.
291. Tianyu Wang, Rongqing Zhang, Lingyang Song, Zhu Han, Haopeng Li, and Bingli Jiao, "Power Allocation for Two-Way Relay System Based on Sequential Second Price Auction," invited, *Wireless Personal Communications Journal*, vol. 67, no. 1, p.p. 47 - 62, October 2012.
292. Rongqing Zhang, Lingyang Song, Zhu Han, and Bingli Jiao, "Physical Layer Security for Two Way Relay Communications with Untrusted Relay and Friendly Jammers," *IEEE Transactions on Vehicular Communication*, vol. 61, no. 8, p.p. 3693-3704, October 2012.
293. Walid Saad, Zhu Han, H. Vincent Poor, Tamer Basar, and Ju Bin Song, "A Cooperative Bayesian Nonparametric Framework for Primary User Activity Monitoring in Cognitive Radio Networks," *IEEE Journal on Selected Areas in Communications*, special issue on Cooperative Network, vol.30, no.9, p.p. 1815-1822, October 2012.
294. Husheng Li, Shuping Gong, Lifeng Lai, Zhu Han, Robert C. Qiu, and Depeng Yang, "Efficient and Secure Wireless Communications for Advanced Metering Infrastructure in Smart Grids," *IEEE Transactions on Smart Grid*, vol. 3, no. 3, p.p. 1540-1551, September 2012.
295. Shuguang Cui, Zhu Han, Soumya Kar, Tung Kim, H. Vincent Poor, and Ali Tajer, "Coordinated Data Injection Attack and Detection in Smart Grid," *IEEE Signal Processing Magazine*, special issue on Signal Processing Techniques for Smart Grid, vol. 29, no. 5, p.p. 106-115, September 2012.
296. Walid Saad, Zhu Han, H. Vincent Poor, and Tamer Basar, "Game-Theoretic Methods for the Smart Grid: An Overview of Microgrid Systems, Demand-Side Management, and Smart Grid Communications," *IEEE Signal Processing Magazine*, special issue on Signal Processing Techniques for Smart Grid, vol. 29, no. 5, p.p. 86-105, September 2012.

297. Nipendra Kayastha, Dusit Niyato, Ekram Hossain, and Zhu Han, "Smart Grid Sensor Data Collection, Communication, and Networking: A Tutorial," *Wireless Communications and Mobile Computing*, DOI: 10.1002/wcm.2258, July 2012.
298. Dalei Wu, Song Ci, Haiyan Luo, Zhu Han, Guan-Ming Su, Haohong Wang, and Hui Tang, "Video Summary Delivery over Cooperative Wireless Networks," *IEEE Wireless Communication*, vol. 19, no. 2, p.p. 80-87, April 2012.
299. Walid Saad, Zhu Han, Rong Zheng, Are Hjørungnes, Tamer Basar, and Vincent Poor, "Coalitional Games in Partition Form for Joint Spectrum Sensing and Access in Cognitive Radio Networks," *IEEE Journal of Selected Topics in Signal Processing*, vol. 6, no. 2, p.p. 195-209, April 2012.
300. Nam Tuan Nguyen, Rong Zheng, and Zhu Han, "On Identifying Primary User Emulation Attacks in Cognitive Radio Systems Using Nonparametric Bayesian Classification," *IEEE Transactions on Signal Processing*, vol. 60, no.3, p.p. 1432-1445, March 2012.
301. Zhu Kun, Dusit Niyato, Ping Wang, and Zhu Han, "Dynamic Spectrum Leasing and Service Selection in Spectrum Secondary Market of Cognitive Radio Networks," *IEEE Transactions on Wireless Communications*, vol. 11, no. 3, p.p. 1136-1145, March 2012.
302. Mohamad Charafeddine, Aydin Sezgin, Zhu Han, and Arogyaswami Paulraj, "Achievable and Crystallized Rate Regions of the Interference Channel with Interference as Noise," *IEEE Transactions on Wireless Communications*, vol.11, no.3, p.p. 1100-1111, March 2012.
303. Jia (Jasmine) Meng, Yingying Li, Nam Nguyen, Wotao Yin, and Zhu Han, "Compressive Sensing Based High Resolution Channel Estimation for OFDM System," *IEEE Journal of Selected Topics in Signal Processing*, special issue on Robust Measures and Tests Using Sparse Data for Detection and Estimation, vol.6, no.1, p.p.15-25, February 2012.
304. Jingchao Chen, Rongqing Zhang, Lingyang Song, Zhu Han, and Bingli Jiao, "Joint Relay and Jammer Selection for Secure Two-way Relay Networks," *IEEE Transactions on Information Forensics and Security*, vol.7, no.1, p.p.310-320, February 2012.
305. Lingyang Song, Zhu Han, Zhongshan Zhang, and Bingli Jiao, "Noncooperative Feedback Rate Control Game for Channel State Information in Wireless Networks," *IEEE Journal on Selected Areas in Communications*, special issue on Game Theory in Wireless Communications, vol.30, no.1, p.p.188-197, January 2012.
306. Zhifeng Luo, Zhu Han, Albert Kai-sun Wong, and Shuisheng Qiu, "IDMA-Based Cooperative Partial Packet Recovery: Principles and Applications," *EURASIP Journal on Wireless Communications and Networking*, vol.2012, doi:10.1186/1687-1499-2012-2, January 2012.
307. Zhenghao Zhang, Zhu Han, Husheng Li, Depeng Yang, and Changxing Pei, "Belief Propagation based Cooperative Compressed Spectrum Sensing in Wideband Cognitive Radio Networks," *IEEE Transactions on Wireless Communications*, vol.10, no.9, p.p.3020-3031, September 2011.
308. Walid Saad, Zhu Han, Tamer Basar, Merouane Debbah, and Are Hjørungnes, "Network Formation Games Among Relay Stations in Next Generation Wireless

- Networks,” *IEEE Transactions on Communications*, vol.9, no.9, p.p.2528-2542, September 2011.
309. Lei Jiang, Zhu Han, M. A. Vazquez-Castro, and Are Hjørungnes, “Secure Satellite Communication Systems Design with Individual Secrecy Rate Constraints,” *IEEE Transactions on Information Forensics and Security*, Special Issue on Using the Physical Layer for Securing the Next Generation of Communication Systems, vol.6, no.4, p.p.661-671, September 2011.
  310. Walid Saad, Zhu Han, Tamer Basar, Mérouane Debbah, and Are Hjørungnes, “Hedonic Coalition Formation for Distributed Task Allocation among Wireless Agents,” *IEEE Transactions on Mobile Computing*, vol. 10, no.9, pp.1327–1344, September 2011.
  311. Husheng Li and Zhu Han, “Socially Optimal Queuing Control in Cognitive Radio Networks Subject to Service Interruptions: To Queue or Not to Queue?,” *IEEE Transactions on Wireless Communications*, vol.10, no.5, p.p. 1656-1666, May 2011.
  312. Walid Saad, Zhu Han, Mérouane Debbah, Are Hjørungnes, and Tamer Basar, “Distributed Coalition Formation Games for Secure Wireless Transmission,” invited, *Journal of Mobile Networks and Applications*, Special Issues on Mobility of Systems, Users, Data and Computing, ACM/Springer, April 2011.
  313. Zhu Han, Rong Zheng, and Vincent H. Poor, “Repeated Auctions with Bayesian Nonparametric Learning for Spectrum Access in Cognitive Radio Networks,” *IEEE Transactions on Wireless Communications*, vol.10, no.3, pp.890–900, March 2011.
  314. Jia (Jasmine) Meng, Wotao Yin, Husheng Li, Ekram Hossain, and Zhu Han, “Collaborative Spectrum Sensing from Sparse Observations in Cognitive Radio Networks,” *IEEE Journal on Selected Topics on Communications*, special issue on Advances in Cognitive Radio Networking and Communications, vol.29, no.2, pp.327-337, February 2011.
  315. Walid Saad, Zhu Han, Tamer Basar, Mérouane Debbah, and Are Hjørungnes, “Coalition Formation Games for Collaborative Spectrum Sensing,” *IEEE Transactions on Vehicular Technology*, vol.60, no.1, pp.276–297, January 2011.
  316. Walid Saad, Zhu Han, Are Hjørungnes, Dusit Niyato, and Ekram Hossain, “Coalition Formation Games for Distributed Cooperation Among Roadside Units in Vehicular Networks,” *IEEE Journal on Selected Topics on Communications*, special issue on Vehicular Communications and Networks, vol.29, no.1, pp.48–60, January 2011.
  317. Husheng Li and Zhu Han, “Dogfight in Spectrum: Combating Primary User Emulation Attacks in Cognitive Radio Systems Part II: Unknown Channel Statistics,” *IEEE Transactions on Wireless Communications*, Vol.9, no.12, pp.274-283, December 2010.
  318. Husheng Li and Zhu Han, “Dogfight in Spectrum: Combating Primary User Emulation Attacks in Cognitive Radio Systems Part I: Known Channel Statistics,” *IEEE Transactions on Wireless Communications*, vol.9, no.11, pp.3566-3577, November, 2010.
  319. Husheng Li and Zhu Han, “Catch Me if You Can: An Abnormality Detection Approach for Collaborative Spectrum Sensing in Cognitive Radio Networks,” *IEEE*

- Transactions on Wireless Communications*, vol.9, no.11, pp.3554-3565, November 2010.
320. Lun Dong, Zhu Han, Athina P. Petropulu and H. Vincent Poor, "Improving Wireless Physical Layer Security via Cooperating Relays," *IEEE Transactions on Signal Processing*, vol.58, no.3, pp.1875-1888, March 2010.
  321. Ahmed K. Sadek, Zhu Han, and K. J. Ray Liu, "Distributed Relay-Assignment Protocols for Coverage Expansion in Cooperative Wireless Networks," *IEEE Transactions on Mobile Computing*, vol.9, no.4, pp.505-515, April 2010.
  322. Wenkai Wang, Husheng Li, Yan (Lindsay) Sun, and Zhu Han, "Securing Collaborative Spectrum Sensing against Untrustworthy Secondary Users in Cognitive Radio Networks," *Eurasip Journal on Advances in Signal Processing*, special issue on Advanced Signal Processing for Cognitive Radio Networks. vol.2010, Article ID 695750, 15 pages, 2010 **2015 EURASIP Best Paper Award for the Journal on Advances in Signal Processing.**
  323. Dusit Niyato, Ekram Hossain, Dong In Kim, and Zhu Han, "Relay-Centric Radio Resource Management and Network Planning in IEEE 802.16j Mobile Multihop Relay Networks," *IEEE Transactions on Wireless Communications*, Volume: 8 Issue:12, pp.6115 - 6125, December 2009.
  324. Ramakant Komali, Juan E. Suris, Luiz DaSilva, Zhu Han, and Allen MacKenzie, "Asymptotic Optimality for Distributed Spectrum Sharing using Bargaining Solutions," *IEEE Transactions on Wireless Communications*, vol.8, no.10, pp.5225-5237, October 2009.
  325. Ya-Chiou Shiu, Jason Sheng-Hong Tsai, Leang-San Shieh, and Zhu Han, "A New Approach for Adaptive Blind Equalization of Chaotic Communication: The Optimal Linearization Technique," *Computers and Mathematics with Applications*, vol.58, no.9, pp. 1687-1698, November 2009.
  326. Zhu Han and Yan Lindsay Sun, "Distributed Cooperative Transmission with Unreliable and Untrustworthy Relay Channels," *EURASIP Journal on Wireless Communications and Networking*, special issue on Wireless Network Security, Volume 2009 (2009), Article ID 740912, 13 pages.
  327. Zhu Han, A. Lee Swindlehurst, and K. J. Ray Liu, "Optimization of MANET Connectivity Via Smart Deployment/Movement of Unmanned Air Vehicles," *IEEE Transactions on Vehicular Technology*, vol.58, no.7, pp.3533-3546, September 2009.
  328. Walid Saad, Zhu Han, Mérouane Debbah, Are Hjørungnes, and Tamer Basar, "Coalitional Game Theory for Communication Networks," *IEEE Signal Processing Magazine, Special Issue on Game Theory*, pp.77-97, September 2009.
  329. Zhu Han, Guan-Ming Su, Haohong Wang, Song Ci, and Weifeng Su, "Auction Based Resource Allocation for Cooperative Video Transmission Protocols over Wireless Networks," *Eurasip Journal on Advances in Signal Processing*, Special Issue on Game Theory in Signal Processing and Communications, vol.2009, Article ID 980304, 12 pages, 2009.
  330. Walid Saad, Zhu Han, Mérouane Debbah, and Are Hjørungnes, "A Distributed Coalition Formation Framework for Fair User Cooperation in Wireless Networks," *IEEE Transactions on Wireless Communications*, vol.8, no.9, pp.4580-4593, September 2009.



331. Dusit Niyato, Ekram Hossain, and Zhu Han, "Dynamics of Multiple-Seller and Multiple-Buyer Spectrum Trading in Cognitive Radio Networks: A Game Theoretic Modeling Approach," *IEEE Transactions on Mobile Computing (Featured Article in Transactions on Mobile Computing)*, vol.8, no.8, pp.1009-1022, August 2009.
332. Beibei Wang, Zhu Han, and K. J. Ray Liu, "Distributed Relay Selection and Power Control for Multiuser Cooperative Communication Networks Using Stackelberg Game," *IEEE Transactions on Mobile Computing*, vol.8, no.7, pp.975-990, July 2009.
333. Zhu Han, Ninoslav Marina, Mérouane Debbah, and Are Hjørungnes, "Physical Layer Security Game: Interaction between Source, Eavesdropper and Friendly Jammer," *EURASIP Journal on Wireless Communications and Networking*, special issue on Wireless Physical Layer Security, Volume 2009, Article ID 452907, 10 pages, June 2009.
334. Zhu Han, Thanongsak Himsoon, W. Pam Siriwongpairat, and K. J. Ray Liu, "Resource Allocation for Multiuser Cooperative OFDM Networks: Who Helps Whom and How to Cooperate," *IEEE Transactions on Vehicular Transactions*, vol.58, no.6, pp.2378-2391, June 2009.
335. Zhu Han, Rongfei Fan, and Jiang Hai, "Replacement of Spectrum Sensing in Cognitive Radio," *IEEE Transactions on Wireless Communications*, vol.8, no.6, pp.2819-2926, June 2009.
336. Zhu Han, Xin Zhang, and H. Vincent Poor, "High Performance Cooperative Transmission Protocols Based on Multiuser Detection and Network Coding," *IEEE Transactions on Wireless Communications*, vol.8, no.5, pp.2352-2361, May 2009.
337. Dusit Niyato, Ekram Hossain, and Zhu Han, "Dynamic Spectrum Access in IEEE 802.22-Based Cognitive Wireless Networks: A Game Theoretic Model for Competitive Spectrum Bidding and Pricing," *IEEE Communications Magazine*, Volume: 16 Issue:2, pp.16-23, April 2009 (**The IEEE Communications Society Fred W. Ellersick Prize, IEEE Wireless Communications Magazine Best Paper Award, 2011**).
338. Zhu Han and H. Vincent Poor, "Coalition Games with Cooperative Transmission: A Cure for the Curse of Boundary Nodes in Selfish Packet-Forwarding Wireless Networks," *IEEE Transactions on Communications*, vol.57, no.1, pp.203-213, January 2009.
339. Ahmed Ibrahim, Zhu Han, and K. J. Ray Liu, "Distributed Energy-Efficient Cooperative Routing in Wireless Networks," *IEEE Transactions on Wireless Communications*, vol.7, no.10, pp.3930-3941, October, 2008.
340. Rajiv Agarwal, Vinay Majjigi, Zhu Han, Rath Vannithamby, and John M. Cioffi, "Low Complexity Resource Allocation with Opportunistic Feedback over Downlink OFDMA Networks," *IEEE Journal on Selected Areas on Communications, Special Issue on Exploiting Limited Feedback in Tomorrow's Wireless Communication Networks*, vol.26, no.8, pp.1462-1472, October 2008.
341. Jianwei Huang, Zhu Han, Mung Chiang, and H. Vincent Poor, "Auction-based Resource Allocation for Cooperative Communications," *IEEE Journal on Selected*

- Areas on Communications, Special Issue on Game Theory*, vol.26, no.7, pp.1226-1238, September 2008.
342. Charles Pandana, Zhu Han, and K. J. Ray Liu, "Cooperation Enforcement and Learning for Optimizing Packet Forwarding in Autonomous Wireless Networks," *IEEE Transactions on Wireless Communications*, vol.7, no.8, pp.3150-3163, August 2008.
  343. Zhu Han, Zhu Ji, and K. J. Ray Liu, "A Cartel Maintenance Framework to Enforce Cooperation in Wireless Networks with Selfish Users," *IEEE Transactions on Wireless Communications*, vol.7, no.5, pp.1889-1899, May 2008.
  344. Husheng Li, Zhu Han, and H. Vincent Poor, "Asymptotic Analysis of Large Cooperative Relay Networks Using Random Matrix Theory," *EURASIP Journal on Advances in Signal Processing*, special issue on Wireless Cooperative Networks, Volume 2008, Article ID 235867, April 2008.
  345. Yan Lindsay Sun, Zhu Han, and K. J. Ray Liu, "Defense of Trust Management Vulnerabilities in Distributed Networks," *IEEE Communications Magazine, Special Issue, Security in Mobile Ad Hoc and Sensor Networks*, vol.46, no.2, pp.112-119, February 2008.
  346. Zhu Han and H. Vincent Poor, "Lifetime Improvement in Wireless Sensor Networks via Collaborative Beamforming and Cooperative Transmission," invited, *IET Proceedings of Microwaves, Antennas and Propagation, Special Issue on Antenna Systems and Propagation for Future Wireless Communications*, vol.1, no.6, pp.1103-1110, December 2007.
  347. Guan-Ming Su, Zhu Han, Min Wu, and K. J. Ray Liu, "Joint Uplink and Downlink Optimization for Real-Time Multiuser Video Streaming Over WLANs," *IEEE Journal on Selected Topics in Signal Processing*, vol.1, no.2, pp.280-294, August 2007.
  348. Zhu Han, Zhu Ji, and K. J. Ray Liu, "Non-Cooperative Resource Competition Game by Virtual Referee in Multi-Cell OFDMA Networks," *IEEE Journal on Selected Areas in Communications, Special Issue on Non-cooperative Behavior in Networking*, vol.53, no.10, pp.1079-1090, August 2007.
  349. Thanongsak Himsoon, W. Pam Siritwongpairat, Zhu Han, and K. J. Ray Liu, "Lifetime Maximization via Cooperative Nodes and Relay Deployment in Wireless Networks," *IEEE Journal on Selected Areas in Communications*, vol.25, no.2, pp.306-317, February, 2007.
  350. W. Pam Siritwongpairat, Zhu Han, and K. J. Ray Liu, "Power Controlled Channel Allocation for Multiuser Multiband UWB Systems," *IEEE Transactions on Wireless Communications*, vol.6, no.2, pp.583-592, February 2007.
  351. Zhu Han, Xin Liu, Z. Jane Wang, and K. J. Ray Liu, "Delay Sensitive Scheduling Schemes for Heterogeneous QoS over Wireless Networks," *IEEE Transactions on Wireless Communication*, vol.6, no.2, pp.423-428, February, 2007.
  352. Zhu Han, Guan-Ming Su, Andres Kwasinski, Min Wu, and K. J. Ray Liu, "Multiuser Distortion Management of Layered Video over Resource Limited Downlink Multi-code CDMA," *IEEE Transactions on Wireless Communications*, vol.5, no.11, pp.3056-3067, November, 2006.

353. Guan-Ming Su, Zhu Han, Min Wu, and K. J. Ray Liu, "A Scalable Multiuser Framework for Video Over OFDM Networks: Fairness and Efficiency," *IEEE Transactions on Circuit and System for Video Technology*, vol.16, no.10, pp.1217-1231, October 2006.
354. Zhu Han, Andres Kwasinski, and K. J. Ray Liu, "A Near-Optimal Multiuser Joint Speech Source-Channel Resource-Allocation Scheme over Downlink CDMA Networks," *IEEE Transactions on Communications*, vol.54, no.9, pp.1682-1692, September, 2006.
355. Guan-Ming Su, Zhu Han, Min Wu, and K. J. Ray Liu, "Multiuser Cross-Layer Resource Allocation for Video Transmission over Wireless Networks," *IEEE Network Magazine, Special Issue on Multimedia over Broadband Wireless Networks*, pp.21-27, March/April, 2006.
356. Yan Lindsay Sun, Wei Yu, Zhu Han, and K. J. Ray Liu, "Information Theoretic Framework of Trust Modelling and Evaluation for Ad Hoc Networks," *IEEE Journal on Selected Areas on Communications*, vol.24, no.2, pp.305-317, February, 2006.
357. Zhu Han and K. J. Ray Liu, "Non-Cooperative Power Control Game and Throughput Game over Wireless Networks," *IEEE Transactions on Communications*, vol.53, no.10, pp.1625-1629, Oct. 2005.
358. Zhu Han, Zhu Ji, and K. J. Ray Liu, "Fair Multiuser Channel Allocation for OFDMA Networks Using Nash Bargaining Solutions and Coalitions," *IEEE Transactions on Communications*, vol.53, no.8, pp.1366-1376, Aug. 2005.
359. Z. Jane Wang, Zhu Han and K. J. Ray Liu, "A MIMO-OFDM Channel Estimation Approach Using Time of Arrivals," *IEEE Transactions on Wireless Communications*, vol.4, no.3, pp.1207-1213, May 2005.
360. Zhu Han and K. J. Ray Liu, "Power Minimization Under Throughput Management Over Wireless Networks with Antenna Diversity," *IEEE Transactions on Wireless Communications*, vol.3, no.6, pp.2170-2181, Nov. 2004.
361. Zhu Han, Farrokh R. Farrokhi, and K. J. Ray Liu, "Joint Power Control and Blind Beamforming over Wireless Networks: A Cross Layer Approach," *EURASIP Journal on Applied Signal Processing*, 2004, issue 5, pp.751-761, Special Issue on MIMO Communications and Signal Processing.
362. Zhu Han and K. J. Ray Liu, "Joint Link Quality and Power Management over Wireless Networks with Fairness Constraint and Space-Time Diversity," *IEEE Transactions on Vehicular Technology*, vol.53, no.4, pp.1138-1148, Jul. 2004.

*In Revision or Submitted*

362. Mohammad Aghababaie Alavijeh, Behrouz Maham, Zhu Han, and Said Nader-Esfahani, "Efficient Anti-Jamming Truthful Spectrum Auction among Secondary Users in Cognitive Radio Networks," submitted to *IEEE Transactions on Wireless Communications*.
363. Yulei Zhao, Yong Li, Hongliang Mao, Ning Ge, and Zhu Han, "Efficient Resource Allocation for Network Coding Aided Device-to-Device Communications," submitted to *IEEE Access*.

