

DR. LIN GAO

CONTACT INFORMATION

Department of EIE, Harbin Institute of Technology, Shenzhen
Room 1102, Building L, HIT Campus, Nanshan, Shenzhen, China (518055)
<http://www.hitsz.edu.cn/teacher/view/id-1309.html>

Tel: (+86) 187-1927-7272
Email: gaol@hit.edu.cn
gaolin021@hotmail.com

EDUCATION AND WORKING

- **Associate Professor** 2015.09 – Now
Electronic and Information Engineering, Harbin Institute of Technology, Shenzhen, China
– Research Topic: “Mobile Cloud/Crowd/Edge Computing and Cognitive Networking”
- **Postdoc Fellow** 2010.08 – 2015.08
Information Engineering, The Chinese University of Hong Kong, Shatin, Hong Kong
– Research Topic: “Network Optimizations and Economics”
- **Doctor of Philosophy (Ph.D.)** 2006.09 – 2010.07
Electronic Engineering, Shanghai Jiao Tong University, Shanghai, China
– Thesis: “Dynamic Spectrum Sharing in Cognitive Radio Networks: A Game-Theoretical Approach”
- **Master of Engineering (M.E.)** 2004.09 – 2007.01
Electronic Engineering, Shanghai Jiao Tong University, Shanghai, China
– Thesis: “Research on Adaptive Resource Allocation for MIMO-OFDM Systems”
- **Bachelor of Engineering (B.E.)** 1998.09 – 2002.07
Information Engineering, Nanjing University of Posts and Telecommunications, Nanning, China

RESEARCH INTEREST

- **Mobile Computing and Networking**
 - Edge Computing, Caching, and Networking
 - Mobile Crowdsensing and Crowd Computing
 - Cognitive Networking and Network Intelligence
- **Game Theory and Network Economics**
 - Network Game Modelling and Analysis
 - Incentive Mechanism Design and Optimization
 - Outsourcing, Crowdsourcing, and Sharing Economy

SELECTED RESEARCH TOPICS

- **Mobile Cloud/Crowd/Edge Computing and Networking**
 - Research Problems: *Mobile Edge Computing, Edge Caching, Data Offloading, Data Plan Design, Mobile Crowdsensing, WiFi Crowdsourcing, User-Provided Networking, Network Virtualization.*
 - Research Output: **10+ journal papers** including JSAC [6, 27] (**CCF-A**), TON [3, 8, 11, 18, 19, 29] (**CCF-A**), TMC [1, 2, 4, 5, 9, 13, 14, 22] (**CCF-A**), and **20+ conference papers** including INFOCOM [39, 60, 61, 72, 75, 79, 80] (**CCF-A**).
 - Academia Impact: **Best Paper Awards** [77, 84], **Best Paper Award Finalist** [72]
- **Cognitive Networking and Network Intelligence**
 - Research Problems: *Dynamic Spectrum Sharing, Secondary Spectrum Trading, Spectrum Aggregation, TV White Space Exploiting, Cognitive Communications and Networking, Network Intelligentization.*
 - Research Output: **10+ journal papers** including JSAC [23, 24, 28, 32, 33] (**CCF-A**), TMC [20, 31, 34] (**CCF-A**), and **10+ conference papers** including INFOCOM [76] (**CCF-A**), MobiHoc [47, 94] (**CCF-B**), SECON [88] (**CCF-B**).
 - Academia Impact: **ESI Highly Cited Papers** [20, 31], **Best Paper Award** [81]

RESEARCH AWARDS

- **Best Paper Award**, *Proc. IEEE WCNC*, 2019
- **Best Paper Award**, *Proc. IEEE WiOPT*, 2014
- **Best Paper Award**, *Proc. IEEE WiOPT*, 2013
- **Best Paper Award Finalist**, *Proc. IEEE INFOCOM*, 2016
- **Best Student Paper Award**, *Proc. IEEE WiOPT*, 2015
- **IEEE ComSoc Asia-Pacific Outstanding Young Researcher Award**, *IEEE Comm. Society*, 2016
 - Select 4 to 6 winners every year among young researchers in the IEEE ComSoc Asia-Pacific Region according to their research contributions over the last 3 years.

RESEARCH GRANTS

- **Co-I**, “Energy-Harvesting Wireless Sensor Networks,” *Basic Research Project of Shenzhen Science and Technology Program*, Shenzhen, China, 2019.01.01–2020.12.31, RMB **320,000**
- **PI**, “Dynamic Spectrum Sharing and Spectrum Big Data,” *Research Foundation for Advanced Talents*, Shenzhen, China, 2017.01.01–2019.12.31, RMB **3,000,000**
- **PI**, “Multi-Dimensional Spectrum Resource Sharing Principle and Incentive,” *National Natural Science Foundation of China (NSFC)*, 2018.01.01–2018.12.31, RMB **160,000**
- **PI**, “TV White Space Ecosystem,” *Scientific Research Innovation Fund*, Harbin Institute of Technology, Harbin, China, 2017.01.01–2