364. Yangqing Li, Saurabh Prasad, Wei Chen, Changchuan Yin, and Zhu Han, “Compressive Hyperspectral Imaging via Approximate Message Passing,” submitted to *Elsevier Signal Processing: Image Communication*.
365. Yong Xiao, Dusit Niyato, Ping Wang, Wei Li, and Zhu Han, “Dynamic Energy Trading for Wireless Powered Communication Networks,” submitted to *IEEE Wireless Communications Magazine*.
366. Xianfu Chen, Zhu Han, Honggang Zhang, Guoliang Xue, Mehdi Bennis, and Tao Chen, “Foresighted Transmission Scheduling for Energy Optimization in Software-Defined Radio Access Networks,” submitted to *IEEE Transactions on Mobile Computing*.
367. Radwa Sultan, Lingyang Song, Karim G. Seddik, and Zhu Han, “Joint User Pairing, Subcarrier, and Power Allocation in Full-Duplex OFDMA Networks,” submitted to *IEEE Transactions on Vehicular Technology*.
368. Dusit Niyato, Xiao Lu, Ping Wang, Hai Jiang, Dong In Kim, and Zhu Han, “Mobile Wireless Content Caching for 5G Networks,” submitted to *IEEE Network*, special issue on Ultra-Dense Heterogeneous Small Cell Deployment In 5G And Beyond.
369. Kaige Yan, Xingyao Zhang, Xin Fu, and Zhu Han, “Enabling QoE-Aware DVFS for Mobile Devices at Low Battery Level,” submitted to *IEEE Transactions on Computers*.
370. Yong Xiao, Ali Arab, Amin Khodaei, Dusit Niyato, Suresh Khator, and Zhu Han, “Smart Pricing with Q-Learning for Retailers in Electricity Market,” submitted to *IEEE Transactions on Smart Grid*.
371. Yong Xiao, Dusit Niyato, Zixiang Xiong, Zhu Han, and Luiz DaSilva, “A Stochastic Coalition Formation Game for Renewable Energy-Supported Fog Computing Networks,” submitted to *IEEE Transactions on Wireless Communications*.
372. Yun Hu, Zheng Chang, Hongyan Li, Tapani Ristaniemi, and Zhu Han, “Service Provisioning and User Association for Heterogeneous Wireless Railway Networks,” submitted to *IEEE Transactions on Vehicular Technology Connected Vehicles Series*.
373. Wenbo Wang, Andres Kwasinski, Dusit Niyato, and Zhu Han, “Learning for Robust Routing Based on Stochastic Game in Cognitive Radio Networks,” submitted to *IEEE Transactions on Wireless Communications*.
374. Dusit Niyato, Dong In Kim, Ping Wang, and Zhu Han, “Applications of Auctions in Internet of Things (IoT) Data Collection and Communication,” submitted to *IEEE Communications Magazine*, special issue on Internet of Things (IoT).
375. Mohammad Abu Alsheikh, Dusit Niyato, Derek Leong, Ping Wang, and Zhu Han, “A Framework for Optimal Pricing and Bundling of Big Data Service,” submitted to *IEEE Access*.
376. Hang Qin and Zhu Han, “Crude-Oil Scheduling Network in Smart Field under Cyber-Physical System: A Fractional Programming Approach,” submitted to *IEEE Transactions on Systems, Man, and Cybernetics: Systems*.
377. Xiangyu Niu, Hung Khanh Nguyen, Jinyuan Sun, and Zhu Han, “Privacy-preserving Computation for Large-scale Security-Constrained Optimal Power Flow Problem

- in Smart Grid”, submitted to *IEEE Transactions on Dependable and Secure Computing*.
378. Yanru Zhang, Chunxiao Jiang, Nguyen H. Tran, Shengrong Bu, F. Richard Yu, and Zhu Han, “Insurance Plan for Service Assurance in Cloud Computing Market with Incomplete Information”, submitted to *IEEE Transactions on Service Computing*.
  379. Yanru Zhang, Dusit Niyato, Ping Wang, and Zhu Han, “Big Data Services Sales Design with Mixed Bundling Strategy: A Multi-Dimension Adverse Selection Approach”, submitted to *IEEE Transactions on Big Data*.
  380. Lixin Li, Wei Chen, and Zhu Han, “Achievable Rate Region for mmWave Two-Way Large-Scale Antenna Relay Channel,” submitted to *IEEE Wireless Communications Letters*.
  381. Xiaofei Wang, Min Chen, Victor C. M. Leung, Zhu Han, Ted Taekyoung Kwon, and Dapeng Oliver Wu, “Traffic Offloading by Social Network Services-Based Opportunistic Device-to-Device Sharing in Mobile Social Networks,” submitted to *IEEE Transactions on Mobile Computing*.
  382. Zheng Chang, Lei Lei, Huaqing Zhang, Tapani Ristaniemi, Symeon Chatzinotas, Bjorn Ottersten, and Zhu Han, “Secure and Energy-Efficient Resource Allocation for Multiple-Antenna NOMA with Wireless Power Transfer,” submitted to *IEEE Transaction on Green Communications and Networking*.
  383. Jun Du, Erol Gelenbe, Chunxiao Jiang, Zhu Han, and Yong Ren, “Contract Mechanism and Performance Analysis for Data Transaction in Mobile Social Networks,” submitted to *IEEE Transactions on Network Science and Engineering*.
  384. Xi Chen, Qiuyang Shen, Xuqing Wu, Miao Pan, Jiefu Chen, and Zhu Han, “Bayesian Sampling and Approximation for Geosteering Inversion Problem,” submitted to *IEEE Signal Processing Magazine*.
  385. Huaqing Zhang, Wenbo Ding, Jian Song, and Zhu Han, “Resource Allocation in Multi-Hop Visible Light Communication and D2D Heterogeneous Network: A Hierarchical Game Approach,” submitted to *IEEE Transactions on Communications*.
  386. Liqing Liu, Xijuan Guo, Zheng Chang, Tapani Ristaniemi, and Zhu Han, “Joint Optimization of Energy and Delay for Computation Offloading in Cloudlet-Assisted Mobile Cloud Computing,” submitted to *Wireless Networks*.
  387. Jun Du, Erol Gelenbe, Chunxiao Jiang, Zhu Han, and Yong Ren, “Auction-based Data Transaction in Mobile Networks: Data Allocation Design and Performance Analysis,” submitted to *IEEE Transactions on Mobile Computing*.
  388. Tengjiao Wang, Sicong Liu, Fang Yang, Jintao Wang, S Jian Song, and Zhu Han, “Generalized Spatial Modulation Based Multi-User and Signal Detection Scheme for Terrestrial Return Channel with NOMA,” submitted to *IEEE Transactions on Broadcasting*.
  389. Kaigui Bian, Yuzhe Yang, Zhiwen Hu, Zijie Zheng, Lingyang Song, Wotao Yin, and Zhu Han, “AQI-Patroller: 3D Air Quality Profiling in Urban Areas using Drones,” submitted to *IEEE Journal on Internet of Things*.
  390. Shaohan Feng, Dusit Niyato, Ping Wang, and Zhu Han, “Joint Traffic Routing and Virtualized Security Function Activation in Wireless Multihop Networks,” submitted to *IEEE Transactions on Vehicular Technology*.

391. Mbazingwa E. Mkiramweni, Chungang Yang, Jiandong Li, and Zhu Han, "Game Theoretical Approaches for Wireless Communications with Unmanned Aerial Vehicles," submitted to *IEEE Wireless Communications Magazine*.
392. Hui Chen, Zhu Han, Na Li, and Xiaofeng Tao, "Big Data Analysis for US Political Polarization using Random Matrix Theory," submitted to *China Science*.
393. Wanyi Li, Li Wang, and Zhu Han, "Exploiting the Stable Multiple Activity Matching based Power Optimization for Mobile Crowd Sensing Content Sharing," submitted to *IEEE Wireless Communications Letters*.
394. Chungang Yang, Yue Zhang, Jiandong Li, and Zhu Han, "Distributed Interference-Aware Traffic Offloading and Power Control in Ultra-Dense Networks: Mean Field Game With Dominating Player," submitted to *IEEE Transactions on Vehicular Technology*.
395. Sai Mounika Errapotu, Hung Khanh Nguyen, Yanmin Gong, Jin-Hee Cho, Miao Pan, and Zhu Han, "Privacy Preserving ADMM for Smart Home: Cost-Aware Appliance Scheduling Using Fog Computing," submitted to *IEEE Transactions on Dependable and Secure Computing*.
396. Guobin Zhang, Haijun Zhang, Zhu Han, and George K. Karagiannidis, "Spectrum Allocation and Power Control under Complex Inter-Cell Interference in Full-Duplex Ultra-Dense Heterogeneous Networks," submitted to *IEEE Transactions on Communications*.
397. Tai Manh Ho, Nguyen H. Tran, S. M Ahsan Kazmi, Zhu Han, and Choong Seon Hong, "Wireless Network Virtualization with Non-Orthogonal Multiple Access in LTE System," submitted to *IEEE Transactions on Vehicular Technology*.
398. Ye Yu, Xiangyuan Bu, Kai Yang, Hung Khanh Nguyen, and Zhu Han, "Network Function Virtualization Resource Allocation based on Joint Benders Decomposition and ADMM," submitted to *IEEE Transactions on Network on Service Management*.
399. Radwa Sultan, Karim G. Seddik, Zhu Han, and Behnaam Aazhang, "Joint Transmitter-Receiver Optimization and Self-interference Suppression in Full Duplex MIMO System," submitted to *IEEE Transactions on Communications*.
400. Neetu Raveendran, Yunan Gu, Chunxiao Jiang, Nguyen Hoang Tran, Miao Pan, Lingyang Song, and Zhu Han, "Cyclic Three-Sided Matching Game Inspired Wireless Network Virtualization," submitted to *IEEE Transactions on Mobile Computing*.
401. Dong Wang, Bo Bai, Kai Lei, Wenbo Zhao, Yanping Yang, and Zhu Han, "Enhancing Information Security via Physical Layer Approaches in Heterogeneous IoT with Multi-Access Mobile Edge Computing in Smart City," submitted to *IEEE Access*.
402. Xunsheng Du, Hien Van Nguyen, Chunxiao Jiang, Yong Li, F. Richard Yu, and Zhu Han, "Virtual Relay Selection in LTE-V: A Deep Reinforcement Learning Approach to Heterogenous Data," submitted to *IEEE Transactions on Vehicular Technology*.
403. Tingting Liu, Jun Li, Feng Shu, Haibing Guan, Yongpeng Wu, and Zhu Han, "Incentive Mechanism Design for Two-Layer Wireless Edge Caching Networks Using Contract Theory," submitted to *IEEE Transactions on Services Computing*.

404. Tengjiao Wang, Jingbo Tan, Wenbo Ding, Yanru Zhang, Fang Yang, Jian Song, and Zhu Han, "Inter-Community Detection Scheme for Social Internet of Things: A Compressive Sensing Over Graphs Approach," submitted to *IEEE Internet of Things Journal*, special issue on IoT for Smart & Sensing Systems: Issues, trends and applications.
405. Bo Gu, Yifei Wei, Mei Song, Zhu Han, "Double Auction-based relay selection and power allocation for green relay-assisted cellular networks," submitted to *IEEE Transactions on Vehicular Technology*.
406. Lixin Li, Jiao He, Lie-Liang Yang, Zhu Han, Wei Chen, Huisheng Zhang, Xu Li, "Spectral and Energy Efficiency Analysis for Multi-Pair Bidirectional Relaying with Massive MIMO under Channel Aging", submitted to *IEEE Transactions on Vehicular Technology*.
407. Ali Arab, Amin Khodaei, and Zhu Han, "Sustainable Strategic Management of Utilities of the Future: A Resource-based View on Smart Grids," submitted to *Academy of Management Journal*.
408. Yong Niu, Han Shi, Yong Li, Zhangdui Zhong, and Zhu Han, "Joint Sub-Channel Allocation for Access, Backhaul, and Device-to-Device Links in Dense mmWave Small Cells," submitted to *IEEE Access*.
409. Yong Niu, Han Shi, Yong Li, Zhangdui Zhong, and Zhu Han, "Sub-Channel Allocation for Device-to-Device Underlaying MmWave Small Cells Using Coalition Formation Games," submitted to *IEEE Transactions on Network Science and Engineering*.
410. Jiong Liu and Zhu Han, "Performance Analysis of TCP New Reno over Satellite DVB-RCS2 Random Access Links," submitted to *IEEE Transactions on Wireless Communications*.
411. Xiuhua Li, Xiaofei Wang, Ding Li, Peng-Jun Wan, Zhu Han, and Victor C. M. Leung, "Optimizing Hierarchical Edge Caching in Device-to-Device Aided Mobile Networks," submitted to *IEEE Transactions on Wireless Communications*.
412. Lixin Li, Zihe Zhang, Xu Li, Ang Gao, Wei Chen, Miao Pan, and Zhu Han, "Down-link Interference Control in Dense Interference-Aware Drone Small Cells Networks: A Mean Field Game Approach," submitted to *IEEE Transactions on Communications*.
413. Zhikun Wu, Zesong Fei, Ye Yu, Chengwen Xing, and Zhu Han, "Towards Optimal Remote Radio Head Activation, User Association and Power allocation in C-RANs using Benders Decomposition and ADMM," submitted to *IEEE Transactions on Communications*.
414. Francesco Chiti, Romano Fantacci, Dania Marabissi, Benedetta Picano, and Zhu Han, "A Dynamic 5G Spectrum Resources Management Framework for Intelligent IoT Applications," submitted to *IEEE Communications Magazine*, special issue on Unlocking 5G Spectrum Potential For Intelligent Iot: Opportunities, Challenges And Solutions.
415. Guoling Liu, Wenjiang Feng, Zhu Han, and Weiheng Jiang, "Performance Analysis and Optimization of Cooperative Full-Duplex D2D Communication Underlaying Cellular Networks," submitted to *IEEE Transactions on Wireless Communications*.

416. Zhikun Wu, Zesong Fei, and Zhu Han, "Remote Radio Head Activation and User Association in Virtualized Dense C-RANs," submitted to *IEEE Transactions on Wireless Communications*.
417. Nguyen Cong Luong, Yutao Jiao, Ping Wang, Dusit Niyato, and Zhu Han, "A Machine Learning Based Auction for Resource Trading in Fog Computing," submitted to *IEEE Wireless Communications Magazine*.
418. Saeed Ahmadian, Xiao Tang, Heidar Malki, and Zhu Han, "Modelling Cyber Attacks on Electricity Market Using Mathematical Programming with Equilibrium Constraints," submitted to *IEEE Access*.
419. Anselme Ndikumana, Nguyen H. Tran, Tai Manh Ho, Zhu Han, Walid Saad, Dusit Niyato, and Choong Seon Hong, "Joint Communication, Computation, Caching, and Control in Big Data Multi-access Edge Computing," submitted to *IEEE Transactions on Mobile Computing*.
420. Sanghai Guan, Jingjing Wang, Chunxiao Jiang, Zhu Han, and Yong Ren, "Data Driven Paradigms of Networked Colonel Blotto Games: Models, Strategies, and Applications," submitted to *IEEE Transactions on Network Science and Engineering*.
421. Mingjin Gao, Rujing Shen, Shihao Yan, Jun Li, Haibing Guan, Yonghui Li, Jinglin Shi, and Zhu Han, "Heterogeneous Computational Resource Allocation for C-RAN: A Contract-Theoretic Approach," submitted to *IEEE Transactions on Network and Service Computing*.
422. Lixin Li, Ganning He, Lie-Liang Yang, Wei Chen, Xu Li, Ang Gao, and Zhu Han, "Secrecy Sum Rate Maximization in PD-NOMA and SCMA Systems with SWIPT," submitted to *IEEE Transactions on Wireless Communications*.
423. Xuelin Cao, Zuxun Song, Bo Yang, Lijun Qian, and Zhu Han, "Modeling and Analysis of LTE-U/Wi-Fi Coexistence Networks with Full-duplex MAC," submitted to *IEEE Transactions on Wireless Communications*.
424. Hongliang Zhang, Lingyang Song, Zhu Han, and Geoffrey Ye Li, "Cellular Network Controlled UAV-to-X Communications for 5G," submitted to *IEEE Wireless Communication Magazine*, special issue on U2X communication in 5G.
425. Jinlong Wang, Haichao Wang, Zhen Xue, Linyuan Zhang, Guoru Ding, Yuhua Xu, and Zhu Han, "Robust Spectrum Sharing in Air-Ground Integrated Networks: Opportunities and Challenges," submitted to *IEEE Wireless Communications*, Special Issue on Integrating UAVs into 5G and Beyond.
426. Zehui Xiong, Shaohan Feng, Dusit Niyato, Ping Wang, and Zhu Han, "Dynamic Pricing for Revenue Maximization in Mobile Social Data Market with Network Effects," submitted to *IEEE Transactions on Wireless Communications*.
427. Hongtao Zhang, Muchu Niu, and Zhu Han, "Characterization of Joint Coverage Probability Incorporating Temporal Correlation and Fluctuation," submitted to *IEEE Wireless Communication Letters*.
428. Zheng Chang, Yun Hu, Zhenyu Zhou, Tapani Ristaniemi, and Zhu Han, "Resource Management for Service-oriented Wireless Virtualized Networks," submitted to *IEEE Communication Magazines*.



429. Tingting Liu, Junhua Wang, BaekGyu Kim, Chung-Wei Lin, Shinichi Shiraishi, Kai Liu, Jun Li, Feng Shu, Yong Qi, Jiang Xie, and Zhu Han, "Computation Offloading in a Hierarchical Vehicular-based Architecture," submitted to *IEEE Wireless Communications*, Special Issue on Emerging Information and Communication Technologies for Autonomous Driving.
430. Yang Zhang, Zehui Xiong, Dusit Niyato, Ping Wang, and Zhu Han, "Market-Oriented Information Trading in Internet of Things (IoT) for Smart Cities", submitted to *IEEE Wireless Communications*.
431. Sicong Liu, Liang Xiao, Zhu Han, and Yuliang Tang, "Eliminating NB-IoT Interference to LTE Systems: a Sparse Machine Learning Based Approach," submitted to *IEEE Internet of Things Journal*.
432. Jiandong Li, Chungang Yang, Lingxia Wang, Xinwei Wang, and Zhu Han, "Intelligent User-Centric Network Selection: A Model-Driven Reinforcement Learning Framework," submitted to *IEEE Access*.
433. Chuanyin Li, Jiandong Li, Yuzhou Li, and Zhu Han, "Pricing Game with Complete or Incomplete Spectrum Inventories for Mobile Virtual Network Operators," submitted to *IEEE Transactions on Wireless Communications*.
434. Haichao Wang, Jinlong Wang, Guoru Ding, Feifei Gao, and Zhu Han, "Completion Time Minimization with Path Planning for Fixed-Wing UAV Communications," submitted to *IEEE Transactions on Wireless Communications*.
435. Bin Li, Hanyu Cao, Yue Rong, and Zhu Han, "Transceiver Design for AF MIMO Relay Systems with a Power Splitting Based Wireless Powered Relay Node," submitted to *IEEE Transactions on Communications*.
436. Hongliang Zhang, Lingyang Song, Zhu Han, and H. Vincent Poor, "Cooperative UAV Sensing for 5G and Beyond: Opportunities and Challenges," submitted to *IEEE Wireless Communication Magazine*.
437. Yali Chen, Bo Ai, Yong Niu, Ruisi He, Zhangdui Zhong, and Zhu Han, "Resource Allocation for Device-to-Device Communications in Multi-Cell Multi-Band Heterogeneous Cellular Networks," submitted to *IEEE Transactions on Vehicular Technology*.
438. Tingting Liu, Jun Li, Feng Shu, Mulan Wang, and Zhu Han, "Latency, Reliability and Energy-aware Optimal Resource Allocation in Vehicular Fog Networks based on Martingale Theory," submitted to *IEEE Transactions on Vehicular Technology*.
439. Kenza Hamidouche, Walid Saad, Merouane Debbah, My Tra Thai, and Zhu Han, "Contract-based Incentive Mechanism for LTE over Unlicensed Channels," submitted to *IEEE Transactions on Wireless Communications*.
440. Mohamed A. ElMossallamy, Zhu Han, Miao Pan, Riku Jantti, Karim G. Seddik, and Geoffrey Ye Li, "Design and Performance Analysis of Noncoherent Backscatter Communications over Ambient OFDM Signals," submitted to *IEEE Transactions on Communications*.
441. Di Zhou, Min Sheng, Bin Li, Mounika Errapotu Sai, Jiandong Li, and Zhu Han, "Distributionally Robust Planning for Data Delivery in Distributed Satellite Cluster Networks," submitted to *IEEE Transactions on Wireless Communications*.

442. Lun Li, Shuo Qiu, Jiqiang Liu, and Zhu Han, "Blockchain-based Energy Trading in Smart Grid with Conditional Privacy-Preserving Authentication," submitted to *IEEE Transactions on Cloud Computing*.
443. Shixun Gong, Na Li, Xiaofeng Tao, and Zhu Han, "Cooperative Secret and Private Keys Generation in Pairwise Independent Network," submitted to *IEEE Transactions on Information Forensics and Security*.
444. Dawei Chen, Xiaoqin Zhang, Li Wang, and Zhu Han, "Prediction of Cloud Resources Demand Based on Hierarchical Pythagorean Fuzzy Deep Neural Network," submitted to *IEEE Transactions on Cloud Computing*.
445. Mingjin Gao, Rujing Sheng, Shihao Yan, Jun Li, Yonghui Li, Jinglin Shi, and Zhu Han, "Computation Offloading with Instantaneous Load Billing for Mobile-Edge Computing," submitted to *Transactions on Network and Service Management*.
446. Mohamed A. ElMossallamy, Miao Pan, Riku Jantti, Karim G. Seddik, Geoffrey Ye Li, and Zhu Han, "Design and Performance Analysis of Noncoherent Backscatter Communications over Ambient OFDM Signals," submitted to *IEEE Transactions on Communications*.
447. Xianfu Chen, Celimuge Wu, Mehdi Bennis, Zhifeng Zhao, and Zhu Han, "Learning to Entangle Radio Resources in Vehicular Communications: An Oblivious Game-Theoretic Perspective," submitted to *IEEE Transactions on Vehicular Technology*, special issue on Machine Learning-based Internet of Vehicle: Theory, Methodology, and Applications.
448. Di Zhou, Min Sheng, Jie Luo, Runzi Liu, Jiandong Li, and Zhu Han, "Dynamic Optimization for Stochastically Arrived Data Downloading in Small Satellite Networks," submitted to *IEEE Transactions on Wireless Communications*.
449. Haoxin Wang, Tingting Liu, BaekGyu Kim, Chung-Wei Lin, Shinichi Shiraishi, Jiang (Linda) Xie, and Zhu Han, "Architectural Design Alternatives based on Edge/Fog Computing for Connected Vehicles," submitted to *IEEE Communications Surveys & Tutorials*.
450. Haipeng Yao, Pengcheng Gao, Jingjing Wang, Peiying Zhang, Chunxiao Jiang, and Zhu Han, "Capsule Network Assisted IoT Traffic Classification Mechanism for Smart Cities," submitted to *IEEE Internet of Things Journal*, Special Issue on "Enabling a Smart City: Internet of Things Meets AI".
451. Shimin Gong, Jing Xu, Dusit Niyato, Xiaoxia Huang, and Zhu Han, "Embracing Backscatter Communications in Wireless Powered Hybrid Radio Networks," submitted to *IEEE Network*.
452. Bo Yang, Xuelin Cao, Lijun Qian, and Zhu Han, "A Machine Learning Enabled MAC Framework for Heterogeneous Internet-of-Things Networks," submitted to *IEEE Transactions on Wireless Communications*.
453. Tingting Liu, Linlin Sun, Riqing Chen, Feng Shu, Xiaobo Zhou, Zhu Han, "Martingale Theory-based Optimal Task Allocation in Heterogeneous Vehicular Networks," submitted to *IEEE Access*.
454. Haipeng Yao, Mengnan Li, Jun Du, Peiying Zhang, Chunxiao Jiang, and Zhu Han, "Artificial Intelligence-based Techniques for Information Centric Network," submitted to *IEEE Communication Magazine*.

455. Xuelin Cao, Zuxun Song, Bo Yang, Mohamed ElMossallamy, Lijun Qian, and Zhu Han, "A Distributed Ambient Backscatter MAC Protocol for Green Internet-of-Things Networks," submitted to *IEEE Transactions on Green Communications and Networking*.
456. Saeed Ahmadian, Jahandar Jahanipour, Heidar Malki, and Zhu Han, "Detection of False Data Injection Attacks on Smart Grid Using Generative Adversarial Networks and Auto-Encoders," submitted to *IEEE Transactions on Industrial Informatics*.
457. Junhua Wang, Tingting Liu, Kai Liu, BaekGyu Kim, Jiang Xie, and Zhu Han, "Ultra-Reliable Low-Latency Multi-period Computation Offloading in Fog Networks", submitted to *IEEE Transactions on Mobile Computing*.
458. Zhongyu Miao, Ying Wang, and Zhu Han, "A Supplier-Firm-Buyer Framework for Computation and Content Resource Assignment in Wireless Virtual Networks," submitted to *IEEE Transactions on Wireless Communications*.
459. Yu Du, Jun Li, Long Shi, Tingting Liu, Feng Shu, and Zhu Han, "Two-tier Matching Game in Small Cell Networks with Mobile Edge Computing," submitted to *IEEE Transactions on Network Science and Engineering*, Special Issue on Economics of Modern Networks.
460. Huaqing Zhang, Boya Di, Zheng Chang, Xuefang Liu, Lingyang Song, and Zhu Han, "Equilibrium Problems with Equilibrium Constraints Analysis for Power Control and User Scheduling in NOMA Networks," submitted to *IEEE Transactions on Network Science and Engineering*, Special Issue on Economics of Modern Networks.
461. Yan Kyaw Tun, Nguyen H. Tran, Duy T. Ngo, Shashi Raj Pandey, Zhu Han, and Choong Seon Hong, "Wireless Network Slicing: Generalized Kelly Mechanism Based Resource Allocation," submitted to *IEEE Journal on Selected Areas in Communications*, special issue on Network Softwarization & Enablers.
462. Feng Shu, Zhengwang Wang, Tingting Liu, Shihao Yan, Xiaobo Zhou, Jun Li, Xiangyun Zhou, IEEE, Zhu Han, "Low-Complexity Linear Precoding for Secure Spatial Modulation," submitted to *IEEE Journal on Selected Areas in Communications*, special issue on spatial modulation in emerging wireless systems.
463. Xiaoqing Shao, Chungang Yang, Jiandong Li, and Zhu Han, "Game Theoretical Approaches for Cooperative UAV NOMA Networks," submitted to *IEEE Wireless Communications*.
464. Junhua Wang, Kai Liu, Bin Li, Tingting Liu, Ruoguang Li, and Zhu Han, "Ultra-Reliable Low-Latency Multi-period Computation Offloading in Fog Networks," submitted to *IEEE Transactions on Mobile Computing*.
465. Dong Wang, Bo Bai, Guangzheng Zhang, and Zhu Han, "Optimal Placement of a Low-Altitude Aerial Base Station for Securing Communications," submitted to *IEEE Wireless Communication Letter*.
466. James Oyedokun, Shengrong Bu, F. Richard Yu, Zhu Han, and Xue Liu, "Big Data Analytics for Demand Response in Smart Grids - A Survey," submitted to *IEEE Communication Surveys & Tutorials*.
467. Yibing Wang, Yong Niu, Hao Wu, Zhu Han, and Bo Ai, "Sub-Channel Allocation for Device-to-Device Underlying Full-Duplex mmWave Small Cells using Coalition

- Formation Games,” submitted to *IEEE Transactions on Wireless Communications*.
468. Qixun Zhang, Huiqing Sun, Zhiyong Feng, Miao Pan, and Zhu Han, “Sensing and Communication Integrated System for Connected Vehicles: Challenges and Opportunities,” submitted to *IEEE Communication Magazine*.
  469. Biling Zhang, Yuyang Chen, Jung-Lang Yu, and Zhu Han, “An Indirect-Reciprocity Based Incentive Framework for Multimedia Service through Device-to-Device Multicast,” submitted to *IEEE Transactions on Vehicular Technology*.
  470. Chunxia Su, Fang Ye, Tingting Liu, Yuan Tian, and Zhu Han, “Computation Offloading in Hierarchical Mobile Edge Computing Based on Contract Theory and Bayesian Matching Game,” submitted to *IEEE Transactions on Wireless Communications*.
  471. Ruoguang Li, Li Wang, Xiaoming Tao, Mei Song, and Zhu Han, “Bender’s Decomposition Approaches to Secure Energy Efficient Resource Allocation in Multiuser Full Duplex Relay Networks,” submitted to *IEEE Transactions on Vehicular Technology*.
  472. Yan Zhu, Min Sheng, Jiandong Li, Runzi Liu, and Zhu Han, “Modeling and Performance Analysis for Satellite Data Relay Network Using Two-Dimensional Markov-Modulated Process,” submitted to *IEEE Transactions on Communications*.
  473. Kuo Chun Tsai, Wenyi Hu, Xuqing Wu, Jiefu Chen, and Zhu Han, “Automatic First Arrival Picking via Deep Learning with Human Interactive Learning,” submitted to *IEEE Transactions on Geoscience and Remote Sensing*.
  474. Yu Zhang, Bin Li, Feifei Gao, and Zhu Han, “A Robust Design for Ultra Reliable Ambient Backscatter Communication Systems,” submitted to *IEEE Internet of Things Journal*.
  475. Lisu Yu, Pingzhi Fan, Zhu Han, “Maximizing Spectral Efficiency for SCMA Systems with Codebooks Based on Star-QAM Signaling Constellations,” submitted to *IEEE Wireless Communication Letter*.
  476. Fahira Sangare, Duy H. N. Nguyen, and Zhu Han, “Learning Frameworks for Dynamic Joint RF Energy Harvesting and Channel Access,” submitted to *IEEE Access*.
  477. Mohammad Abu Alsheikh, Dinh Thai Hoang, Dusit Niyato, Derek Leong, Ping Wang, and Zhu Han, “Optimal Pricing of Internet of Things: A Machine Learning Approach,” submitted to *IEEE Journal on Selected Areas in Communication*, special issue on Machine Learning in Wireless Communications.
  478. Biling Zhang, Yuyang Chen, Jung-Lang Yu, and Zhu Han, “An Indirect-Reciprocity based Incentive Framework for Multimedia Service through Device-to-Device Multicast,” submitted to *IEEE Transactions on Vehicular Communications*.
  479. Lixin Li, Yang Xu, Jiaying Yin, Wei Liang, Xu Li, and Zhu Han, “Deep Reinforcement Learning Approaches for Joint Caching Content Placement and Content Delivery Policy in Cache-enabled D2D Network,” submitted to *IEEE Transactions on Internet of Things*.

480. Minwei Shi, Kai Yang, Niyato Dusit, and Zhu Han, "Coverage Analysis of Integrated Sub-6GHz-mmWave Cellular Networks with Hotspots," submitted to *IEEE Transactions on Communications*.

### Conference Publications

1. Jiahao Ding, Yanmin Gong, Miao Pan, Zhu Han and Chi Zhang, "Optimal Privacy-Preserving ADMM Algorithm," submitted to *The 39th IEEE International Conference on Distributed Computing Systems (ICDCS)*, Dallas, TX, July 2019.
2. Ruifeng Duan, Estifanos Menta, Huseyin Yigitler, Riku Jantti, and Zhu Han, "Hybrid Beamformer Design for High Dynamic Range Ambient Backscatter Receivers," submitted to *IEEE International Conference on Communications Workshop*, Shanghai, China, May 2019.
3. Hui Chen, Xiaofeng Tao, Na Li, Tengfei Sui, and Zhu Han, "Fake News Analysis Using Random Matrix Theory," submitted to *IEEE International Conference on Communications*, Shanghai, China, May 2019.
4. Haoxin Wang, BaekGyu Kim, Jiang (Linda) Xie, and Zhu Han, "E-Auto: A Communication Scheme for Connected Vehicles with Edge-Assisted Autonomous Driving," submitted to *IEEE International Conference on Communications*, Shanghai, China, May 2019.
5. Neetu Raveendran, Yiyong Zha, Yunfei Zhang, Xin Liu, and Zhu Han, "Virtual Core Network Resource Allocation in 5G Systems using Three-Sided Matching," submitted to *IEEE International Conference on Communications*, Shanghai, China, May 2019.
6. Reginald A. Banez, Lixin Li, Chungang Yang, Lingyang Song, and Zhu Han, "A Mean-Field-Type Game Approach to Computation Offloading in Mobile Edge Computing Networks," submitted to *IEEE International Conference on Communications*, Shanghai, China, May 2019.
7. Jiahao Ding, Sai Mounika Errapotu, Haijun Zhang, Yanmin Gong, Miao Pan, and Zhu Han, "Stochastic ADMM Based Distributed Machine Learning with Differential Privacy," submitted to *IEEE International Conference on Communications*, Shanghai, China, May 2019.
8. Min Wang, Biling Zhang, Jung-Lang Yu, and Zhu Han, "Long-Term Contract Design for Traffic Off-Loading in Heterogeneous Cloud Radio Access Networks," submitted to *IEEE International Conference on Communications*, Shanghai, China, May 2019.
9. Zhikun Wu, Zesong Fei, Zhu Han, and Li-Chun Wang, "Distributed User-centric Clustering and Base Station Mode Choose in Ultra Dense Networks," submitted to *IEEE International Conference on Communications*, Shanghai, China, May 2019.
10. Benedetta Picano, Francesco Chiti, Romano Fantacci, and Zhu Han, "Passengers Demand Forecasting Based on Chaos Theory," submitted to *IEEE International Conference on Communications*, Shanghai, China, May 2019.
11. Dawei Chen, Yifei Wei, Li Wang, and Zhu Han, "Deep Reinforcement Learning Based Strategy for Quadrotor UAV Pursuer and Evader Problem," submitted to *IEEE International Conference on Communications*, Shanghai, China, May 2019.

12. He Cai, Jun Deng, Sheng Chen, Xiaofei Wang, Sangheon Park, and Zhu Han, "Improved Flow Awareness by Spatio-Temporal Collaborative Sampling in Software Defined Networks," submitted to *IEEE International Conference on Communications*, Shanghai, China, May 2019.
13. Bo Gu, Yifei Wei, Xiaowei Liu, Mei Song, and Zhu Han, "Traffic Offloading and Power Allocation for Green HetNets Using Deep Reinforcement Learning," submitted to *IEEE International Conference on Communications*, Shanghai, China, May 2019.
14. Xinru Mi, Chungang Yang, Zheng Chang, Jiandong Li, Zhu Han, "Multi-Resource Management for Multi-Tier Space Information Networks: A Cooperative Game," submitted to *IEEE International Conference on Communications*, Shanghai, China, May 2019.
15. Zhongyu Miao, Ying Wang, and Zhu Han, "Nucleolus-Based Profit Sharing for Wireless Small Cells in Content Centric Networks," submitted to *IEEE International Conference on Communications*, Shanghai, China, May 2019.
16. Yue Yu, Jun Wu, Xiao Tang, Tiecheng Song, BaekGyu Kim, and Zhu Han, "Distributed Downloading Strategy for Multi-Source Data Fusion in Edge-Enabled Vehicular Network," submitted to *IEEE International Conference on Communications*, Shanghai, China, May 2019.
17. Yu Zhang, Bin Li, Feifei Gao and Zhu Han, "Distributionally Robust Optimization for Ultra Reliable Ambient Backscatter Systems," submitted to *IEEE International Conference on Communications*, Shanghai, China, May 2019.
18. Yan Zhu, Min Sheng, Jiandong Li, Runzi Liu, Ziyue Jia, Jianping Liu, and Zhu Han, "Antenna Scheduling for Multiple User Satellites in Space Data Relay Networks," submitted to *IEEE International Conference on Communications*, Shanghai, China, May 2019.
19. Huan Ren, Lixin Li, Wenjun Xu, Wei Chen, and Zhu Han, "Machine Learning-based Hybrid Precoding with Robust Error for UAV mmWave Massive MIMO," submitted to *IEEE International Conference on Communications*, Shanghai, China, May 2019.
20. Chunxia Su, Fang Ye, Yuan Tian, and Zhu Han, "Computation Offloading with Dynamic Matching Algorithm in Mobile Edge Computing Networks," submitted to *IEEE International Conference on Communications*, Shanghai, China, May 2019.
21. Mohamed ElMossallamy, Zhu Han, Miao Pan, Riku Jantti, Karim Seddik, and Geoffrey Ye Li, "Noncoherent Frequency Shift Keying for Ambient Backscatter over OFDM Signals," submitted to *IEEE International Conference on Communications*, Shanghai, China, May 2019.
22. Yuyang Chen, Biling Zhang, Min Wang, Tianyu Xu, and Zhu Han, "An Indirect-Reciprocity Game Theoretic Framework for Device-to-Device Multicast," submitted to *IEEE International Conference on Communications*, Shanghai, China, May 2019.
23. Jinglin Zhang, Wenjun Xu, Hui Gao, Miao Pan, Zhiyong Feng, and Zhu Han, "Position-Attitude Prediction based Beam Tracking for UAV mmWave Communications," submitted to *IEEE International Conference on Communications*, Shanghai, China, May 2019.

24. Ye Yu, Xiangyuan Bu, Kai Yang, Hongyuan Yang, and Zhu Han, "UAV-Aided Low Latency Mobile Edge Computing with mmWave Backhaul," submitted to *IEEE International Conference on Communications*, Shanghai, China, May 2019.
25. Bingjie Liu, Haitao Xu, Xianwei Zhou, Zhu Han, "Stackelberg Differential Game based Resource Allocation in Wireless Networks with Fog Computing," submitted to *IEEE International Conference on Communications*, Shanghai, China, May 2019.
26. Sahil Garg, Kuljeet Kaur, Georges Kaddoum, Neeraj Kumar, and Zhu Han, "SecIoV: A Multi-Stage Anomaly Detection Scheme for Internet of Vehicles," submitted to *IEEE International Conference on Communications*, Shanghai, China, May 2019.
27. Qianqian Cheng, Lixin Li, Ruituo Jiang, Xu Li, Hongying Meng, and Zhu Han, "Deep Fully Convolutional Neural Network-Based Speech Enhancement Using Generative Adversarial Network," submitted to *44th International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, Brighton, UK, May 2019.
28. Xuelin Cao, Zuxun Song, Bo Yang, Mohamed ElMossallamy, Lijun Qian, and Zhu Han, "A Distributed MAC Using Wi-Fi to Assist Sporadic Backscatter Communications," submitted to *IEEE International Conference on Computer Communications (INFOCOM) workshop*, Paris, France, May 2019.
29. Bo Yang, Hsiang-Huang Wu, Xuelin Cao, Xiangfang Li, Timothy Kroecker, Zhu Han, and Lijun Qian, "Intelli-Eye: An UAV Tracking System with Optimized Machine Learning Tasks Offloading," submitted to *IEEE International Conference on Computer Communications (INFOCOM) workshop*, Paris, France, May 2019.
30. Xunsheng Du, Xuqing Wu, Jiefu Chen, Joey Roth, Kwee Choong See, and Zhu Han, "Deep Learning Model for Quantifying Shaker Cutting Volumes in Real-Time Via Video Streaming," *SPE/ IADC Drilling Conference and Exhibition*, Hague, Netherland, March 2019.
31. Xunsheng Du, Xuqing Wu, Jiefu Chen, and Zhu Han, "The Embedded VGG-net Video Stream Processing Framework for Real-time Quantification of Shaker Cutting Volume," *International Petroleum Technology Conference*, Beijing, China, March 2019.
32. Ruoguang Li, Li Wang, Mei Song, and Zhu Han, "Asynchronous Finite Sum Optimization for Task Pricing in Crowdsourcing-Based Internet of Things," invited *IEEE International Conference on Communication Systems*, Chengdu, China December 2018.
33. Jingyi Wang, Xinyue Zhang, Haijun Zhang, Hai Lin, Hideki Tode, Miao Pan, and Zhu Han, "Data-Driven Optimization for Utility Providers with Differential Privacy of Users' Energy Profile," *IEEE Globecom*, Abu Dhabi, UAE, December 2018.
34. Chuanyin Li, Jiandong Li, Yuzhou Li, and Zhu Han, "Price and Spectrum Inventory Game for MVNOs in Wireless Virtualization Communication Markets," *IEEE Globecom*, Abu Dhabi, UAE, December 2018.
35. Dawei Chen, Xiaoqin Zhang, Li Wang, and Zhu Han, "Prediction of Cloud Resources Demand Based on Fuzzy Deep Neural Network," *IEEE Globecom*, Abu Dhabi, UAE, December 2018.

36. Mohamed A. ElMossallamy, Zhu Han, Miao Pan, Riku Jantti, Karim G. Seddik, and Geoffrey Ye Li, "Backscatter Communications over Ambient OFDM Signals using Null Subcarriers," *IEEE Globecom*, Abu Dhabi, UAE, December 2018.
37. Sanghai Guan, Jingjing Wang, Chunxiao Jiang, Zhu Han, Yong Ren, and Abderahim Bensliman, "Colonel Blotto Game Aided Attack-Defense Analysis in Real-World Networks," *IEEE Globecom*, Abu Dhabi, UAE, December 2018.
38. Junhua Wang, Tingting Liu, Kai Liu, BaekGyu Kim, Jiang Xie, and Zhu Han, "Computation Offloading over Fog and Cloud using Multi-Dimensional Multiple Knapsack Problem," *IEEE Globecom*, Abu Dhabi, UAE, December 2018.
39. Xiao Tang, Pinyi Ren, and Zhu Han, "Securing Small Cell Networks Under Interference Constraint: A Quasi-Variational Inequality Approach," *IEEE Globecom*, Abu Dhabi, UAE, December 2018.
40. Zijie Zheng, Lingyang Song, Zhu Han, Geoffrey Y. Li, and H. V. Poor, "A Stackelberg Game Approach to Large-Scale Edge Caching," *IEEE Globecom*, Abu Dhabi, UAE, December 2018.
41. Tingting Liu, Jun Li, Feng Shu, and Zhu Han, "Quality-of-Service Driven Resource Allocation Based on Martingale Theory," *IEEE Globecom*, Abu Dhabi, UAE, December 2018.
42. Amit Samanta, Zheng Chang, and Zhu Han, "Latency-Oblivious Distributed Task Scheduling for Mobile Edge Computing," *IEEE Globecom*, Abu Dhabi, UAE, December 2018.
43. Jun Li, Ran Ding, Yu Du, Tingting Liu, and Zhu Han, "Incomplete Contract-Based Ownership Allocation for Operator in Mobile Edge Computing," *4th IEEE International Conference on Computer and Communications*, Chengdu, China, December 2018.
44. Saeed Ahmadian, Heidar Malki, and Zhu Han, "Cyber Attacks on Smart Energy Grids Using Generative Adversarial Networks," invited *6th IEEE Global Conference on Signal and Information Processing (GlobalSIP)*, Anaheim, CA, November 2018.
45. Jiaying Yin, Lixin Li, Yang Xu, Wei Liang, Huisheng Zhang<sup>1</sup>, Zhu Han, "Joint Content Popularity Prediction And Content Delivery Policy For Cache-Enabled D2D Networks: A Deep Reinforcement Learning Approach," *6th IEEE Global Conference on Signal and Information Processing (GlobalSIP)*, Anaheim, CA, November 2018.
46. Jiahao Ding, Sai Mounika Errapotu, Yuanxiong Guo, Miao Pan, and Zhu Han, "Stochastic Alternating Direction Method of Multipliers Based Distributed Learning with Differential Privacy," submitted to *IEEE International Conference on Data Mining*, Singapore, November 2018.
47. Xiao Tang, Pinyi Ren, and Zhu Han, "Energy Efficiency Competition for Visible Light Communication under Illumination Constraint," *Asia-Pacific Signal and Information Processing Association Annual Summit and Conference*, Honolulu, Hawaii, November 2018.
48. Zihe Zhang, Lixin Li, Xiaomin Liu, Wei Liang, Zhu Han, "Matching-Based Resource Allocation and Distributed Power Control Using Mean Field Game in the



- NOMA-Based UAV Networks,” *Asia-Pacific Signal and Information Processing Association Annual Summit and Conference*, Honolulu, Hawaii, November 2018.
49. Ye Yu, Xiangyuan Bu, Kai Yang, and Zhu Han, “Energy Efficient Mobile Edge Computing using Joint Benders Decomposition and Distributed Dinkelbach Algorithm,” *Asia-Pacific Signal and Information Processing Association Annual Summit and Conference*, Honolulu, Hawaii, November 2018.
  50. Kalle Ruttik, Ruifeng Duan, Riku Jantti, and Zhu Han, “Does Ambient Backscatter Communication Need Additional Regulations?” invited, *IEEE International Symposium on Dynamic Spectrum Access Networks (DySPAN)*, Seoul, South Korea, October 2018.
  51. James Oyedokun, Shengrong Bu, Yong Xiao, and Zhu Han, “Smart Meter Data Characterization and Clustering for Peak Demand Targeting in Smart Grids,” submitted to *IEEE PES ISGT Europe*, Sarajevo, Bosnia and Herzegovina, October 2018.
  52. Xiaoyuan Liang, Guiling Wang, Yi Qi, and Zhu Han, “A Deep Spatio-Temporal Fuzzy Neural Network for Passenger Demand Prediction,” submitted to *ACM International Conference on Information and Knowledge Management (CIKM)*, Turin, Italy, October 2018.
  53. Hongliang Zhang, Boya Di, Xiaomei Zhang, Kaigui Bian, Lingyang Song and Zhu Han, “Cellular Internet-of-Things (IoT) Communications over Unlicensed Band,” *IEEE International Symposium on Dynamic Spectrum Access Networks (DySPAN)*, Seoul, South Korea, October, 2018.
  54. Yuchen Jin, Xuqing Wu, Jiefu Chen, Zhu Han, Wenyi Hu, “Seismic Data Denoising By Deep Residual Networks,” submitted to *Society of Exploration Geophysicists (SEG)*, Anaheim, CA, October 2018.
  55. Kuo Chun Tsai, Xuqing Wu, Jiefu Chen, Wenyi Hu, and Zhu Han, “First Break Automatic Picking with Deep Semi-Supervised Learning Neural Network,” submitted to *Society of Exploration Geophysicists (SEG)*, Anaheim, CA, October 2018.
  56. Xiaomin Liu, Lixin Li, Wei Liang, Fucheng Yang, Haitao Xu, and Zhu Han, “Joint Optimization Scheme for Spectrum Leasing in Cognitive Radio Networks,” invited *The Tenth International Conference on Wireless Communications and Signal Processing (WCSP)*, Hangzhou, China, October 2018.
  57. Zihe Zhang, Lixin Li, Wei Liang, Xu Li, Ang Gao, Wei Chen, and Zhu Han, “Downlink Interference Management in Dense Drone Small Cells Networks Using Mean-Field Game Theory,” invited, *The Tenth International Conference on Wireless Communications and Signal Processing (WCSP)*, Hangzhou, China, October 2018
  58. Wenzhong Yan, Lixin Li, Xu Li, Ang Gao, Huisheng Zhang, Wei Chen, and Zhu Han, “A Contract-Based Incentive Mechanism in RF-Powered Backscatter Cognitive Radio Networks,” invited, *The Tenth International Conference on Wireless Communications and Signal Processing (WCSP)*, Hangzhou, China, October 2018
  59. Yatai Liu, Lixin Li, Wei Liang, Huisheng Zhang, Ang Gao, Xu Li, and Zhu Han, “Auction-Based Users Dynamic Allocation in Heterogeneous Networks,” *IEEE/CIC International Conference on Communications in China (ICCC)*, Beijing, China, August 2018.

60. Shaomin Zhang, Lixin Li, Jiaying Yin, Wei Liang, Xu Li, Wei Chen, and Zhu Han, "A Dynamic Power Allocation Scheme in Power-Domain NOMA using Actor-Critic Reinforcement Learning," *IEEE/CIC International Conference on Communications in China*, Beijing, China, August 2018.
61. Yang Xu, Lixin Li, Ziheng Zhang, Kaiyuan Xue, and Zhu Han, "A Discrete-Time Mean Field Game in Multi-UAV Wireless Communication System," *IEEE/CIC International Conference on Communications in China*, Beijing, China, August 2018.
62. Peitong Yang, Lixin Li, Jiaying Yin, Huisheng Zhang, Wei Liang, Wei Chen, and Zhu Han, "Dynamic Spectrum Access in Cognitive Radio Networks Using Deep Reinforcement Learning and Evolutionary Game," *IEEE/CIC International Conference on Communications in China (ICCC)*, Beijing, China, August 2018.
63. Youbing Hu, Lixin Li, Jiaying Yin, Huisheng Zhang, Wei Liang, Ang Gao, and Zhu Han, "Optimal Transmit Antenna Selection Strategy for MIMO Wiretap Channel Based on Deep Reinforcement Learning," *IEEE/CIC International Conference on Communications in China (ICCC)*, Beijing, China, August 2018.
64. Xiaoyuan Liang, Guiling Wang, and Zhu Han, "A Low-Cost Collaborative Indoor Localization System based on Smartphone Platform," invited *IEEE International Conference on Green Computing and Communications (GreenCom)*, Halifax, Canada, August 2018.
65. Feiran You, Jun Li, Jinhui Lu, Feng Shu, Tingting Liu, and Zhu Han, "A Multi-rounds Double Auction Based Resource Trading for Small-Cell Caching System," invited, *The 27th International Conference on Computer Communications and Networks (ICCCN 2018)*, Hangzhou, China, August 2018.
66. Oluwaseyi Omotere, John Fuller, Lijun Qian, and Zhu Han, "Spectrum Occupancy Prediction in Coexisting Wireless Systems using Deep Learning," submitted to *IEEE Vehicular Technology Conference*, Chicago, IL, August 2018.
67. Shaobo Liu, Biling Zhang, Jung-Lang Yu, and Zhu Han, "A Delay and Traffic Balancing Sensitive Scheme for User Association in Limited Fronthaul H-CRANs," *15th International Symposium on Wireless Communication Systems*, Lisbon, Portugal, August 2018.
68. Mingyan Xiao, Ming Li, Linke Guo, Miao Pan, Zhu Han, and Pan Li, "Securing Task Allocation in Mobile Crowd Sensing: An Incentive Design Approach," submitted to *ICDCS 38th IEEE International Conference on Distributed Computing Systems*, Vienna, Austria, July 2018.
69. Jun Du, Chunxiao Jiang, Erol Gelenbe, Zhu Han, Yong Ren, and Mohsen Guizani, "Networked Data Transaction in Mobile Networks: A Prediction-based Approach Using Auction," *The 14th International Wireless Communications and Mobile Computing Conference (IWCMC)*, Limassol, Cyprus, June 2018.
70. Zhibin Xu, Lixin Li, Haitao Xu, Ang Gao, Xu Li, and Zhu Han, "Precoding Design for Drone Small Cells Cluster Network with Massive MIMO: A Game Theoretical Approach," *The 14th International Wireless Communications and Mobile Computing Conference (IWCMC)*, Limassol, Cyprus, June 2018.
71. Imran Akhtar, Lixin Li, Fucheng Yang, Xu Li, Ang Gao, Wei Chen, and Zhu Han, "Energy Efficient Hybrid Precoding for Cooperative Multicell Multiuser Massive

- MIMO Systems with Multiple Base Station Association,” *International Wireless Communications and Mobile Computing Conference (IWCMC)*, Limassol, Cyprus, June 2018.
72. Jun Du, Chunxiao Jiang, Erol Gelenbe, Zhu Han, Yong Ren, and Mohsen Guizani “Cognitive Data Allocation for Auction-based Data Transaction in Mobile Networks,” *The 14th International Wireless Communications and Mobile Computing Conference (IWCMC)*, Limassol, Cyprus, June 2018.
  73. Xiaoran Fan, Han Ding, Yanyong Zhang, Wade Trappe, Zhu Han, and Rich Howard, “Energy Ball: Efficient and Safe Wireless Energy Transfer in Internet of Things through Coherent Phase Combining,” submitted to *Annual International Conference on Mobile Systems, Applications, and Services (MobiSys)*, Munich, Germany, June, 2018.
  74. Ruifeng Duan, Riku Jantti, Mohamed ElMossallamy, Zhu Han, and Miao Pan, “Multi-Antenna Receiver for Ambient Backscatter Communication Systems,” *IEEE 19th International Workshop on Signal Processing Advances in Wireless Communications (SPAWC)*, Kalamata, Greece, June 2018
  75. Nguyen Tran, David Mayerich, and Zhu Han, “Multi-Modal Infrared Spectroscopic Image Reconstruction,” submitted to *SPIE Translational Biophotonics 2018*, Houston, TX, May 2018.
  76. Neetu Raveendran, Kaigui Bian, Lingyang Song, and Zhu Han, “A Social-Choice Theoretic Approach For Analyzing User Behaviors In Online Streaming Mobile Applications ,” invited, *8th EAI International Conference on Game Theory for Networks (GAMENETS)*, Seoul, South Korea, May 2018.
  77. Haitao Xu, Hung Khanh Nguyen, Xianwei Zhou, Zhu Han, “Stackelberg Differential Game based Charging Control of Electric Vehicles in Smart Grid,” *8th EAI International Conference on Game Theory for Networks*, Seoul, South Korea, May 2018.
  78. Imran Akhtar, Lixin Li, Xu Li, Wei Chen, Zhu Han, “Weighted Sum-Rate Maximization for Cooperative Multicell Multiuser Massive MIMO Systems based on Discretized Pareto Boundary Approximation,” *the 27th Wireless and optical Communications Conferences*, Hualien, Taiwan, May 2018.
  79. Jiaying Yin, Lixin Li, Huisheng Zhang, Xu Li, Ang Gao, and Zhu Han, “A Prediction-Based Coordination Caching Scheme for Content Centric Networking,” *the 27th Wireless and optical Communications Conferences*, Hualien, Taiwan, May 2018.
  80. Xuelin Cao, Zuxun Song, Bo Yang, and Zhu Han, “Full-Duplex MAC Protocol for Wi-Fi/LTE-U Coexistence Networks,” *IEEE International Conference on Communications Workshops- FDComm, Third Workshop on Full-Duplex Communications for Future Wireless Networks*, Kansas City, MO, May 2018.
  81. Ruoguang Li, Li Wang, Mei Song, and Zhu Han, “Secure Energy Efficient Resource Allocation for OFDM Full-Duplex Relay Cooperative Networks,” *IEEE International Conference on Communications Workshop - FDComm, Full-Duplex Communications for Future Wireless Networks*, Kansas City, MO, May 2018.

82. Yifei Wei, Zhiqiang Zhang, F. Richard Yu, and Zhu Han, "Joint User Scheduling and Content Caching Strategy for Mobile Edge Networks Using Deep Reinforcement Learning," *IEEE International Conference on Communications Workshop - ICECC, Information-Centric Edge Computing and Caching for Future Networks*, Kansas City, MO, May 2018.
83. Khaled Rabieh, Miao Pan, Zhu Han, and Vitaly Ford, "SRPV: A Scalable Revocation Scheme for Pseudonyms-based Vehicular Ad Hoc Networks," *IEEE International Conference on Communications*, Kansas City, MO, May 2018.
84. Zehui Xiong, Shaohan Feng, Dusit Niyato, Ping Wang, and Zhu Han, "Optimal Pricing-Based Edge Computing Resource Management in Mobile Blockchain," *IEEE International Conference on Communications*, Kansas City, MO, May 2018.
85. Yu Liu, Yong Niu, Yong Li, Ming Zeng, Zhu Han, "Exploiting Multi-Hop Relay to Achieve Mobility-Aware Transmission Scheduling in mmWave Systems," *IEEE International Conference on Communications*, Kansas City, MO, May 2018.
86. Tengjiao Wang, Jingbo Tan, Wenbo Ding, Yanru Zhang, Fang Yang, Jian Song, and Zhu Han, "Compressive Sensing Over Graphs Based Inter-Community Detection Scheme in Mobile Social Networks," *IEEE International Conference on Communications*, Kansas City, MO, May 2018.
87. Jingjing Zhao, Yuanwei Liu, Toktam Mahmoodi, Kok Keong Chai, Yue Chen, and Zhu Han, "Resource Allocation in Cache-Enabled CRAN with Non-Orthogonal Multiple Access," *IEEE International Conference on Communications*, Kansas City, MO, May 2018.
88. Wanyi Li, Li Wang, Yunan Gu, Ruoguang Li, Mei Song, and Zhu Han, "Stable Multiple Activity Matching Based Content Sharing for Mobile Crowd Sensing," *IEEE International Conference on Communications*, Kansas City, MO, May 2018.
89. Lili Wang, Biling Zhang, Jung-Lang Yu, and Zhu Han, "Contract Design for Traffic Off-loading Collaboration in H-CRAN with Asymmetric Information," *IEEE International Conference on Communications*, Kansas City, MO, May 2018.
90. Ye Yu, Xiangyuan Bu, Kai Yang, and Zhu Han, "Green Fog Computing Resource Allocation using Joint Benders Decomposition, Dinkelbach Algorithm and Modified Distributed Inner Convex Approximation," *IEEE International Conference on Communications*, Kansas City, MO, May 2018.
91. Hui Chen, Xiaofeng Tao, Na Li, and Zhu Han, "Political Polarization Analysis Using Random Matrix Theory: Case Study for USA Biparty Public View," *IEEE International Conference on Communications*, Kansas City, MO, May 2018.
92. Yuzhe Yang, Zijie Zheng, Kaigui Bian, Lingyang Song, and Zhu Han, "Sensor Deployment Recommendation for 3D Fine-Grained Air Quality Monitoring using Semi-Supervised Learning," *IEEE International Conference on Communications*, Kansas City, MO, May 2018.
93. Tai Ho, Nguyen H. Tran, S. M. Ahsan Kazmi, Zhu Han, and Choong Seon Hong, "Wireless Network Virtualization with Non-Orthogonal Multiple Access," submitted to *IEEE/IFIP Network Operations and Management Symposium*, Taipei, Taiwan, April 2018.

94. Kuo Chun Tsai, Li Wang, and Zhu Han, "Mobile Social Media Networks Caching with Convolutional Neural Network," *IEEE Wireless Communications and Networking Conference (WCNC) Workshop*, Barcelona, Spain, April 2018.
95. Haitao Xu, Yuqiong Cao, Xianwei Zhou, and Zhu Han, "Stackelberg Differential Game based Power Control in Small Cell Networks Powered by Renewable Energy," *IEEE Wireless Communications and Networking Conference (WCNC)*, Barcelona, Spain, April 2018.
96. Zheng Chang, Chunlei Jing, Xijuan Guo, Zhu Han, and Tapani Ristaniemi, "Resource Allocation for Wireless Virtualized HetNet with Caching and Hybrid Energy Supply," *IEEE Wireless Communications and Networking Conference (WCNC)*, Barcelona, Spain, April 2018.
97. Tingting Liu, Jun Li, BaekGyu Kim, Chung-Wei Lin, Shinichi Shiraishi, Jiang Xie, and Zhu Han, "Distributed File Allocation Using Matching Game in Mobile Fog-Caching Service Network," *IEEE Conference on Computer Communications Workshops (INFOCOM WKSHPS): IECCO: Integrating Edge Computing, Caching, and Offloading in Next Generation Networks*, Honolulu, HI, April 2018.
98. Xiaoran Fan, Zhijie Zhang, Wade Trappe, Yanyong Zhang, Richard Howard, and Zhu Han, "Secret-Focus: A Practical Secret Communication System by Perturbing Focused Phases Among Distributed Transmitters," *IEEE Conference on Computer Communications (INFOCOM)*, Honolulu, HI, April 2018.
99. Kongrath Suankaewmanee, Dinh Thai Hoang, Dusit Niyato, Suttinee Sawadstang, Ping Wang, and Zhu Han, "Performance Analysis and Application of Mobile Blockchain," *International Conference on Computing, Networking and Communications*, Maui, HI, March 2018.
100. Qiuyang Shen, Zhu Han, and Jiefu Chen, "Subsurface characterization uncertainty quantification: Monte Carlo with collocation method and Bayesian inference method," *National Radio Science Meeting*, Boulder, CO, Jan. 2018.
101. Yinan Ding, Li Wang, Zexuan Yang, and Zhu Han, "Moral Hazard Based Incentive Mechanism for Cooperative Caching in Multi-hop Communications," *IEEE Global Communications Conference: Workshops: 6th International Workshop on Emerging Technologies for 5G and Beyond Wireless and Mobile Network*, Singapore, December 2017.
102. Yifei Wei, Zhiqiang Zhang, F. Richard Yu, and Zhu Han, "Power Allocation in HetNets with Hybrid Energy Supply Using Actor-Critic Reinforcement Learning," *IEEE Globecom*, Singapore, December 2017.
103. Yuzhe Yang, Zijie Zheng, Kaigui Bian, Yun Jiang, Lingyang Song, and Zhu Han, "Arms: A Fine-grained 3D AQI Realtime Monitoring System by UAV," *IEEE Globecom*, Singapore, December 2017.
104. Huong Tra Le, Nguyen H. Tran, Phuong L. Vo, Zhu Han, Mehdi Bennis, and Choong Seon Hong, "Contract-based Cache Partitioning and Pricing Mechanism in Wireless Network Slicing," *IEEE Globecom*, Singapore, December 2017.
105. Neetu Raveendran, Huaqing Zhang, Zijie Zheng, Lingyang Song, and Zhu Han, "Large-Scale Fog Computing Optimization using Equilibrium Problem with Equilibrium Constraints," *IEEE Globecom*, Singapore, December 2017.

106. Huaqing Zhang, Xiao Tang, Reginald A. Benez, Pinyi Ren, Lingyang Song, and Zhu Han, "An EPEC Analysis for Power Allocation in LTE-V Networks," *IEEE Globecom*, Singapore, December 2017.
107. Jingyi Wang, Yanming Gong, Lijun Qian, Riku Jantti, Miao Pan, and Zhu Han, "Primary Users' Operational Privacy Preservation via Data-Driven Optimization," *IEEE Globecom*, Singapore, December 2017 **Best Paper Award**.
108. Jiao He, Lixin Li, Huisheng Zhang, Wei Chen, Lie-Liang Yang, and Zhu Han, "Multi-Pair Bidirectional Relaying with Full-Duplex Massive MIMO Experiencing Channel Aging," *IEEE Globecom*, Singapore, December 2017.
109. Zheng Chang, Chunlei Jing, Xijun Guo, Zhu Han, and Tapani Ristaniemi, "Distributed Resource Allocation for Wireless Virtualized Energy Harvesting Small Cell Networks," *IEEE Globecom*, Singapore, December 2017.
110. Jun Du, Erol Gelenbe, Chunxiao Jiang, Zhu Han, and Yong Ren, "Data Transaction Modeling in Mobile Networks: Contract Mechanism and Performance Analysis," *IEEE Globecom*, Singapore, December 2017.
111. Chen Xu, Junhao Feng, Zhenyu Zhou, Zheng Chang, Zhu Han, and Shahid Mumtaz, "Two-Stage Matching for Energy-Efficient Resource Management in D2D Cooperative Relay Communications," *IEEE Globecom*, Singapore, December 2017.
112. Yanru Zhang, Xiang-Yang Li, and Zhu Han, "Third Party Auditing for Service Assurance in Cloud Computing," *IEEE Globecom*, Singapore, December 2017.
113. Sami Khairy, Lin X. Cai, Yu Cheng, Zhu Han, and Hanguan Shan, "A Hybrid-LBT MAC with Adaptive Sleep for LTE LAA Coexisting with Wi-Fi over Unlicensed Band," *IEEE Globecom*, Singapore, December 2017.
114. Radwa Sultan, Karim G. Seddik, Zhu Han, and Behnaam Aazhang, "Asymptotic Behavior Analysis and Performance Optimization in Full Duplex Massive MIMO," *IEEE Globecom*, Singapore, December 2017.
115. Chunggang Yang, Yue Zhang, Jiandong Li, and Zhu Han, "Power Control Mean Field Game With Dominator in Ultra-Dense Small Cell Networks," *IEEE Globecom*, Singapore, December 2017.
116. Radwa Sultan, Karim G. Seddik, and Zhu Han, "Crystallized Rate Regions for Full Duplex Enabled Small Cell Networks," *IEEE Globecom*, Singapore, December 2017.
117. Li Wang, Huaqing Wu, Zhu Han, Ping Zhang, H. Vincent Poor, "Dynamic Resource Matching for Socially Cooperative Caching in IoT Networking," *IEEE Globecom*, Singapore, December 2017.
118. Zehui Xiong, Shaohan Feng, Dusit Niyato, Ping Wang and Zhu Han, "Network Effect-Based Sequential Dynamic Pricing for Mobile Social Data Market," *IEEE Globecom*, Singapore, December 2017.
119. Shaohua Qin, Sebastian Berisha, David Mayerich, and Zhu Han, "Phase Retrieval Based Deconvolution Algorithm In Optical Systems," *IEEE Global Conference on Signal and Information Processing (GlobalSIP)*, Montreal, Canada, November 2017.

120. Jiaying Yin, Quan Huang, Lixin Li, Ang Gao, Wei Chen, and Zhu Han, "High Throughput Parallel Encoding and Decoding Architecture for Polar Codes," *IEEE/CIC International Conference on Communications in China (ICCC)*, Qingdao, China, October 2017.
121. Zihe Zhang, Lixin Li, Ganning He, Wei Chen, and Zhu Han, "Simultaneous Wireless Information and Power Transfer for Cognitive Two-Path Successive Relaying Networks," *IEEE/CIC International Conference on Communications in China (ICCC)*, Qingdao, China, October 2017.
122. Chuyi Guo, Yanru Zhang, Li Wang, Zhu Han, and Ping Zhang, "Efficient Resource Allocation in Wireless Network Virtualization: A Joint Design of Adverse Selection and Moral Hazard," *IEEE/CIC International Conference on Communications in China (ICCC)*, Qingdao, China, October 2017 **Best Paper Award**.
123. Haitao Xu, Jiyang Ma, Xianwei Zhou, and Zhu Han, "Stackelberg Differential Game Based Resource Allocation in Wireless Powered Relay Networks," *IEEE/CIC International Conference on Communications in China (ICCC)*, Qingdao, China, October 2017.
124. Xingwang Mao, Biling Zhang, Xuerong Gou, Jung-Lang Yu, and Zhu Han, "Matching Game based Resource Allocation for 5G H-CRAN Networks with Device-to-Device Communication," *The 28th Annual IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC)*, Montreal, Canada, October 2017.
125. Ruqiu Ma, Li Wang, Yinan Ding, Zhu Han, and Bingli Jiao, "Adverse Selection Based Incentive Mechanism for Cooperative Caching in Distributed Storage System," *the Ninth International Conference on Wireless Communications and Signal Processing*, Nanjing, China, October, 2017.
126. Yuehong Guo, Lixin Li, Xiacong Wen, Wei Chen, and Zhu Han, "Sub-array Based Hybrid Precoding Design for Downlink Millimeter-Wave Multi-User Massive MIMO Systems," *the Ninth International Conference on Wireless Communications and Signal Processing*, Nanjing, China, October, 2017.
127. Xuan Ma, Lixin Li, Meng Zhu, Wei Chen, and Zhu Han, "Multilevel Polar-Coded Modulation Based on Cooperative Relaying," *the Ninth International Conference on Wireless Communications and Signal Processing*, Nanjing, China, October, 2017.
128. Ganning He, Lixin Li, Xu Li, Wei Chen, Lie-Liang Yang, and Zhu Han, "Secrecy Sum Rate Maximization in NOMA Systems with Wireless Information and Power Transfer," *the Ninth International Conference on Wireless Communications and Signal Processing*, Nanjing, China, October, 2017.
129. Yun Hu, Hongyan Li, Zheng Chang, Chensi Zhang, and Zhu Han, "End-to-End Backlog and Delay Bound Analysis Using Martingale for Multihop V2V Networks," invited *IEEE Conference on Standards for Communications & Networking*, Helsinki, Finland, September 2017.
130. Qiuyang Shen, Han Lu, Xuqing Wu, Xin Fu, Jiefu Chen, and Zhu Han, "Statistical Geosteering Inversion by Hamiltonian Dynamics Monte Carlo Method," *SEG International Exhibition and 87th Annual Meeting*, Houston, TX, September 2017.

131. Francesco Chiti, Romano Fantacci, Benedetta Picano, Yunan Gu, Xunsheng Du, and Zhu Han, "A Low Complexity Matching Game Approach for LTE-Unlicensed," invited, *IEEE 86th Vehicular Technology Conference, Fall*, Toronto, Canada, September 2017.
132. Mengling Guan, Bo Bai, Li Wang, Shi Jin, and Zhu Han, "Joint Optimization for Computation Offloading and Resource Allocation in Internet of Things," invited, *IEEE 86th Vehicular Technology Conference, Fall*, Toronto, Canada, September 2017.
133. Xunsheng Du, Huaqing Zhang, Hien Van Nguyen, and Zhu Han, "Stacked LSTM Deep Learning Model for Resource Allocation in Vehicle-to-Vehicle Communication," *IEEE 86th Vehicular Technology Conference, Fall*, Toronto, Canada, September 2017.
134. Qiuyang Shen, Xuqing Wu, Jiefu Chen, and Zhu Han, "Quasi-Newton MCMC for Solving Geosteering Inverse Problems," *International Applied Computational Electromagnetics Society Symposium in China*, Suzhou, China, August, 2017.
135. Jingjing Wang, Chunxiao Jiang, Zhu Han, Tony Q. S. Quek, and Yong Ren, "Private Information Diffusion Control in Cyber Physical Systems: A Game Theory Perspective," invited *The 26th International Conference on Computer Communications and Networks (ICCCN)*, Vancouver, Canada, August 2017.
136. Oluwaseyi Omotere, Lijun Qian, Riku Jantti, Miao Pan, and Zhu Han, "Big RF Data Assisted Cognitive Radio Network Coexistence in 3.5GHz Band," *The 26th International Conference on Computer Communications and Networks (ICCCN 2017)*, Vancouver, Canada, August 2017.
137. Qiuyang Shen, Xuqing Wu, Jiefu Chen, Yueqin Huang, and Zhu Han, "Solving Subsurface Inverse Problem on the MapReduce Platform: A Langevin Dynamics Approach for Geosteering Inversion," *IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting*, San Diego, CA, July 2017.
138. Mohammad Aghababaie Alavijeh, Behrouz Maham, Zhu Han, and Walid Saad, "Truthful Spectrum Auction for Efficient Anti-Jamming in Cognitive Radio Networks," *22nd IEEE Symposium on Computers and Communication (ISCC 2017)*, Crete, Greece, July 2017.
139. Zijie Zheng, Lingyang Song, Zhu Han, Geoffrey Ye Li, and H. Vincent Poor, "Multi-Leader Multi-Follower Game-Based ADMM for Big Data Processing" *IEEE 18th International Workshop on Signal Processing Advances in Wireless Communications (SPAWC)*, Hokkaido, Japan, July 2017.
140. Qiuyang Shen, Xuqing Wu, Yueqin Huang, Jiefu Chen, Zhu Han, "Stochastic geosteering inversions by hybrid Monte Carlo method," *SPE Gulf Coast Section Emerging Engineers Symposium*, Spring, TX, June 2017.
141. Tengjiao Wang, Sicong Liu, Fang Yang, Jintao Wang, Jian Song, and Zhu Han, "Block-Sparse Compressive Sensing Based Multi-User and Signal Detection for Generalized Spatial Modulation in NOMA," *The 13th International Wireless Communications and Mobile Computing Conference*, Valencia, Spain, June 2017.



142. Xiangming Zhu, Chunxiao Jiang, Wei Feng, Linling Kuang, Zhu Han, and Jianhua Lu, "Resource Allocation in Spectrum-Sharing Cloud Based Integrated Terrestrial-Satellite Network," *The 13th International Wireless Communications and Mobile Computing Conference*, Valencia, Spain, June 2017.
143. Yunchao Gong, Li Wang, Ruoguang Li, Mei Song, and Zhu Han, "Power Allocation for Secrecy Efficiency in Full-Duplex Relay Assisted Cooperative Networks," invited, *IEEE Vehicular Technology Conference: VTC2017-Spring*, Sydney, Australia, June 2017.
144. Xiuhua Li, Peiran Wu, Xiaofei Wang, Keqiu Li, Zhu Han and Victor C. M. Leung, "Collaborative Hierarchical Caching in Cloud Radio Access Networks," *2017 Workshop on Integrating Edge Computing, Caching, and Offloading in Next Generation Networks (IECCO), INFOCOM Workshop*, Atlanta, GA, May 2017.
145. Fahira Sangare and Zhu Han, "Joint Optimization of Cognitive RF Energy Harvesting and Channel Access using Markovian Multi-Armed Bandit Problem," *IEEE International Conference on Communications, Workshop on Emerging Energy Harvesting Solutions for 5G Networks (5G-NRG)*, Paris, France, May 2017.
146. Zheng Chang, Zhongyu Wang, Xijuan Guo, Zhu Han, and Tapani Ristaniemi, "Energy Efficient and Distributed Resource Allocation for Wireless Powered OFDMA Multi-cell Networks," *International workshop on Service-oriented optimization of Green Mobile Networks*, Paris, France, May 2017.
147. Xiaoyue Wan, Liang Xiao, Qiangda Li and Zhu Han, "PHY-Layer Authentication with Multiple Landmarks with Reduced Communication Overhead," *IEEE International Conference on Communications*, Paris, France, May 2017.
148. Bin Chen, Bi Ling Zhang, Jung-Lang Yu, Yan Chen, and Zhu Han, "An Indirect Reciprocity Based Incentive Framework for Cooperative Spectrum Sensing," *IEEE International Conference on Communications*, Paris, France, May 2017.
149. Yunan Gu, Li Wang, Miao Pan, and Zhu Han, "Exploiting the Stable Fixture Matching Game for Mobile Crowd Sensing: A Local Event Sharing Framework," *IEEE International Conference on Communications*, Paris, France, May 2017.
150. Xiao Tang, Pinyi Ren and Zhu Han, "Hierarchical Power Competition for Security Enhancement in Wireless Networks," *IEEE International Conference on Communications*, Paris, France, May 2017.
151. Zhanwei Hou, He Chen, Yonghui Li, Zhu Han, and Branka Vucetic, "A Contract-based Incentive Mechanism for Energy Harvesting-based Internet of Things," *IEEE International Conference on Communications*, Paris, France, May 2017.
152. Sami Khairy, Mengqi Han, Lin X. Cai, Yu Cheng, and Zhu Han, "Enabling efficient multi-channel bonding for IEEE 802.11ac WLANs," *IEEE International Conference on Communications*, Paris, France, May 2017.
153. Hui Chen, Xiaofei Tao, Li Na, and Zhu Han, "Secrecy Performance Analysis of Hybrid Eavesdroppers System Using Stochastic Geometry and Random Matrix Theory," *IEEE International Conference on Communications*, Paris, France, May 2017.

154. Jingjing Zhao, Yuanwei Liu, Kok Keong Chai, Arumugam Nallanathan, Yue Chen, and Zhu Han, "Resource Allocation for Non-Orthogonal Multiple Access in Heterogeneous Networks," *IEEE International Conference on Communications*, Paris, France, May 2017.
155. Xianfu Chen, Huaqing Zhang, and Zhu Han, "Delay-Tolerant Resource Scheduling in Large-Scale Virtualized Radio Access Networks," *IEEE International Conference on Communications*, Paris, France, May 2017.
156. Zijie Zheng, Lingyang Song, and Zhu Han, "Bridging the Gap Between Big Data and Game Theory: A General Hierarchical Pricing Framework," *IEEE International Conference on Communications*, Paris, France, May 2017.
157. Xianfu Chen, Zhu Han, Zheng Chang, Guiliang Xue, Honggang Zhang, and Mehdi Bennis, "Adapting Downlink Power in Fronthaul-Constrained Hierarchical Software-Defined RANs," *IEEE Wireless Communications and Networking Conference*, San Francisco, CA, March 2017.
158. Hui Chen, Xiaofeng Tao, Na Li, and Zhu Han, "Ergodic Secrecy Rate of Randomly Deployed Cellular Networks Enhanced by Artificial Noise," *IEEE Wireless Communications and Networking Conference*, San Francisco, CA, March 2017.
159. Tingting Liu, Jun Li, Feng Shu, and Zhu Han, "Resource Trading for a Small-Cell Caching System: A Contract-Theory Based Approach," *IEEE Wireless Communications and Networking Conference*, San Francisco, CA, March 2017.
160. Yanru Zhang, Nguyen H. Tran, Dusit Niyato, and Zhu Han, "Multi-Dimensional Payment Plan in Fog Computing with Moral Hazard", invited, *15th IEEE International Conference on Communication Systems (ICCS)*, **Best Paper Award**, Shenzhen, China, December 2016.
161. Radwa Sultan, Lingyang Song, Karim G. Seddik, and Zhu Han, "Full Duplex in Massive MIMO Systems: Analysis and Feasibility," *IEEE Globe Communication Conference (Globecom) workshop on Full Duplex Wireless Communications (FDEX)*, Washington DC, December 2016.
162. Xu Ma, Fang Yang, Sicong Liu, Jian Song, and Zhu Han, "Training Sequence Design and Optimization for Structured Compressive Sensing Based Channel Estimation in Massive MIMO Systems," *IEEE Globe Communication Conference (Globecom) Workshops: 5th International Workshop on Emerging Technologies for 5G Wireless Cellular Networks*, Washington DC, December 2016.
163. Huaqing Zhang, Xianfu Chen, and Zhu Han, "A Zero-Determinant Approach for Power Control of Multiple Wireless Operators in LTE Unlicensed," *IEEE Globe Communication Conference (Globecom)*, Washington DC, December 2016.
164. Jingzhi Hu, Yun Liao, Lingyang Song, and Zhu Han, "Power-throughput Tradeoff in Full-duplex WiFi Networks," *IEEE Globe Communication Conference (Globecom)*, Washington DC, December 2016.
165. Duy H. N. Nguyen, Yanru Zhang, and Zhu Han, "A Contract-Theoretic Approach to Spectrum Resource Allocation in Wireless Virtualization," *IEEE Globe Communication Conference (Globecom)*, Washington DC, December 2016.
166. Xiao Tang, Pinyi Ren, and Zhu Han, "Iterative Power Optimization Towards Secure Multi-Channel Full-Duplex Communication," *IEEE Globe Communication Conference (Globecom)*, Washington DC, December 2016.

167. Dinh Thai Hoang, Dusit Niyato, Ping Wang, Dong In Kim, and Zhu Han, "The Tradeoff Analysis in RF-Powered Backscatter Cognitive Radio Networks," *IEEE Globe Communication Conference (Globecom)*, Washington DC, December 2016.
168. Huaqing Zhang, Wenbo Ding, Jian Song, and Zhu Han, "A Hierarchical Game Approach for Visible Light Communication and Multi-Hop D2D Heterogeneous Network," *IEEE Globe Communication Conference (Globecom)*, Washington DC, December 2016.
169. Yanru Zhang, Chunxiao Jiang, Lingyang Song, Walid Saad, Zaher Dawy, and Zhu Han, "Complementary Investment of Infrastructure and Service Providers in Wireless Network Virtualization," *IEEE Globe Communication Conference (Globecom)*, Washington DC, December 2016.
170. Zheng Chang, Zhongyu Wang, Xijuan Guo, Zhu Han, Tapani Ristaniemi, "Energy Efficient Resource Allocation for Wireless Power Transfer Enabled Massive MIMO System," *IEEE Globe Communication Conference (Globecom)*, Washington DC, December 2016.
171. Sai Mounika Errapotu, Jingyi Wang, Zaixin Lu, Wei Li, Miao Pan, and Zhu Han, "Bidding Privacy Preservation for Dynamic Matching Based Spectrum Trading," *IEEE Globe Communication Conference (Globecom)*, Washington DC, December 2016.
172. Yunan Gu, Lin X. Cai, Miao Pan, Lingyang Song, and Zhu Han, "Exploiting the Stable Fixture Matching Game for Content Sharing in D2D-based LTE-V2X Communications," *IEEE Globe Communication Conference (Globecom)*, Washington DC, December 2016.
173. Sicong Liu, Fang Yang, Wenbo Ding, Jian Song, and Zhu Han, "Impulsive Noise Cancellation for MIMO-OFDM PLC Systems: a Structured Compressed Sensing Perspective," *IEEE Globe Communication Conference (Globecom)*, Washington DC, December 2016.
174. Wei Huang, Wei Chen, Bo Bai, Shidong Zhou, and Zhu Han, "Physical Layer Security Game With Full-Duplex Proactive Eavesdropper," *IEEE Globalsip*, Washington DC, December 2016.
175. Fahira Sangare, Duy Huu Ngoc Nguyen, Yong Xiao, Zhu Han, "Opportunistic Sensing For Joint Energy Harvesting And Channel Access", *IEEE Globalsip*, Washington DC, December 2016.
176. Jingbo Tan, Fang Yang, Changyong Pan, Jian Song, and Zhu Han, "Multiple Line Outage Detection for Smart Grid: A Block-Wise Compressive Sensing Perspective," *IEEE SmartGridComm*, Sydney, Australia, November, 2016.
177. Hung Khanh Nguyen, Amin Khodaei, and Zhu Han, "Distributed Algorithms for Peak Ramp Minimization Problem in Smart Grid," *IEEE SmartGridComm*, Sydney, Australia, November, 2016.
178. Qiuyang Shen, Jiefu Chen, and Zhu Han, "Total Variation Denoising of Azimuthal Resistivity Inversion in Geosteering," *SEG Annual Meeting*, Dallas, TX, October 2016.
179. Ruoguang Li, Li Wang, Mei Song, and Zhu Han, "Bit Error Rate Analysis in Hybrid Full Duplex/Half Duplex Relay Cooperative Networks," *8th International*

*Conference on Wireless Communications and Signal Processing*, Yangzhou, China, October 2016.

180. Yangqing Li, Saurabh Prasad, Wei Chen, Changchuan Yin, and Zhu Han, "An Approximate Message Passing Approach For Compressive Hyperspectral Imaging Using A Simultaneous Low-Rank And Joint-Sparsity Prior," *8th Workshop on Hyperspectral Image and Signal Processing: Evolution in Remote Sensing*, Los Angeles, August 2016.
181. Meng Li, Yanru Zhang, Li Wang, Mei Song, and Zhu Han, "Incentive Design for Collaborative Jamming Using Contract Theory in Physical Layer Security," *IEEE International Conference on Communications in China (ICCC)*, Chengdu, China, July 2016.
182. Dusit Niyato, Lu Xiao, Ping Wang, Dong In Kim, and Zhu Han, "Distributed Wireless Energy Scheduling for Wireless Powered Sensor Networks," *IEEE International Conference on Communications (ICC)*, Kuala Lumpur, Malaysia, May 2016.
183. Chunxiao Jiang, Haijun Zhang, Zhu Han, Julian Cheng, Yong Ren, and Lajos Hanzo, "On the Outage Probability of Information Sharing in Cognitive Vehicular Networks," *IEEE International Conference on Communications (ICC)*, Kuala Lumpur, Malaysia, May 2016.
184. Jun Du, Chunxiao Jiang, Yi Qian, Zhu Han, and Yong Ren, "Traffic Prediction Based Resource Configuration in Space-based Systems," *IEEE International Conference on Communications (ICC)*, Kuala Lumpur, Malaysia, May 2016.
185. Ruo Zhou Yu, Shuang Qin, Mehdi Bennis, Xianfu Chen, Gang Feng, Zhu Han, Guoliang Xue, "Enhancing Software-Defined RAN with Collaborative Caching and Scalable Video Coding," *IEEE International Conference on Communications (ICC)*, Kuala Lumpur, Malaysia, May 2016.
186. Nguyen H. Tran, Chuan Pham, Shaolei Ren, Zhu Han, and Choong Seon Hong, "Coordinated Power Reduction in Multi-Tenant Colocation Datacenter: An Emergency Demand Response Study," *IEEE International Conference on Communications (ICC)*, **Best Paper Award**, Kuala Lumpur, Malaysia, May 2016.
187. Jingjing Wang, Chunxiao Jiang, Longxiang Gao, Shui Yu, Zhu Han, and Yong Ren, "Complex Network Theoretical Analysis on Information Dissemination over Vehicular Networks," *IEEE International Conference on Communications (ICC)*, Kuala Lumpur, Malaysia, May 2016.
188. Hongliang Zhang, Yusheng Ji, Lingyang Song, and Han Zhu, "Hypergraph Based Resource Allocation for Cross-cell Device-to-Device Communications," *IEEE International Conference on Communications (ICC)*, Kuala Lumpur, Malaysia, May 2016.
189. Huaqing Wu, Li Wang, Tommy Svensson, and Zhu Han, "Resource Allocation for Wireless Caching in Socially-Enabled D2D Communications," *IEEE International Conference on Communications (ICC)*, Kuala Lumpur, Malaysia, May 2016.
190. Yong Xiao, Zixiang Xiong, Dusit Niyato, Zhu Han, and Luiz A. DaSilva, "Full-Duplex Machine-to-Machine Communication for Wireless-Powered Internet-of-Things," *IEEE International Conference on Communications (ICC)*, Kuala Lumpur, Malaysia, May 2016.

191. Duy H. N. Nguyen, Long Bao Le, and Zhu Han, "Optimal Uplink and Downlink Channel Assignment in a Full-Duplex Multiuser System," *IEEE International Conference on Communications (ICC)*, Kuala Lumpur, Malaysia, May 2016.
192. Huaqing Zhang, Yong Xiao, Shengrong Bu, Dusit Niyato, Richard Yu, and Zhu Han, "Fog Computing in Multi-Tier Data Center Networks: A Hierarchical Game Approach," *IEEE International Conference on Communications (ICC)*, Kuala Lumpur, Malaysia, May 2016.
193. Xiao Tang, Pinyi Ren, and Zhu Han, "Combating Full-Duplex Active Eavesdropper: A Game-Theoretic Perspective," *IEEE International Conference on Communications (ICC)*, Kuala Lumpur, Malaysia, May 2016.
194. Zijie Zheng, Lingyang Song, Dusit Niyato, Zhu Han, "Resource Allocation in Wireless Powered Relay Networks Through A Nash Bargaining Game," *IEEE International Conference on Communications (ICC)*, Kuala Lumpur, Malaysia, May 2016.
195. Dusit Niyato, Mohammad Abu Alsheikh, Ping Wang, Dong In Kim, and Zhu Han, "Market Model and Optimal Pricing Scheme of Big Data and Internet of Things (IoT)," *IEEE International Conference on Communications (ICC)*, Kuala Lumpur, Malaysia, May 2016.
196. Zheng Chang, Yunan Gu, Zhu Han, Xianfu Chen, and Tapani Ristaniemi, "Context-Aware Data Caching for 5G Heterogeneous Small Cells Networks," *IEEE International Conference on Communications (ICC)*, Kuala Lumpur, Malaysia, May 2016.
197. Mingxin Zhou, Huanyu Zhang, Shengli Zhang, Lingyang Song, Yonghui Li, and Zhu Han, "Design and Implementation of Device-to-Device Software-Defined Networks," *IEEE International Conference on Communications (ICC)*, Kuala Lumpur, Malaysia, May 2016.
198. Qian Yang, Yi Zhang, Hui-Ming Wang, and Zhu Han, "Transmit Optimization for Secure MIMO RFID Wireless Communication," *IEEE International Conference on Communications (ICC)*, Kuala Lumpur, Malaysia, May 2016.
199. Chunxiao Jiang, Yaodong Zhang, Jian Yuan, Yong Ren, and Zhu Han, "Cooperative WiFi Management: Nash Bargaining Solution and Implementation," *IEEE Wireless Communications and Networking Conference*, Doha, Qatar, April 2016.
200. Chunxiao Jiang, Zhu Han, Yong Ren, and Lajos Hanzo, "Information Credibility Equilibrium of Cooperative Networks," *IEEE Wireless Communications and Networking Conference*, Doha, Qatar, April 2016.
201. Yangqing Li, Wei Chen, Changchuan Yin, and Zhu Han, "An Approximate Message Passing Approach For Tensor-Based Seismic Data Interpolation With Randomly Missing Traces," *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, Shanghai, China, March 2016.
202. Radwa Sultan, Lingyang Song, Karim G. Seddik, and Zhu Han, "Users Association in Small Cell Networks with Massive MIMO," invited *International Conference on Computing, Networking and Communications*, Kauai, HI, February 2016
203. Yong Xiao, Zixiang Xiong, Dusit Niyato, Zhu Han, "Distortion Minimization with Adaptive Digital and Analog Transmission for Wireless Sensor Networks with Energy Harvesting," invited, *IEEE Global Conference on Signal and Information Processing (GlobalSIP)*, Orlando, FL, December 2015.

204. Yue Meng, Chunxiao Jiang, Lei Xu, Yong Ren, and Zhu Han, "Wireless Network Recommendation System in Heterogeneous Networks," *IEEE Global Conference on Signal and Information Processing (GlobalSIP)*, Orlando, FL, December 2015.
205. Xianfu Chen, Zhu Han, Honggang Zhang, Guoliang Xue, Mehdi Bennis, and Tao Chen, "Foresighted Resource Scheduling in Software-defined Radio Access Networks with Bursty Traffic," *IEEE Global Conference on Signal and Information Processing (GlobalSIP)*, Orlando, FL, December 2015.
206. Yun Liao, Boya Di, Kaigui Bian, Lingyang Song, Dusit Niyato, and Zhu Han, "Cross-layer Protocol Design for Distributed Full-duplex Network," *IEEE Global Communications Conference*, San Diego, CA, December 2015.
207. Yue Meng, Chunxiao Jiang, Zhu Han, Tony Q. S. Quek, and Yong Ren, "Learning in Small Cell Networks: A Non-Bayesian Social Interactive Model," *IEEE Global Communications Conference*, San Diego, CA, December 2015.
208. Yanru Zhang, Lanchao Liu, Lingyang Song, Miao Pan, Zaher Dawy, and Zhu Han, "Incentive Mechanism in Crowdsourcing by Tournament," *IEEE Global Communications Conference*, San Diego, CA, December 2015.
209. Yun Hu, Hongyan Li and Zhu Han, "Delay Bound Analysis Using Martingale for Multimedia DTN under Heterogeneous Network for High-Speed Trains," *IEEE Global Communications Conference*, San Diego, CA, December 2015.
210. Yunan Gu, Yanru Zhang, Lin X. Cai, Miao Pan, Lingyang Song, and Zhu Han, "Exploiting Student-Project Allocation Matching for Spectrum Sharing in LTE-Unlicensed," *IEEE Global Communications Conference*, San Diego, CA, December 2015.
211. Yong Xiao, Dusit Niyato, Zhu Han, and Luiz A. DaSilva, "Joint Optimization for Power Scheduling and Transfer in Energy Harvesting Communication Systems," *IEEE Global Communications Conference*, San Diego, CA, December 2015.
212. Huaqing Zhang, Yong Xiao, Lin X. Cai, Lingyang Song, Niyato Dusit, and Zhu Han, "Hierarchical Competition for LTE Unlicensed using Stackelberg Game and Bargaining," *IEEE Global Communications Conference*, San Diego, CA, December 2015.
213. Ali Arab, Amin Khodaei, Suresh Khator, and Zhu Han, "Transmission Network Restoration Considering AC Power Flow Constraints," *IEEE International Conference on Smart Grid Communications (SmartGridComm)*, Miami, FL, November 2015.
214. Yangqing Li, Wei Chen, Changchuan Yin, and Zhu Han, "Approximate Message Passing for Sparse Recovering of Spatially and Temporally Correlated Data," invited *IEEE International Conference on Communications in China*, Shenzhen, China, November 2015.
215. Zilong Wu, Li Wang, Giuseppe Araniti, and Zhu Han, "Exploiting Social-Interest Interactions on User Clustering and Content Dissemination in Device-to-Device Communications," invited *IEEE International Conference on Communications in China*, Shenzhen, China, November 2015.
216. Yingyu Li, Yifang Zhu, Wotao Yin, Yang Liu, Guangming Shi, and Zhu Han, "Prediction of High Resolution Spatial-temporal Air Pollutant Map from Big Data

- Sources,” *The 1st International Conference on Big Data Computing and Communications Big Data (BigCom2015)*, Taiyuan, China, August, 2015.
217. Yanru Zhang, Yunan Gu, Miao Pan, Zaher Dawy, Lingyang Song, and Zhu Han, “Financing Contract with Adverse Selection and Moral Hazard for Spectrum Trading in Cognitive Radio Networks,” invited, *Third IEEE China Summit and International Conference on Signal and Information Processing (ChinaSIP 2015)*, Chengdu, China, July 2015.
  218. Yun Liao, Kaigui Bian, Liangyang Song, and Zhu Han, “Robust Cooperative Spectrum Sensing in Full-duplex Cognitive Radio Networks,” *International Conference on Ubiquitous and Future Networks (ICUFN 2015)*, Japan, July 2015.
  219. Yun Liao, Kaigui Bian, Lingyang Song, and Zhu Han, “Full-duplex WiFi: Achieving Simultaneous Sensing and Transmission for Future Wireless Networks,” poster session of *IEEE Mobihoc*, Hangzhou, China, June 2015.
  220. Ali Arab, Suresh K. Khator, Qianmei Feng, and Zhu Han, “Control Theoretic Scheduling of Angiography for Implanted Stents in Human Arteries,” *Annual Industrial and Systems Engineering Research Conference*, Nashville, TN, June 2015.
  221. Radwa Aly Sultan, Lingyang Song, Karim G. Seddik, Yonghui Li, and Zhu Han, “Mode Selection, User Pairing, Subcarrier Allocation and Power Control in Full-Duplex OFDMA HetNets,” *IEEE International Conference on Communications Workshop, 4th International Workshop on Small Cell and 5G Networks (Small-Nets)*, London, UK, June, 2015.
  222. Yun Liao, Tianyu Wang, Kaigui Bian, Lingyang Song, and Zhu Han, “Decentralized Dynamic Spectrum Access in Full-Duplex Cognitive Radio Networks,” *IEEE International Conference on Communications*, London, UK, June, 2015 **Best Paper Award**.
  223. Dong Wang, Bo Bai, Wei Chen, and Zhu Han, “Secure Green Communication for Amplify-and-Forward Relaying with Eavesdroppers,” *IEEE International Conference on Communications*, London, UK, June, 2015.
  224. Yong Xiao, Zhu Han, Dusit Niyato and Chau Yuen, “Bayesian Reinforcement Learning for Energy Harvesting Communication Systems with Uncertainty,” *IEEE International Conference on Communications*, London, UK, June, 2015.
  225. Francesco Chiti, Romano Fantacci, Enrico Dei, and Zhu Han, “Context Aware Clustering in VANETs: a Game Theoretic Perspective,” *IEEE International Conference on Communications*, London, UK, June, 2015.
  226. Dusit Niyato, Ping Wang, Dong In Kim, Zhu Han, and Joseph Chee Ming Teo, “User’s Deception Mechanisms against Jammers in Wireless Energy Harvesting Networks,” *IEEE International Conference on Communications*, London, UK, June, 2015.
  227. Xiong Zhou, Suili Feng, Zhu Han, and Yuan Liu, “Distributed User Association and Interference Coordination in HetNets Using Stackelberg Game,” *IEEE International Conference on Communications*, London, UK, June, 2015.
  228. Dong Wang, Bo Bai, Wei Chen, and Zhu Han, “Energy Efficiency Maximization for Secure Data Transmission over DF Relay Networks,” *IEEE International Conference on Communications*, London, UK, June, 2015.

229. Dusit Niyato, Ping Wang, Dong In Kim, and Zhu Han, "Content Messenger Selection and Wireless Energy Transfer Policy in Mobile Social Networks," *IEEE International Conference on Communications*, London, UK, June, 2015.
230. Dusit Niyato, Ping Wang, Dong In Kim, Zhu Han, and Lu Xiao, "Game Theoretic Modeling of Jamming Attack in Wireless Powered Communication Networks," *IEEE International Conference on Communications*, London, UK, June, 2015.
231. He Chen, Yonghui Li, Zhu Han, and Branka Vucetic, "A Stackelberg Game-Based Energy Trading Scheme for Power Beacon-Assisted Wireless-Powered Communication," *40th IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, Brisbane, Australia, April 2015.
232. Dusit Niyato, Ping Wang, Dong In Kim, Zhu Han, and Lu Xiao, "Performance Analysis of Delay-Constrained Wireless Energy Harvesting Communication Networks under Jamming Attacks," *IEEE Wireless Communications and Networking Conference*, New Orleans, LA, March 2015.
233. Tianyu Wang, Lingyang Song, and Zhu Han, "Dynamic FemtoCaching for Mobile Users," *IEEE Wireless Communications and Networking Conference*, New Orleans, LA, March 2015.
234. Joseph Kamto, Lijun Qian, Wei Li, and Zhu Han, "Biconnected Tree for Robust Data Collection in Advanced Metering Infrastructure," *IEEE Wireless Communications and Networking Conference*, New Orleans, LA, March 2015.
235. Ruizhou Ding, Tianyu Wang, Lingyang Song, Zhu Han, and Jianjun Wu, "Roadside-Unit Caching in Vehicular Ad Hoc Networks for Efficient Popular Content Delivery," *IEEE Wireless Communications and Networking Conference*, New Orleans, LA, March 2015.
236. Erte Pan, Husheng Li, Lingyang Song, and Zhu Han, "Kernel-Based Non-parametric Clustering for Load Profiling of Big Smart Meter Data," *IEEE Wireless Communications and Networking Conference*, New Orleans, LA, March 2015.
237. Lanchao Liu, Xianfu Chen, Mehdi Bennis, Guoliang Xue, and Zhu Han, "A Distributed ADMM Approach for Mobile Data Offloading in Software Defined Network," *IEEE Wireless Communications and Networking Conference*, New Orleans, LA, March 2015.
238. Yanru Zhang, Yunan Gu, Lanchao Liu, Miao Pan, Zaher Dawy, and Zhu Han, "Incentive Mechanism in Crowdsourcing with Moral Hazard," *IEEE Wireless Communications and Networking Conference*, New Orleans, LA, March 2015.
239. Yunan Gu, Yanru Zhang, Miao Pan, and Zhu Han, "Student Admission Matching based Content-Cache Allocation," *IEEE Wireless Communications and Networking Conference*, New Orleans, LA, March 2015.
240. Fahira Sangare, Ali Arab, Miao Pan, Lijun Qian, Suresh Khator, and Zhu Han, "RF Energy Harvesting for WSNs via Dynamic Control of Unmanned Vehicle Charging," *IEEE Wireless Communications and Networking Conference*, New Orleans, LA, March 2015.
241. Huaqing Zhang, Dusit Niyato, Lingyang Song, Tao Jiang, and Zhu Han, "Equilibrium Analysis for Zero-Determinant Strategy in Resource Management of Wireless Network," *IEEE Wireless Communications and Networking Conference*, New Orleans, LA, March 2015.



242. Lanchao Liu and Zhu Han, "Multi-Block ADMM for Big Data Optimization in Smart Grid," invited, *International Conference on Computing, Networking and Communications*, Anaheim, CA, February 2015.
243. Ramy E. Ali, Fadel F. Digham, Karim G. Seddik, Mohammed Nafie, and Zhu Han, "A Probabilistic MAC for Cognitive Radio Systems with Energy Harvesting Nodes," *IEEE globalsip*, Atlanta, December, 2014.
244. Husheng Li and Zhu Han, "Communication Requirement for Distributed Statistical Machine Learning with Application in Waveform Cognition," *IEEE globalsip*, Atlanta, December, 2014.
245. Erte Pan and Zhu Han, "Non-parametric Bayesian Learning with Deep Learning Structure and Its Applications in Wireless Networks," *IEEE globalsip*, Atlanta, December, 2014.
246. Radwa Aly Sultan, Lingyang Song, and Zhu Han, "Impact of Full Duplex on Resource Allocation for Small Cell Networks," *IEEE globalsip*, Atlanta, December, 2014.
247. Nguyen H. Tran, Hoang Dai Tran, Long Bao Le, Zhu Han, and Choong Seon Hong, "Load Balancing and Pricing for Spectrum Access Control in Cognitive Radio Networks," *IEEE Global Communications Conference*, December, Austin, TX, 2014.
248. Bidushi Barua, Zaheer Khan, Zhu Han, Matti Latva-aho, and Marcos Katz, "On the Selection of Best Devices for Cooperative Wireless Content Delivery," *IEEE Global Communications Conference*, December, Austin, TX, 2014.
249. Lanchao Liu, Shaolei Ren, and Zhu Han, "Scalable Workload Management for Water Efficiency in Data Centers," *IEEE Global Communications Conference*, December, Austin, TX, 2014.
250. Yawei Pang, Yanru Zhang, Yunan Gu, Miao Pan, Pan Li and Zhu Han, "Efficient Data Collection for Wireless Rechargeable Sensor Clusters in Harsh Terrains Using UAVs," *IEEE Global Communications Conference*, December, Austin, TX, 2014.
251. Yong Xiao, Zhu Han, and Luiz A. DaSilva, "Opportunistic Relay Selection for Cooperative Energy Harvesting Communication Networks," *IEEE Global Communications Conference*, December, Austin, TX, 2014.
252. Erte Pan, Miao Pan, Zhu Han, and Vernaldo Wright, "Mobile Trace Inference Based on Tensor Voting," *IEEE Global Communications Conference*, December, Austin, TX, 2014.
253. Huaqing Zhang, Dusit Niyato, Lingyang Song, Tao Jiang, and Zhu Han, "Zero-Determinant Strategy in Cheating Management of Wireless Cooperation," *IEEE Global Communications Conference*, December, Austin, TX, 2014.
254. Yun Liao, Tianyu Wang, Lingyang Song, and Zhu Han, "Listen-and-Talk: Full-duplex Cognitive Radio Networks," *IEEE Global Communications Conference*, December, Austin, TX, 2014 **Best Paper Award**.
255. Rakpong Kaewpuang, Dusit Niyato, Ping Wang, Zhu Han, and Rongxing Lu, "Optimal Decentralized Security Software Deployment in Multihop Wireless Networks," *IEEE Global Communications Conference*, December, Austin, TX, 2014.

256. Yunan Gu, Yanru Zhang, Miao Pan, and Zhu Han, "Cheating in Matching of Device to Device Pairs in Cellular Networks," *IEEE Global Communications Conference*, December, Austin, TX, 2014.
257. Husheng Li and Zhu Han, "Distributed Source Coding for Controlling Cyber Physical Systems with Application in Smart Grids," *IEEE Global Communications Conference*, December, Austin, TX, 2014.
258. Muhammad Ejaz Ahmed, Ju Bin Song, and Zhu Han, "Mitigating Malicious Attacks using Bayesian Nonparametric Clustering in Collaborative Cognitive Radio Networks," *IEEE Global Communications Conference*, December, Austin, TX, 2014.
259. Yanru Zhang, Yunan Gu, Miao Pan, and Zhu Han, "Distributed Matching Based Spectrum Allocation in Cognitive Radio Networks," *IEEE Global Communications Conference*, December, Austin, TX, 2014.
260. Huaqing Zhang, Mehdi Bennis, Luiz A. DaSilva, and Zhu Han, "Multi-leader Multi-follower Stackelberg Game among Wi-Fi, Small Cell and Macrocell Networks," *IEEE Global Communications Conference*, December, Austin, TX, 2014.
261. Huaqing Zhang, Fei Li, Niyato Dusit, Lingyang Song, Tao Jiang, and Zhu Han, "Zero-determinant Strategy in Power Control of Small Cell Network," invited, *IEEE International Conference on Communication Systems (ICCS)*, Macau, China, November 2014.
262. Jia Hao, Hongliang Zhang, Lingyang Song, and Zhu Han, "Graph-based Resource Allocation for Device-to-Device Communications Aided Cellular Network," *IEEE International Conference on Communications in China (ICC)*, Shanghai, China, October 2014.
263. Tian Zhang, Wei Chen, Zhu Han, and Zhigang Cao, "Electric Vehicle Charging Scheduling Under Local Renewable Energy and Stochastic Grid Power Price", *IEEE SmartGridComm*, Venice, Italy, October, 2014.
264. Dusit Niyato, Ping Wang, Peter Han Joo Chong, Zhu Han and Dong In Kim, "Optimal Energy Management Policy of a Mobile Cloudlet with Wireless Energy Charging", *IEEE SmartGridComm*, Venice, Italy, October, 2014.
265. Ali Arab, Eylem Tekin, Amin Khodaei, Suresh Khator, and Zhu Han, "Dynamic Maintenance Scheduling for Power Systems Incorporating Hurricane Effects", *IEEE SmartGridComm*, Venice, Italy, October, 2014.
266. Wenbo Wang, Andres, Kwasinski, and Zhu Han, "Power Allocation with Stackelberg Game in Femtocell Networks: A Self-Learning Approach," *IEEE International Conference on Sensing, Communication, and Networking (SECON)*, Singapore, July 2014.
267. Nguyen H. Tran, Shaolei Ren, Zhu Han, Sung Man Jang, Seung Il Moon, and Choong Seon Hong, "Demand Response of Data Centers: A Real-time Pricing Game between Utilities in Smart Grid," *USENIX Feedback Computing workshop*, Philadelphia, PA, June 2014.
268. Serveh Shalmashi, Guowang Miao, Zhu Han, and Slimane Ben Slimane, "Interference Constrained Device-to-Device Communications," *IEEE International Conference on Communications*, Sydney, Australia, June 2014.

269. Wasiu Opeyemi Oduola, Xiangfang Li, Lijun Qian, and Zhu Han, "Power Control for Device-to-Device Communications as an Underlay to Cellular System," *IEEE International Conference on Communications*, Sydney, Australia, June 2014.
270. Siavash Bayat, Yonghui Li, Zhu Han, Mischa Dohler, and Branka Vucetic, "Distributed Massive Wireless Access for Cellular Machine-to-Machine Communication," *IEEE International Conference on Communications*, Sydney, Australia, June 2014.
271. Zijie Zheng, Tianyu Wang, Lingyang Song, and Zhu Han, "Efficient Resource Allocation for Mobile Social Networks in D2D Communication Underlying Cellular Networks," *IEEE International Conference on Communications*, Sydney, Australia, June 2014.
272. Yue Sun, Tianyu Wang, Lingyang Song, and Zhu Han, "Efficient Resource Optimization for Heterogeneous Smart-Building Networks," *IEEE International Conference on Communications*, Sydney, Australia, June 2014.
273. Hang Zhang, Tianyu Wang, Lingyang Song, and Zhu Han, "Radio Resource Allocation for Physical-Layer Security in Device to Device Underlay Communications," *IEEE International Conference on Communications*, Sydney, Australia, June 2014.
274. Xiaofei Wang, Min Chen, Zhu Han, Dapeng Wu, Taekyoung Kwon, "TOSS: Traffic Offloading by Social Network Service-Based Opportunistic Sharing in Mobile Social Networks," *the 33rd Annual IEEE International Conference on Computer Communications (INFOCOM)*, Toronto, Canada, April-May, 2014.
275. Walid Saad, Zhu Han, Rong, Zheng, Merouane Debbah, and H. Vincent Poor, "A College Admissions Game for Uplink User Association in Wireless Small Cell Networks," *the 33rd Annual IEEE International Conference on Computer Communications (INFOCOM)*, Toronto, Canada, April-May, 2014.
276. Hongliang Zhang, Lili Ma, Lingyang Song, and Zhu Han, "Wireless Device-to-Device Hypergraph Optimization," *IEEE INFOCOM, Student Activities*, Toronto, Canada, April-May, 2014.
277. Zijie Zheng, Tianyu Wang, Lingyang Song, Zhu Han, and Jianjun Wu, "Social-Aware Multi-File Dissemination in Device-to-Device Overlay Networks," *IEEE INFOCOM, Student Activities*, Toronto, Canada, April-May, 2014.
278. Siavash Bayat, Yonghui Li, Zhu Han, Mischa Dohler, and Branka Vucetic, "Distributed Data Aggregation in Machine-to-Machine Communication Networks Based on Coalitional Game," *IEEE Wireless Communications and Networking Conference*, Istanbul, Turkey, April 2014.
279. Wenbo Wang, Andres Kwasinski, and Zhu Han, "A Routing Game in Cognitive Radio Networks against Routing-Toward-Primary-User Attacks," *IEEE Wireless Communications and Networking Conference*, Istanbul, Turkey, April 2014.
280. Wenbo Wang, Andres Kwasinski, and Zhu Han, "Routing Based on Layered Stochastic Games for Multi-Hop Cognitive Radio Networks," *IEEE Wireless Communications and Networking Conference*, Istanbul, Turkey, April 2014.
281. Alireza Eshraghi, Behrouz Maham, Zhu Han, and Morteza Banagar, "Efficiency and Coverage Improvement of Active RFID Two-Hop Relay Systems," *IEEE Wireless Communications and Networking Conference*, Istanbul, Turkey, April 2014.

282. Lanchao Liu, Qing Ling, and Zhu Han, "Decentralized Gauss-Newton Method For Nonlinear Least Squares On Wide Area Network," invited, *The 2nd Radio and Antenna Days of the Indian Ocean (RADIO)*, Mauritius, April 2014.
283. Ali Arab, Amin Khodaei, Zhu Han, and Suresh Khator, "Optimal Restoration Planning for Smart Grid under Natural Disaster," *2014 UT Energy Forum Texas Energy Research Challenge*, Austin, February, 2014.
284. Boya Di, Tianyu Wang, Lingyang Song, and Zhu Han, "Incentive Mechanism for Collaborative Smartphone Sensing using Overlapping Coalition Formation Games," *IEEE Globe Communication Conference (Globecom)*, Atlanta, GA, December 2013.
285. Yanru Zhang, Lingyang Song, Walid Saad, Zaher Dawy, and Zhu Han, "Exploring Social Ties for Enhanced Device-to-Device Communications in Wireless Networks," *IEEE Globe Communication Conference (Globecom)*, Atlanta, GA, December 2013.
286. Mohammad Esmalifalak, Nam Tuan Nguyen, Rong Zheng, and Zhu Han, "Detecting Stealthy False Data Injection Using Machine Learning in Smart Grid," *IEEE Globe Communication Conference (Globecom)*, Atlanta, GA, December 2013.
287. Najmeh Forouzandehmehr, Samir M. Perlaza, Zhu Han, and H. Vincent Poor, "A Satisfaction Game for Heating, Ventilation and Air Conditioning Control of Smart Buildings," *IEEE Globe Communication Conference (Globecom)*, Atlanta, GA, December 2013.
288. Zaheer Khan, Marcos Katz, Zhu Han, Angeliki Alexiou and Luiz A. DaSilva, "Autonomous Opportunistic Spectrum Access Strategies: Benefits of Adaptive Strategies," *31ST Wireless World Research Forum Meeting*, Vancouver, Canada, October, 2013.
289. Lanchao Liu, Amin Khodaei, Wotao Yin, and Zhu Han, "A Distribute Parallel Approach for Big Data Scale Optimal Power Flow with Security Constraints," *IEEE SmartGridComm*, Vancouver, Canada, October 2013.
290. Qiumin Dong, Dusit Niyato, Ping Wang, and Zhu Han, "An Adaptive Scheduling of PHEV Charging: Analysis under Imperfect Data Communication," *IEEE SmartGridComm*, Vancouver, Canada, October 2013.
291. Zhenghao Zhang, Husheng Li, Ju Bin Song, Zhu Han, Gaoyong Luo, and Wenjing Hu, "Wireless Communication Aided Differential Relay Protection in Smart Grids: A Concerted Blitzkrieg," *IEEE SmartGridComm*, Vancouver, Canada, October 2013.
292. Husheng Li, Zhu Han, and Ju Bin Song, "Stabilizing Hybrid Data Traffics in Cyber Physical Systems with Case Study on Smart Grid," *IEEE SmartGridComm*, Vancouver, Canada, October 2013.
293. Husheng Li, Zhu Han, and Ju Bin Song, "Blind Control Synthesis for Large Dynamical Systems with Application in Smart Grids: A Non-equilibrium Statistical Mechanics Approach," *IEEE SmartGridComm*, Vancouver, Canada, October 2013.
294. Hang Zhang, Tianyu Wang, Lingyang Song, and Zhu Han, "Turning Interference Weakness into PHY Security Enhancement for Cognitive Radio Networks," *2013 International Conference on Wireless Communications and Signal Processing (WCSP)*, Hangzhou, China, October, 2013.

295. Ali Arab, Amin Khodaei, Suresh Khator, Zhu Han, and Qifeng Ding, "Efficient Post-Hurricane Transmission Network Restoration to Minimize Customer Interruption," *IEEE Great Lakes Symposium on Smart Grid*, Chicago, IL, September, 2013.
296. Behrouz Maham, Walid Saad, Merouane Debbah, and Zhu Han, "Interference Analysis for Spatial Reused Cooperative Multihop Wireless Networks," *IEEE 2013 IEEE 22nd International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC)*, Lingdon, UK, September 2013.
297. Hongliang Zhang, Tianyu Wang, Lingyang Song, and Zhu Han, "Optimization of Joint Resource Allocation and Power Control for D2D Communications Networks," *IEEE International Conference on Communications in China (ICCC), D2D Workshop*, Xi'an, China, August 2013.
298. Yanru Zhang, Erte Pan, Lingyang Song, Walid Saad, Zaher Dawy, and Zhu Han, "Social Network Enhanced Device-to-Device Communication Underlying Cellular Networks," *IEEE International Conference on Communications in China (ICCC), D2D Workshop*, Xi'an, China, August 2013.
299. Samir M. Perlaza, Arsenia Chorti, H. Vincent Poor, and Zhu Han, "On the Impact of Network-State Knowledge on the Feasibility of Secrecy," *IEEE International Symposium on Information Theory (ISIT)*, Istanbul, Turkey, July 2013.
300. Tamseel Mahmood Syed, Nghi H. Tran, Tuyen X. Tran, and Zhu Han, "Precoder Design for a Single-Relay Non-Orthogonal AF System based on Mutual Information," *The 9th IEEE International Wireless Communications and Mobile Computing Conference (IWCMC 2013)*, Cagliari, Italy, July 2013.
301. Samir M. Perlaza, Arsenia Chorti, H. Vincent Poor, and Zhu Han, "On the Trade-offs between Network State Knowledge and Secrecy," invited, *2013 Global Wireless Summit*, Atlantic City, NJ, June 2013.
302. Tina Mathews and Zhu Han, "USRP2 Implementation of Compressive Sensing Based Channel Estimation in OFDM," invited, *the Third International Conference on Communications and Information Technology (ICCIT-2013)*, Beirut, Lebanon, June 2013.
303. Lanchao Liu, Mohammad Esmalifalak, and Zhu Han, "Detection of False Data Injection in Power Grid Exploiting Low Rank and Sparsity," *IEEE International Conference on Communications*, Budapest, Hungary, June 2013.
304. Tian Zhang, Wei Chen, Zhu Han, and Zhigang Cao, "Coalitional Game Theoretic Approach for Cooperative Transmission in Vehicular Networks," *IEEE International Conference on Communications*, Budapest, Hungary, June 2013.
305. Tianyu Wang, Lingyang Song, Zhu Han, Zhaohua Lu, and Liujuan Hu, "Popular Content Distribution in Vehicular Networks using Coalition Formation Games," *IEEE International Conference on Communications*, Budapest, Hungary, June 2013.
306. Feiran Wang, Chen Xu, Lingyang Song, Qun Zhao, Xiaoli Wang, and Zhu Han, "Energy-Aware Resource Allocation for Device-to-Device Underlay Communication," *IEEE International Conference on Communications*, Budapest, Hungary, June 2013.

307. Mohammad Aghababaie Alavijeh, Behrouz Maham, Zhu Han, and Said Nader Esfahani, "Efficient Anti-Jamming Truthful Spectrum Auction among Secondary Users in Cognitive Radio Networks," *IEEE International Conference on Communications*, Budapest, Hungary, June 2013.
308. Rongqing Zhang, Lingyang Song, Zhu Han, Xiang Cheng, and Bingli Jiao, "Distributed Resource Allocation for Device-to-Device Communications Underlying Cellular Networks," *IEEE International Conference on Communications*, Budapest, Hungary, June 2013.
309. Qiumin Dong, Dusit Niyato, Ping Wang, and Zhu Han, "Deferrable Load Scheduling Optimization under Power Price Information Attacks in Smart Grid," *IEEE Wireless Communications and Networking Conference*, Shanghai, China, April 2013.
310. Nam Tuan Nguyen, Rong Zheng, and Zhu Han, "UMLI: An Unsupervised Mobile Locations Extraction Approach with Incomplete Data," *IEEE Wireless Communications and Networking Conference*, **Best Paper Award**, Shanghai, China, April 2013.
311. Muhammad Ejaz Ahmed, Ju Bin Song, and Zhu Han, "Traffic Pattern-Based Reward Maximization for Secondary User in Dynamic Spectrum Access," *IEEE Wireless Communications and Networking Conference*, Shanghai, China, April 2013.
312. Chen Wang, Yuan Liu, Meixia Tao, Zhu Han, and Dong In Kim, "Stackelberg Game for Spectrum Reuse in the Two-Tier LTE Femtocell Network," *IEEE Wireless Communications and Networking Conference*, Shanghai, China, April 2013.
313. Yanbo Ma, Chen Wang, Meixia Tao, and Zhu Han, "Content-Aware Transmission with Delay Threshold in Heterogeneous Networks," *IEEE Wireless Communications and Networking Conference*, Shanghai, China, April 2013.
314. Feiran Wang, Lingyang Song, Zhu Han, Qun Zhao, and Xiaoli Wang, "Joint Scheduling and Resource Allocation for Device-to-Device Underlay Communication," *IEEE Wireless Communications and Networking Conference*, Shanghai, China, April 2013.
315. Tianyu Wang, Lingyang Song, Zhu Han, and Walid Saad, "Overlapping Coalitional Games for Collaborative Sensing in Cognitive Radio Networks," *IEEE Wireless Communications and Networking Conference*, Shanghai, China, April 2013.
316. Ziqiang Feng, Lingyang Song, Zhu Han, Dusit Niyato, and Xiaowu Zhao, "Cell Selection in Two-Tier Femtocell Networks with Open/Closed Access Using Evolutionary Game," *IEEE Wireless Communications and Networking Conference*, Shanghai, China, April 2013.
317. Zengfeng Zhang, Lingyang Song, Zhu Han, Walid Saad, and Zhaohua Lu, "Interference Management in Small Cell Networks: An Overlapping Coalitional Game Approach," *IEEE Wireless Communications and Networking Conference*, Shanghai, China, April 2013.
318. Tianyu Wang, Lingyang Song, Zhu Han, Junfeng Zhang, and Xiaodan Zhang, "Dynamic Resource Allocation in Cognitive Radio Two-Way Relay Networks Using Sequential Auctions," invited *IEEE International Wireless Symposium*, Beijing, April 2013.

319. Ting Ning, Zhipeng Yang, Hongyi Wu, and Zhu Han, "Self-Interest-Drive Incentives for Ad Dissemination in Autonomous Mobile Social Networks," The 32nd IEEE International Conference on Computer Communications, INFOCOM, Turin, Italy, April 2013.
320. Rong Zheng, Thanh Le, and Zhu Han, "Approximate Online Learning for Passive Monitoring of Multi-channel Wireless Networks," The 32nd IEEE International Conference on Computer Communications, INFOCOM, Turin, Italy, April 2013.
321. Tian Zhang, Wei Chen, Zhu Han, and Zhigang Cao, "A Cross-Layer Perspective on Energy Harvesting Aided Green Communications over Fading Channels," *2013 IEEE INFOCOM Workshop on Communications and Control for Smart Energy Systems*, Turin, Italy, April 2013.
322. Lanchao Liu and Zhu Han, "Scalable Sparse Optimization for Big Power Grid Data," *NSF Workshop on Big Data From Signal Processing to Systems Engineering*, Arlington, VA, March, 2013.
323. Chen Xu, Lingyang Song, Zhu Han, Do Li, and Bingli Bao, "Resource Allocation Using A Reverse Iterative Combinatorial Auction for Device-to-Device Underlay Cellular Networks," IEEE Globe Communication Conference, Anaheim, CA, December 2012.
324. Nam Tuan Nguyen, Yichuan Wang, Husheng Li, Xin Liu and Zhu Han, "Extracting Typical Users' Moving Patterns Using Deep Learning," IEEE Globe Communication Conference, Anaheim, CA, December 2012.
325. Mohammad Esmalifalak, Ge Shi, Zhu Han, and Lingyang Song, "Attack Against Electricity Market-Attacker and Defender Gaming," IEEE Globe Communication Conference, Anaheim, CA, December 2012.
326. Arsenia Chorti, Samir M. Perlaza, Zhu Han, and H. Vincent Poor, "Physical Layer Security in Wireless Networks with Passive and Active Eavesdroppers," IEEE Globe Communication Conference, Anaheim, CA, December 2012.
327. Samir M. Perlaza, Dusit Niyato, Zhu Han, and Vincent Poor, "On the Decentralized Management of Scrambling Codes in Small Cell Networks," invited, *IEEE Singapore International Conference on Communication Systems (ICCS)*, Singapore, November 2012.
328. Samir M. Perlaza, H. Vincent Poor, and Zhu Han, "Learning Efficient Satisfaction Equilibria via Trial and Error," 2012 Conference Record of the Forty Sixth Asilomar Conference on Signals, Systems and Computers (ASILOMAR), Pacific Grove, CA, November, 2012.
329. Yi Huang, Lifeng Lai, Husheng Li, Wei Chen, and Zhu Han, "Online Quickest Multiarm Bandit Algorithm for Distributive Renewable Energy Resource," *IEEE International Conference on Smart Grid Communications, Smartgridcomm*, **Best Paper Award**, Tainan, October 2012.
330. Yifan Li, Ran Wang, Ping Wang, Dusit Niyato, Walid Saad, and Zhu Han, "Resilient PHEV Charging Policies under Price Information Attacks," *IEEE International Conference on Smart Grid Communications, Smartgridcomm*, Tainan, October 2012.

331. Chen Wang, Meixia Tao, and Zhu Han, "Partition Function Game for Rate Optimization in Random Interference Networks," Fourth International Conference on Wireless Communications and Signal Processing, Huangshan City, China, October 2012.
332. Feiran Wang, Chen Xu, Lingyang Song, and Zhu Han, "Energy-Efficient Radio Resource and Power Allocation for Device-to-Device Communication Underlying Cellular Networks," Fourth International Conference on Wireless Communications and Signal Processing, **Best Paper Award**, Huangshan City, China, October 2012.
333. Jun Deng, Rongqing Zhang, Lingyang Song, Zhu Han, Guang Yang, and Bingli Jiao, "Joint Power Control and Subchannel Allocation for OFDMA Femtocell Networks Using Distributed Auction Game," Fourth International Conference on Wireless Communications and Signal Processing, Huangshan City, China, October 2012.
334. Xiaofei Wang, Min Chen, Zhu Han, Ted "Taekyoung" Kwon, and Yanghee Choi, "Content Dissemination by Pushing and Sharing in Mobile Cellular Networks: An Analytical Study," *the 9th IEEE International Conference on Mobile Ad hoc and Sensor Systems (MASS)*, Las Vegas, NV, October 2012.
335. Samir M. Perlaza, Ravi Tandon, H. Vincent Poor, and Zhu Han, "The Nash Equilibrium Region of the Linear Deterministic Interference Channel with Feedback," *Allerton Conference on Communication, Control, and Computing*, Allerton, IL, Sep.-Oct. 2012.
336. Ziqiang Feng, Jun Deng, Lingyang Song, Zhu Hany, Guang Yang, and Bingli Jiao, "Joint Access Control and Subchannel Allocation for OFDMA Femtocell Network Using a Truthful Mechanism," *International Workshop on Practical Issues and Applications in Next Generation Wireless Networks*, in conjunction with ACM MOBICOM 2012, Istanbul, Turkey, August 2012.
337. Tianyu Wang, Lingyang Song, Zhu Han, and Bingli Jiao, "Popular Content Distribution in CR-VANETs with Joint Spectrum Sensing and Channel Access," *Chinacom*, Kunming, China, August 2012 **Best Student Paper Award**.
338. Walid Saad, Zhu Han, and H. Vincent Poor, "On the Physical Layer Security of Backscatter RFID Systems," invited, *The Ninth International Symposium on Wireless Communication Systems*, Paris, France, August 2012.
339. Nam Tuan Nguyen, Yichuan Wang, Xin Liu, Rong Zheng, and Zhu Han, "A Non-parametric Bayesian Approach for Opportunistic Data Transfer in Cellular Networks," invited, *The 7th International Conference on Wireless Algorithms, Systems, and Applications*, Yellow Mountains, China, August 2012.
340. Tianyu Wang, Lingyang Song, and Zhu Han, "Popular Content Distribution in CR-VANETs with Sensing-Throughput Tradeoff," *First IEEE International Conference on Communications in China (ICCC)*, Beijing, China, August 2012.
341. Y. C. Shiu, J. S. H. Tsai, S. M. Guo, L. S. Shieh, and Z. Han, "Fault-Tolerant Tracker For Interconnected Large-Scale Nonlinear Systems With Input Constraint," *4th International Interdisciplinary Chaos Symposium on Chaos and Complex Systems*, Antalya, Turkey, May 2012.
342. Francois Meriaux, Samir M. Perlaza, Samson Lasaulce, Zhu Han, and Vincent Poor, "On the Achievability of Efficient Satisfaction Equilibria in Self-Configuring



- Networks,” *3rd International Conference on Game Theory for Networks (Gamenets)*, Vancouver, Canada, May 2012.
343. Zhou Yuan, Ju Bin Song, and Zhu Han, “Network Formation Game for Interference Minimization Routing in Cognitive Radio Mesh Networks,” invited, *3rd International Conference on Game Theory for Networks (Gamenets)*, Vancouver, Canada, May 2012.
  344. Quanyan Zhu, Zhu Han, and Tamer Basar, “A Differential Game Approach to Distributed Demand Side Management in Smart Grid,” *IEEE International Conference on Communications*, Ottawa, Canada, June 2012.
  345. Siavash Bayat, Raymond Hall Yip Louie, Zhu Han, Yonghui Li, and Branka Vucetic, “Multiple Operator and Multiple Femtocell Networks: Distributed Stable Matching,” *IEEE International Conference on Communications*, Ottawa, Canada, June 2012.
  346. Muhammad Ejaz Ahmed, Ju Bin Song, Nam Tuan Nguyem, and Zhu Han, “Non-parametric Bayesian Identification of Primary Users’ Payloads in Cognitive Radio Networks,” *IEEE International Conference on Communications*, Ottawa, Canada, June 2012.
  347. Lanchao Liu, Husheng Li, and Zhu Han, “Sampling Spectrum Occupancy Data over Random Fields: A Matrix Completion Approach,” *IEEE International Conference on Communications*, Ottawa, Canada, June 2012.
  348. Tianyu Wang, Lingyang Song, Zhu Han, Xiang Cheng, and Bingli Jiao, “Power Allocation using Vickrey Auction and Sequential First-Price Auction Games for Physical Layer Security in Cognitive Relay Networks,” *IEEE International Conference on Communications*, Ottawa, Canada, June 2012.
  349. Chen Xu, Lingyang Song, Zhu Han, Qun Zhao, Xiaoli Wang, and Bingli Jiao, “Interference-Aware Resource Allocation for Device-to-Device Communications as an Underlay Using Sequential Second Price Auction,” *IEEE International Conference on Communications*, Ottawa, Canada, June 2012.
  350. Mohammad Esmalifalak, Zhu Han, and Lingyang Song, “Effect Of Stealthy Bad Data Injection On Network Congestion In Market Based Power System,” *IEEE Wireless Communications and Networking Conference*, Paris, France, April 2012, (**Best Paper Award**).
  351. Siavash Bayat, Raymond Hall Yip Louie, Zhu Han, Yonghui Li, and Branka Vucetic, “Distributed Stable Matching Algorithm for Physical Layer Security with Multiple Source-Destination Pairs and Jammer Nodes,” *IEEE Wireless Communications and Networking Conference*, Paris, France, April 2012.
  352. Dusit Niyato, Ping Wang, Ekram Hossain, Walid Saad, and Zhu Han, “Game Theoretic Modeling of Cooperation among Service Providers in Mobile Cloud Computing Environments,” *IEEE Wireless Communications and Networking Conference*, Paris, France, April 2012, (**Best Paper Award**).
  353. Yifan Li, Rakpong Kaewpuang, Ping Wang, Dusit Niyato and Zhu Han, “An Energy Efficient Solution: Integrating Plug-In Hybrid Electric Vehicle in Smart Grid with Renewable Energy,” *IEEE INFOCOM Workshop on Green Networking and Smart Grids*, March 2012.

354. Hannan Ma, Husheng Li, and Zhu Han, "A Framework of Frequency Oscillation in Power Grid: Epidemic Propagation over Social Networks," *IEEE INFOCOM Workshop on Green Networking and Smart Grids*, March 2012.
355. Hung Khanh Nguyen, Ju Bin Song, and Zhu Han, "Demand Side Management to Reduce Peak-to-Average Ratio using Game Theory in Smart Grid," *IEEE INFOCOM Workshop on Green Networking and Smart Grids*, March 2012.
356. Husheng Li and Zhu Han, "Distributed Scheduling of Wireless Communications for Voltage Control in Micro Smart Grid", SG-COMNETs workshop in *IEEE Globe Communication Conference (Globecom)*, Houston, TX, December 2011.
357. Husheng Li and Zhu Han, "Manipulating the Electricity Power Market via Jamming the Price Signaling in Smart Grid," SG-COMNETs workshop in *IEEE Globe Communication Conference (Globecom)*, Houston, TX, December 2011.
358. Jingchao Chen, Lingyang Song, Zhu Han, and Bingli Jiao, "Joint Relay and Jammer Selection for Secure Decode-and-Forward Two-Way Relay Communications," *IEEE Globe Communication Conference (Globecom)*, Houston, TX, December 2011.
359. Lanchao Liu, Zhu Han, Zhiqiang Wu, and Lijun Qian, "Collaborative Compressive Sensing based Dynamic Spectrum Sensing and Mobile Primary User Localization in Cognitive Radio Networks," *IEEE Globe Communication Conference (Globecom)*, Houston, TX, December 2011.
360. Huy Nguyen, Nam Nguyen, Guanbo Zheng, Zhu Han, and Rong Zheng, "Binary Blind Identification of Wireless Transmission Technologies for Wide-band Spectrum Monitoring," *IEEE Globe Communication Conference (Globecom)*, Houston, TX, December 2011.
361. Xue Li, Steven Hong, Zhu Han, and Zhiqiang Wu, "Bayesian Compressed Sensing Based Dynamic Joint Spectrum Sensing and Primary User Localization for Dynamic Spectrum Access," *IEEE Globe Communication Conference (Globecom)*, Houston, TX, December 2011.
362. Husheng Li, Zhu Han, and Zhenghao Zhang, "Communication over Random Fields: A Statistical Framework for Cognitive Radio Networks," *IEEE Globe Communication Conference (Globecom)*, Houston, TX, December 2011.
363. Tianyu Wang, Lingyang Song, Zhu Han, Zhongshan Zhang, and Bingli Jiao, "A Feedback Rate Control Game using Sequential Second Price Auction for Channel State Information and Intercell Interference in Wireless Networks," invited, *2011 International Conference on Wireless Communications & Signal Processing: WCSP*, November 2011.
364. Quanyan Zhu, Walid Saad, Zhu Han, H. Vincent Poor, and Tamer Basar, "Eavesdropping and Jamming in Next-Generation Wireless Networks: a Game Theoretic Approach," *the 2011 IEEE Military Communications Conference*, November 2011.
365. Mohammad Esmalifalak, Huy Nguyen, Rong Zheng, and Zhu Han, "Stealth False Data Injection using Independent Component Analysis in Smart Grid," *IEEE International Conference on Smart Grid Communications, Smartgridcomm*, October 2011.

366. Walid Saad, Zhu Han, H. Vincent Poor, and Tamer Basar, "A Noncooperative Game for Double Auction-Based Energy Trading between PHEVs and Distribution Grids," *IEEE International Conference on Smart Grid Communications, Smartgridcomm*, October 2011.
367. Husheng Li, Zhu Han, Lifeng Lai, Robert Caiming Qiu, and Depeng Yang, "Efficient and Reliable Multiple Access for Advanced Metering in Future Smart Grid," *IEEE International Conference on Smart Grid Communications, Smartgridcomm*, October 2011.
368. Husheng Li and Zhu Han, "Synchronization of Power Networks Without and With Communication Infrastructures," *IEEE International Conference on Smart Grid Communications, Smartgridcomm*, October 2011.
369. Manav Bhatnagar, Ankur Bansal, Are Hjørungnes, and Zhu Han, "Maximum-Likelihood Decoding in Decode-and-Forward Based MIMO Cooperative Communication Systems," *the 45th Asilomar Conference on Signals, Systems and Computers*, October 2011.
370. Lei Jiang, Zhu Han, Maria-Angeles Vazquez-Castro, and Are Hjørungnes, "Multi-beam SATCOM Systems Design with Physical Layer Security," invited, *2011 IEEE International Conference on Ultra-Wideband*, September 2011.
371. Rongqing Zhang, Lingyang Song, Zhu Han, Zhongshan Zhang, and Bingli Jiao, "Joint subcarrier and power allocation for multiuser OFDM systems using distributed auction game," *the 6th international conference on Wireless algorithms, systems, and applications*, Chengdu, China, August, 2011.
372. Tianyu Wang, Rongqing Zhang, Lingyang Song, Zhu Han, Haopeng Li, and Bingli Jiao, "Power Allocation for Two-Way Relay System Based on Sequential Second Price Auction," invited, *The Third International Conference on Ubiquitous and Future Networks*, June 2011.
373. Walid Saad, Zhu Han, and H. Vincent Poor, "Coalitional Game Theory for Cooperative Micro-Grid Distribution Networks," *IEEE International Conference on Communications, Workshop on Smart Grid Communications*, Kyoto, Japan, June 2011.
374. Jia Meng, Yingying Li, Nam Nguyen, Wotao Yin, and Zhu Han, "High Resolution OFDM Channel Estimation with Low Speed ADC using Compressive Sensing," *IEEE International Conference on Communications*, Kyoto, Japan, June 2011.
375. Lingyang Song, Zhu Han, Qihao Li, and Bingli Jiao, "Feedback Control Game for Channel State Information in Wireless Networks," *IEEE International Conference on Communications*, Kyoto, Japan, June 2011.
376. Jingchao Chen, Rongqing Zhang, Lingyang Song, Zhu Han, and Bingli Jiao, "Joint Relay and Jammer Selection for Secure Two-way Relay Networks," *IEEE International Conference on Communications*, Kyoto, Japan, June 2011.
377. Rongqing Zhang, Lingyang Song, Zhu Han, and Bingli Jiao, "Distributed Coalition Formation of Relay and Friendly Jammers for Secure Cooperative Networks," *IEEE International Conference on Communications*, Kyoto, Japan, June 2011.

378. Rongqing Zhang, Lingyang Song, Zhu Han, and Bingli Jiao, "Relay and Jammer Cooperation as a Coalitional Game in Secure Cooperative Wireless Networks," invited, *1st International ICST Workshop on Secure Wireless Networks (SECURENETS)*, May 2011.
379. Yingying Li, Zhu Han, Wei-Chuan Shih and Wotao Yin, "Oil spill sensor using multispectral infrared imaging via l1 minimization," *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, Prague, Czech Republic, May 2011.
380. Tianyu Wang, Lingyang Song, Zhu Han, and Bingli Jiao, "Improve Secure Communications in Cognitive Two-Way Relay Networks using Sequential Second Price Auction," *Fifth IEEE International Symposium on New Frontiers in Dynamic Spectrum Access Networks 2010 (DySPAN 2011)*, Aachen, Germany, May 2011.
381. Walid Saad, Zhu Han, and H. Vincent Poor, "A Game Theoretic Approach for Multi-hop Power Line Communications," invited, *2nd International ICST Conference on Game Theory for Networks (Gamenet)*, Shanghai, China, April 2011.
382. Shuhang Liu, Rongqing Zhang, Lingyang Song, Zhu Han, and Bingli Jiao, "Enforce Truth-Telling in Wireless Relay Networks for Secure Communication," *IEEE International Workshop on Security in Computers, Networking and Communications (SCNC)*, INFOCOM Workshop, Shanghai, China, April 2011.
383. Rongqing Zhang, Lingyang Song, Zhu Han, and Bingli Jiao, "Improve Physical Layer Security in Cooperative Wireless Network using Distributed Auction Games," *the 2011 International Workshop on Cognitive and Cooperative Networks*, INFOCOM Workshop, Shanghai, China, April 2011.
384. Nam Tuan Nguyen, Guanbo Zheng, Zhu Han and Rong Zheng, "Device Fingerprinting to Enhance Wireless Security using Nonparametric Bayesian Method," *IEEE Annual IEEE Conference on Computer Communications INFOCOM*, Shanghai, China, April 2011.
385. Wotao Yin, Zaiwen Wen, Shuyi Li, Jia (Jasmine) Meng, and Zhu Han, "Dynamic Compressive Spectrum Sensing for Cognitive Radio Networks," *the 45th Annual Conference on Information Sciences and Systems (CISS)*, Baltimore, MD, March 2011.
386. Yi Huang, Husheng Li, Kristy A. Campbell, and Zhu Han, "Defending False Data Injection Attack On Smart Grid Network Using Adaptive CUSUM Test," *the 45th Annual Conference on Information Sciences and Systems (CISS)*, Baltimore, MD, March 2011.
387. Zhou Yuan, Dusit Niyato, Husheng Li, and Zhu Han, "Defense Against Primary User Emulation Attacks Using Belief Propagation of Location Information in Cognitive Radio Networks," *IEEE Wireless Communications and Networking Conference*, Cancun, Mexico, March 2011.
388. Dusit Niyato, Ping Wang, Walid Saad, Zhu Han, and Are Hjørungnes, "Coalition Formation Games for Relay Transmission: Stability Analysis under Uncertainty," *IEEE Wireless Communications and Networking Conference*, Cancun, Mexico, March 2011.

389. Fabian Rozario, Zhu Han, and Dusit Niyato, "Optimization of Non-cooperative P2P Network from the Game Theory Point of View," *IEEE Wireless Communications and Networking Conference*, Cancun, Mexico, March 2011.
390. Dusit Niyato, Ping Wang, Zhu Han, and Ekram Hossain, "Impact of Packet Loss on Power Demand Estimation and Power Supply Cost," *IEEE Wireless Communications and Networking Conference*, Cancun, Mexico, March 2011.
391. Wenkai Wang, Yan Sun, Husheng Li, and Zhu Han, "Cross-layer Attack and Defense in Cognitive Radio Networks," *IEEE Globe Communication Conference (Globecom)*, Miami, FL, Nov.-Dec. 2010.
392. Walid Saad, Zhu Han, Tamer Basar, Merouane Debbah, and Are Hjørungnes, "A Coalition Formation Game in Partition Form for Peer-to-Peer File Sharing Networks," *IEEE Globe Communication Conference (Globecom)*, Miami, FL, Nov.-Dec. 2010.
393. Rongqing Zhang, Lingyang Song, Zhu Han, Bingli Jiao, and Merouane Debbah, "Physical Layer Security for Two Way Relay Communications with Friendly Jammers," *IEEE Globe Communication Conference (Globecom)*, Miami, FL, Nov.-Dec. 2010.
394. Dusit Niyato, Zhu Han, Walid Saad, and Are Hjørungnes, "A Controlled Coalitional Game for Wireless Connection Sharing and Bandwidth Allocation in Mobile Social Networks," *IEEE Globe Communication Conference (Globecom)*, Miami, FL, Nov.-Dec. 2010.
395. Quanyan Zhu, Zhou Yuan, Ju Bin Song, Zhu Han, and Tamer Basar, "Dynamic Interference Minimization Routing Game for On-Demand Cognitive Pilot Channel," *IEEE Globe Communication Conference (Globecom)*, Miami, FL, Nov.-Dec. 2010.
396. Behrouz Maham, Walid Saad, Merouane Debbah, Zhu Han, and Are Hjørungne, "Efficient Cooperative Protocols for General Outage-Limited Multihop Wireless Networks," invited, in proceeding of *the 21st Annual IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC)*, Istanbul, Turkey, September 2010.
397. Behrouz Maham, Are Hjørungne, and Zhu Han, "Multihop transmission with interference using spatial reused space-time coded cooperative-routing," *5th Advanced satellite multimedia systems conference (asma) and the 11th signal processing for space communications workshop (spsc)*, September 2010.
398. Dan Xu, Xin Liu, and Zhu Han, "A Two-Tier Market for Decentralized Dynamic Spectrum Access in Cognitive Radio Networks," *Seventh Annual IEEE Communications Society Conference on Sensor, Mesh, and Ad Hoc Communications and Networks (SECON)*, Boston, MA, June 2010.
399. Zhifeng Luo, Zhu Han, Albert K. Wong, and Shuisheng Qiu, "Relay-Assisted Partial Packet Recovery with IDMA Method in CDMA Wireless Network," *the 6th International Wireless Communications and Mobile Computing Conference (IWCMC)*, Caen, France, Jun.-Jul. 2010.
400. Rajatha Raghavendra, Hao Zou, Mohamad Charafeddine, Zhu Han, and John M. Cioffi, "Low Complexity Multi-user Rate Region Maximization for Frequency-Selective Interference Channel," invited, *the 6th International Wireless Commu-*

- nications and Mobile Computing Conference (IWCMC)*, Caen, France, Jun.-Jul. 2010.
401. Husheng Li and Zhu Han, "Queuing Analysis of Dynamic Spectrum Access Subject to Interruptions from Primary Users," *the 5th International Conference on Cognitive Radio Oriented Wireless Networks and Communications (Crowncom)*, Cannes, France, June 2010.
  402. Huy Nguyen, Rong Zheng, and Zhu Han, "Binary is Good: A Binary Inference Framework for Primary User Separation in Cognitive Radio Networks," invited, *the 5th International Conference on Cognitive Radio Oriented Wireless Networks and Communications (Crowncom)*, Cannes, France, June 2010.
  403. Husheng Li and Zhu Han, "Blind Dogfight in Spectrum: Combating Primary User Emulation Attacks in Cognitive Radio Systems with Unknown Channel Statistics," *IEEE International Conference on Communications*, Capetown, South Africa, May 2010.
  404. Dapeng Li, Jing Liu, Youyun Xu, Xinbing Wang, and Zhu Han, "A Market Game for Dynamic Multi-Band Sharing in Cognitive Radio Networks," *IEEE International Conference on Communications*, Capetown, South Africa, May 2010.
  405. Quanyan Zhu, Husheng Li, Zhu Han, and Tamer Basar, "A Stochastic Game Model for Jamming in Multi-channel Cognitive Radio Systems," *IEEE International Conference on Communications*, Capetown, South Africa, May 2010.
  406. Quanyan Zhu, Zhu Han, and Tamer Basar, "No-Regret Learning in Collaborative Spectrum Sensing with Malicious Nodes," *IEEE International Conference on Communications*, Capetown, South Africa, May 2010.
  407. Husheng Li and Zhu Han, "Catching Attacker(s) for Collaborative Spectrum Sensing in Cognitive Radio Systems: An Abnormality Detection Approach," *Fourth IEEE International Symposium on New Frontiers in Dynamic Spectrum Access Networks 2010 (DySPAN 2010)*, Singapore, Apr. 2010.
  408. Husheng Li and Zhu Han, "Competitive Spectrum Access in Cognitive Radio Networks: Graphical Game and Learning," *IEEE Wireless Communications and Networking Conference*, Sydney, Australia, Apr. 2010.
  409. Song Gao, Lijun Qian, Dhadesugoor. R. Vaman, and Zhu Han, "Distributed Cognitive Sensing for Time Varying Channels: Exploration and Exploitation," *IEEE Wireless Communications and Networking Conference*, Sydney, Australia, Apr. 2010.
  410. Zhou Yuan, Ju Bin Song, and Zhu Han, "Interference Minimization Routing and Scheduling in Cognitive Radio Wireless Mesh Networks," *IEEE Wireless Communications and Networking Conference*, Sydney, Australia, Apr. 2010.
  411. Husheng Li and Zhu Han, "Collaborative Spectrum Sensing with A Stranger: Trust, or Not to Trust?," *IEEE Wireless Communications and Networking Conference*, Sydney, Australia, Apr. 2010.
  412. Walid Saad, Zhu Han, Tamer Basar, Are Hjørungnes, and Ju Bin Song, "Hedonic Coalition Formation Games for Secondary Base Station Cooperation in Cognitive Radio Networks," *IEEE Wireless Communications and Networking Conference*, Sydney, Australia, Apr. 2010.

413. Wei Zhang and Zhu Han, "Opportunistic Feedback in Collaborative Spectrum Sensing for Cognitive Radio," *IEEE Wireless Communications and Networking Conference*, Sydney, Australia, Apr. 2010.
414. Jia Meng, Wotao Yin, Husheng Li, Ekram Houssain, and Zhu Han, "Collaborative Spectrum Sensing from Sparse Observations Using Matrix Completion for Cognitive Radio Networks," *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, Dallas, TX, Mar. 2010.
415. Zhu Han, Ninoslav Marina, Mérouane Debbah, and Are Hjørungnes, "Improved Wireless Secrecy Rate using Distributed Auction Theory," *The 6th International Conference on Mobile Ad-hoc and Sensor Networks*, Wuyishang, China, Dec. 2009.
416. Walid Saad, Zhu Han, Tamer Basar and Are Hjørungnes, "Network Formation Games for Wireless Multi-hop Networks in the Presence of Eavesdroppers," invited paper, *Third International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP09)*, Aruba, Dec. 2009.
417. Wenkai Wang, Husheng Li, Yan Sun, and Zhu Han, "CatchIt: Detect Malicious Nodes in Collaborative Spectrum Sensing," *IEEE Globe Communication Conference*, Hanolulu, Hawaii, Nov.-Dec. 2009.
418. Husheng Li and Zhu Han, "Dogfight in Spectrum: Jamming and Anti-Jamming in Multichannel Cognitive Radio Systems," *IEEE Globe Communication Conference*, Hanolulu, Hawaii, Nov.-Dec. 2009.
419. Walid Saad, Quanyan Zhu, Tamer Basar, Zhu Han, and Are Hjørungnes, "Hierarchical Network Formation Games in the Uplink of Multi-Hop Wireless Networks," *IEEE Globe Communication Conference*, Hanolulu, Hawaii, Nov.-Dec. 2009.
420. Jia Meng, Javad Ahmadi-Shokouh, Husheng Li, Earl Joe Charlson, Zhu Han, Sima Noghianian, and Ekram Hossain, "Sampling Rate Reduction for 60 GHz UWB Communication using Compressive Sensing," *Asilomar Conference on Signals, Systems & Computers*, Pacific grove, CA, Nov. 2009.
421. Walid Saad, Zhu Han, Tamer Basar, and Are Hjørungnes, "Coalitional Games for Distributed Eavesdroppers Cooperation in Wireless Networks," *the Third International Workshop on Game Theory in Communication Networks, Gamecomm09*, Pisa, Italy, Oct. 2009.
422. Zhu Han, Rong Zheng, and H. Vincent Poor, "Repeated Auctions with Learning for Spectrum Access in Cognitive Radio Networks," invited, *Allerton Conference on Communication, Control, and Computing*, Allerton, IL, Sep.-Oct. 2009.
423. Ju Bin Song, Ki Hwan Lee, and Zhu Han, "Joint Algorithm of Scheduling and Network Flow in Cognitive Radio Wireless Mesh Networks," *IEEE International Conference on Systems, Man and Cybernetics*, San Antonio, Oct. 2009.
424. Lun Dong, Zhu Han, Athina P. Petropulu and H. Vincent Poor, "Cooperative Jamming for Wireless Physical Layer Security," in *Proceedings of IEEE Workshop on Statistical Signal Processing*, Cardiff, Wales, U.K. Sep. 2009.
425. Zhifeng Luo, Deniz Gurkan, Zhu Han, Albert K. Wong, and Shuisheng Qiu, "Cooperative Communication based on IDMA," in *Proceedings of the 5th International Conference on Wireless Communications, Networking and Mobile Computing*, Beijing, China, Sep. 2009.

426. Walid Saad, Zhu Han, Mérouane Debbah, Are Hjørungnes, and Tamer Basar, “Physical Layer Security: Coalitional Games for Distributed Cooperation,” in *Proceedings of 7th International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks, (WiOpt09)*, South Korean, June 2009. (**Best Paper Award**)
427. Walid Saad, Zhu Han, Mérouane Debbah, Are Hjørungnes, and Tamer Basar, “Coalitional Games for Distributed Collaborative Spectrum Sensing in Cognitive Radio Networks,” in *Proceedings of IEEE Annual IEEE Conference on Computer Communications INFOCOM*, Rio de Janeiro, Brazil, April 2009, (**WUN CogCom Best Paper Awards, 2013**).
428. Dalei Wu, Zhu Han, Song Ci, Guan-Ming Su, Haohong Wang, and Weifeng Su, “Cooperative Video Summary Transmission over Wireless Networks,” *Sarnoff*, Princeton, NJ, Mar.-Apr. 2009.
429. Zhu Han, Ninoslav Marina, Mérouane Debbah, and Are Hjørungnes, “Physical Layer Security Game: How to Date a Girl with Her Boyfriend on the Same Table,” *International Conference on Game Theory for Networks*, Istanbul, Turkey, May 2009.
430. M. A. Vazquez Castro, Zhu Han, Are Hjørungnes, and Ninoslav Marina, “Rate Allocation for Satellite Systems with Correlated Channels based on a Stackelberg Game,” *International Conference on Game Theory for Networks*, Istanbul, Turkey, May 2009.
431. Walid Saad, Zhu Han, Tamer Basar, Mérouane Debbah, and Are Hjørungnes, “A Selfish Approach to Coalition Formation among Unmanned Air Vehicles in Wireless Networks,” *International Conference on Game Theory for Networks*, Istanbul, Turkey, May 2009.
432. Jia Meng, Husheng Li, and Zhu Han, “Sparse Event Detection in Wireless Sensor Networks using Compressive Sensing,” *The 43rd Annual Conference on Information Sciences and Systems (CISS)*, Baltimore, MD, Mar. 2009.
433. Beibei Wang, Zhu Han, K. J. Ray Liu, “Peer-to-Peer File Sharing Game using Correlated Equilibrium,” *The 43rd Annual Conference on Information Sciences and Systems (CISS)*, Baltimore, MD, Mar. 2009.
434. Wenkai Wang, Husheng Li, Yan Lindsay Sun, and Zhu Han, “Attack-Proof Collaborative Spectrum Sensing in Cognitive Radio Networks,” *The 43rd Annual Conference on Information Sciences and Systems (CISS)*, Baltimore, MD, Mar. 2009.
435. Ninoslav Marina, Zhu Han, Mérouane Debbah, and Are Hjørungnes, “Game Theory, Information Theory, and Random Matrix Theory: An Ever Closer Union,” open problems session, *Information Theory and Applications Workshop*, San Diego, CA, Feb. 2009.
436. Lun Dong, Zhu Han, Athina P. Petropulu and H. Vincent Poor, “Amplify-And-Forward Based Cooperation For Secure Wireless Communications,” in *Proceedings of IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, Taipei, Taiwan, Apr. 2009.
437. Mohamad Charafeddine, Zhu Han, Arogyaswami Paulraj, and John Cioffi, “Crystallized Rates Region of the Interference Channel via Correlated Equilibrium with



- Interference as Noise,” in Proceedings of *IEEE International Conference on Communications*, Dresden, Germany, Jun. 2009 (**Best Paper Award**).
438. Walid Saad, Zhu Han, Mérouane Debbah, Are Hjørungnes, and Tamer Basar, “A Game-Based Self-Organizing Uplink Tree for VoIP Services in IEEE 802.16j Networks,” in Proceedings of *IEEE International Conference on Communications*, Dresden, Germany, Jun. 2009.
  439. Dusit Niyato, Ekram Hossain, Dong In Kim, and Zhu Han, “Joint Optimization of Placement and Bandwidth Reservation for Relays in IEEE 802.16j Mobile Multihop Networks,” in Proceedings of *IEEE International Conference on Communications*, Dresden, Germany, Jun. 2009.
  440. Lun Dong, Zhu Han, Athina P. Petropulu, and H. Vincent Poor, “Secure Wireless Communications via Cooperation,” in Proceedings of *Allerton Conference on Communication, Control, and Computing*, Allerton, IL, October 2008.
  441. Walid Saad, Zhu Han, Are Hjørungnes, and Mérouane Debbah, “Network Formation Games for Distributed Uplink Tree Construction in IEEE 802.16j Networks,” in Proceedings of *IEEE Global Communications Conference*, New Orleans, LA, November 2008.
  442. Barsha Shrestha, Dusit Niyato, Zhu Han and Ekram Hossain, “Wireless Access in Vehicular Environments Using BitTorrent and Bargaining,” in Proceedings of *IEEE Global Communications Conference*, New Orleans, LA, November 2008.
  443. Zhu Han, Yan Sun, and Hongyuan Shi, “Cooperative Transmission Protocol for Underwater Acoustic Communications,” in Proceedings of *IEEE International Conference on Communications*, Beijing, China, May 2008.
  444. Walid Saad, Zhu Han, Mérouane Debbah, and Are Hjørungnes, “A Distributed Merge and Split Algorithm for Fair Cooperation in Wireless Networks,” in Proceedings of *IEEE International Conference on Communications Workshop on Cooperative Networks*, Beijing, China, May 2008.
  445. Zhu Han and Jiang Hai, “Replacement of Spectrum Sensing and Avoidance of Hidden Terminal for Cognitive Radio,” in Proceedings of *IEEE Wireless Communications and Networking Conference (WCNC)*, Las Vegas, NV, April 2008.
  446. Jianwei Huang, Zhu Han, Mung Chiang, and H. Vincent Poor, “Auction-Based Resource Allocation For Multi-Relay Asynchronous Cooperative Networks,” invited, in Proceedings of *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, Las Vegas, NV, April 2008.
  447. Zhu Han and Yan Lindsay Sun, “Self-Learning Cooperative Transmission - Coping with Unreliability due to Mobility, Channel Estimation Errors, and Untrustworthy Nodes,” in Proceedings of *IEEE Globe Communication Conference (Globecom)*, Washington, D.C., November 2007.
  448. Ahmed S. Ibrahim, Zhu Han, and K. J. Ray Liu, “Distributed Energy-Efficient Cooperative Routing in Wireless Networks,” in Proceedings of *IEEE Globe Communication Conference (Globecom)*, Washington, D.C., November 2007.
  449. Jianwei Huang, Zhu Han, Mung Chiang, and H. Vincent Poor, “Auction-Based Distributed Resource Allocation for Cooperation Transmission in Wireless Networks,” in Proceedings of *IEEE Globe Communication Conference (Globecom)*, Washington, D.C., November 2007.

450. Zhu Han and Yan Lindsay Sun, "Securing Cooperative Transmission in Wireless Communications," in Proceedings of *First Workshop on the Security and Privacy of Emerging Ubiquitous Communication Systems*, Philadelphia, PA, August 2007.
451. Zhu Han and H. Vincent Poor, "Lifetime Improvement of Wireless Sensor Networks by Collaborative Beamforming and Cooperative Transmission," in Proceedings of *IEEE International Conference on Communications*, Glasgow, Scotland, June 2007.
452. Zhu Han, Xin Zhang, and H. Vincent Poor, "Cooperative Transmission Protocols with High Spectral Efficiency and High Diversity Order using Multiuser Detection and Network Coding," in Proceedings of *IEEE International Conference on Communications*, Glasgow, Scotland, June 2007.
453. Juan E. Suris, Luiz DaSilva, Zhu Han, and Allen MacKenzie, "Cooperative Game Theory for Distributed Spectrum Sharing," in Proceedings of *IEEE International Conference on Communications*, Glasgow, Scotland, June 2007.
454. Beibei Wang, Zhu Han, and K. J. Ray Liu, "Distributed Relay Selection and Power Control for Multiuser Cooperative Communication Networks Using Buyer / Seller Game," in Proceedings of *Annual IEEE Conference on Computer Communications, INFOCOM*, Anchorage, AK, May 2007.
455. Zhu Han and H. Vincent Poor, "Coalition Game with Cooperative Transmission: A Cure for the Curse of Boundary Nodes in Selfish Packet-Forwarding Wireless Networks," in Proceedings of *5th International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks, (WiOpt07)*, Limassol, Cyprus, April 2007.
456. Zhu Han, Charles Pandana, and K. J. Ray Liu, "Distributive Opportunistic Spectrum Access for Cognitive Radio using Correlated Equilibrium and No-regret Learning," in Proceedings of *IEEE Wireless Communications and Networking Conference*, Hong Kong, China, March 2007.
457. Beibei Wang, Zhu Han, and K. J. Ray Liu, "Stackelberg Game for Distributed Resource Allocation over Multiuser Cooperative Communication Networks," in Proceedings of *IEEE Global Communications Conference*, San Francisco, CA, November 2006.
458. Yan Lindsay Sun, Zhu Han, Wei Yu, and K. J. Ray Liu, "Attacks on Trust Evaluation in Distributed Networks," invited paper, in Proceedings of *Conference on Information Sciences and Systems*, Princeton, NJ, March 2006.
459. Ahmed K. Sadek, Zhu Han, and K. J. Ray Liu, "A Distributed Relay-Assignment Algorithm for Cooperative Communications in Wireless Networks," in Proceedings of *IEEE International Conference on Communications*, Istanbul, Turkey, June 2006.
460. Zhu Han, A. Lee Swindlehurst, and K. J. Ray Liu, "Smart Deployment/Movement of Unmanned Air Vehicle to Improve Connectivity in MANET," in Proceedings of *IEEE Wireless Communications and Networking Conference*, Las Vegas, NV, March 2006.
461. Ahmed K. Sadek, Zhu Han, and K. J. Ray Liu, "An Efficient Cooperation Protocol to Extend Coverage Area in Cellular Networks," in Proceedings of *IEEE Wireless Communications and Networking Conference*, Las Vegas, NV, March 2006.

462. Wipawee Siriwongpairat, Weifeng Su, Zhu Han, and K. J. Ray Liu, "Employing Cooperative Diversity for Performance Enhancement in UWB Communication Systems," in Proceedings of *IEEE Wireless Communications and Networking Conference*, Las Vegas, NV, March 2006.
463. Thanongsak Himsoon, Wipawee Siriwongpairat, Zhu Han, and K. J. Ray Liu, "Lifetime Maximization by Cooperative Sensor and Relay Deployment in Wireless Sensor Networks," in Proceedings of *IEEE Wireless Communications and Networking Conference*, Las Vegas, NV, March 2006.
464. Yan Lindsay Sun, Zhu Han, Wei Yu, and K. J. Ray Liu, "A Trust Evaluation Framework in Distributed Networks: Vulnerability Analysis and Defense Against Attacks," in Proceedings of *Annual IEEE Conference on Computer Communications, INFOCOM*, Barcelona, Spain, April 2006.
465. Ahmed Sadek, Zhu Han, and K. J. Ray Liu, "Multi-Node Cooperative Resource Allocation to Improve Coverage Area in Wireless Networks," in Proceedings of *IEEE Global Communications Conference*, St. Louis, MI, November 2005.
466. Andres Kwasinski, Zhu Han, and K. J. Ray Liu, "Cooperative Multimedia Communications: Joint Source Coding and Collaboration," in Proceedings of *IEEE Global Communications Conference*, St. Louis, MI, November 2005.
467. Yan Lindsay Sun, Wei Yu, Zhu Han, and K. J. Ray Liu, "Trust Modeling and Evaluation in Ad Hoc Networks," in Proceedings of *IEEE Global Communications Conference*, St. Louis, MI, November 2005.
468. Andres Kwasinski, Zhu Han, and K. J. Ray Liu, "Joint Source Coding Diversity and Cooperative Diversity for Multimedia Communications," in Proceedings of *IEEE Workshop on Signal Processing Advances in Wireless Communications*, pp.111-115, New York City, NY, June 2005.
469. Zhu Han, Thanongsak Himsoon, Wipawee Siriwongpairat, and K. J. Ray Liu, "Energy Efficient Cooperative Transmission over Multiuser OFDM Networks: Who Helps Whom and How to Cooperate," in Proceedings of *IEEE Wireless Communications and Networking Conference*, vol.2, pp.1030-1035, New Orleans, LA, March 2005.
470. Zhu Han, Charles Pandana, and K. J. Ray Liu, "A Self-Learning Repeated Game Framework for Optimizing Packet Forwarding," in Proceedings of *IEEE Wireless Communications and Networking Conference*, vol.4, pp. 2131-2136, New Orleans, LA, March 2005.
471. Wipawee Siriwongpairat, Zhu Han, and K. J. Ray Liu, "Energy-efficient Resource Allocation for multiband UWB Communication Systems," in Proceedings of *IEEE Wireless Communications and Networking Conference*, vol.2, pp.813-818, New Orleans, March 2005.
472. Guan-Ming Su, Zhu Han, Min Wu, and K. J. Ray Liu, "Joint Uplink and Downlink Optimization for Video Conferencing over Wireless LAN," in Proceedings of *IEEE International Conference on Acoustics, Speech, and Signal Processing*, vol.2, pp.1101-1104, Philadelphia, PA, March 2005.
473. Zhu Han, Zhu Ji, and K. J. Ray Liu, "Dynamic Distributed Rate Control for Wireless Networks by Optimal Cartel Maintenance Strategy," in Proceedings of *IEEE*

- Global Communications Conference*, vol.6, pp.3454-3458, Dallas, TX, December 2004.
474. Zhu Han, Zhu Ji, and K. J. Ray Liu, "Low-Complexity OFDMA Channel Allocation with Nash Bargaining Solution Fairness," in Proceedings of *IEEE Global Communications Conference*, vol.6, pp.3726-3731, Dallas, TX, December 2004.
  475. Zhu Han, Zhu Ji, and K. J. Ray Liu, "Power Minimization for Multi-Cell OFDM Networks Using Distributed Non-cooperative Game Approach," in Proceedings of *IEEE Global Communications Conference*, vol.6, pp.3742-3747, Dallas, TX, December 2004.
  476. Guan-Ming Su, Zhu Han, Min Wu, and K. J. Ray Liu, "Dynamic Distortion Control for 3-D Embedded Wavelet Video over Multiuser OFDM Networks," in Proceedings of *IEEE Global Communications Conference*, vol.2, pp.650-654, Dallas, TX, December 2004.
  477. Zhu Han, F.R. Farrokh, Zhu Ji, and K. J. Ray Liu, "Capacity Optimization Using Subspace Method over Multicell OFDMA Networks," in Proceedings of *IEEE Wireless Communications and Networking Conference*, vol.4, pp.2393-2398, Atlanta, GA, March 2004.
  478. Andres Kwasinski, Zhu Han, K. J. Ray Liu, and Nariman Farvardin, "Dynamic Real Time Distortion Management over Multimedia Downlink CDMA," in Proceedings of *IEEE Wireless Communications and Networking Conference*, vol.2, pp.650-654, Atlanta, GA, March 2004.
  479. Zhu Han, Z. Jane Wang, K. J. Ray Liu, and Yue Wang, "Simultaneous Estimation of Kinetic Parameters and the Input Function from DCE-MRI Data: Theory and Simulation," in Proceedings of *IEEE International Symposium on Biomedical Imaging*, pp.996-999, Washington, D.C., June 2004.
  480. Z. Jane Wang, Zsolt Szabo, Zhu Han, Jozsef Varga, and K. J. Ray Liu, "A Likelihood-based Framework for Quantification of Brain Receptor PET Studies in the Pixel Domain," in Proceedings of *IEEE International Symposium on Biomedical Imaging*, pp.1381-1384, Washington, D.C., June 2004.
  481. Guan-Ming Su, Zhu Han, Andres Kwasinski, Min Wu, K. J. Ray Liu, and Nariman Farvardin, "Distortion Management of Realtime MPEG-4 FGS Video over Downlink Multi-code CDMA Networks," in Proceedings of *IEEE International Conference on Communications*, vol.5, pp.3071-3075, Paris, France, June 2004.
  482. Z. Jane Wang, Zhu Han, K. J. Ray Liu, and Yue Wang, "Blind Estimation of Kinetic Parameters and Input Function for Tumor Vascularity Imaging with DCE-MRI," in Proceedings of *NIH Symposium Digital Biology: the Emerging Paradigm*, I-30, Bethesda, MD, November 2003.
  483. Zhu Han, Andres Kwasinski, K. J. Ray Liu, and Nariman Farvardin, "Pizza Party Algorithm for Real-Time Distortion Management in Downlink Single-Cell CDMA Systems," in Proceedings of *Allerton Conference on Communication, Control, and Computing*, Allerton, IL, October 2003.
  484. Zhu Han, Z. Jane Wang, and K. J. Ray Liu, "A Resource Allocation Framework with Credit System and User Autonomy Over Heterogeneous Wireless Networks," in Proceedings of *IEEE Global Communications Conference*, vol.2, pp.977-981, San Francisco, CA, December 2003.

485. Z. Jane Wang, Zhu Han, and K. J. Ray Liu, "MIMO-OFDM Channel Estimation via Probabilistic Data Association Based TOA Estimation," in Proceedings of *IEEE Global Communications Conference*, vol.2, pp.626-630, San Francisco, CA December 2003.
486. Zhu Han and K. J. Ray Liu, "Joint Power Control and Blind Beamforming in Wireless Networks," in Proceedings of *IEEE International Conference on Communications*, vol.3, pp.2144-2148, Anchorage, AK, May 2003.
487. Zhu Han and K. J. Ray Liu, "Throughput Maximization Using Adaptive Modulation in Wireless Networks with Fairness Constraint," in Proceedings of *IEEE Wireless Communications and Networking Conference*, vol.1, pp.243-246, New Orleans, LA, March 2003.
488. Andres Kwasinski, Zhu Han, K. J. Ray Liu, and Nariman Farvardin, "Power Minimization under Real-Time Source Distortion Constraints in Wireless Networks," in Proceedings of *IEEE Wireless Communications and Networking Conference*, vol.1, pp.532-536, New Orleans, LA, March 2003.
489. Zhu Han and K. J. Ray Liu, "Power Minimization under Constant Throughput Constraint in Wireless Networks with Beamforming," in Proceedings of *IEEE Vehicular Technology Conference*, Fall, vol.1, pp.611-615, Vancouver, Canada, September 2002.
490. Zhu Han and K. J. Ray Liu, "Joint Adaptive Power and Modulation Management in Wireless Networks with Antenna Diversity," in Proceedings of *IEEE Sensor Array and Multichannel Signal Processing Workshop*, pp.278-282, Washington, D.C., August 2002.
491. Zhu Han and K. J. Ray Liu, "Adaptive Coding for Joint Power Control and Beamforming over Wireless Networks," in *Proceedings of SPIE Annual Conference*, XII, Seattle, WA, July, 2002.
492. Zhu Han and K. J. Ray Liu, "Adaptive SINR Threshold Allocation for Joint Power Control and Beamforming over Wireless Networks," in Proceedings of *IEEE Vehicular Technology Conference*, vol.3, pp.1548-1552, Atlantic City, MD, October 2001.

## Patent

1. Wipawee Siriwongpairat, Zhu Han, and K. J. Ray Liu, "Method and System for Power Controlled Effective Allocation of Sub-Bands in Ultra-Wideband Communication," U.S. patent 7,653,122.
2. Vincent Poor, Walid Saad, and Zhu Han, "A Method for Securing Backscatter Wireless Communication," U.S. patent, 2017, 9,672,394.

## HOBBY

- North Pole Marathon, April 2012, the reason why the Chinese national flag waving first time in this event.
- First Chinese to Finish Seven Marathons in Seven Continents. First Chinese in Grand Slam Marathon Club (7 Continent Marathons plus North Pole Marathon).
- Half Ironman, swim (1.9 km), bike (90 km), run (22.1 km), April 2016.
- North American Chinese Soccer Tournament, Grand National Champion, New Brunswick, New Jersey, May 1999. Member of Team Maryland Hunter.

- North American Chinese Soccer Tournament, South Champion, San Antonio, May 2018. Member of Team Tang Dynasty.
- 67 Countries Visited. Highest Point: Summit of Kilimanjaro, 5895m. Lowest Point: Dead Sea, -417m. North Most Point: North Pole, 90°0'0"N. South Most Point: Southern Ellsworth Mountains at Union Glacier, Antarctica, 79°46'.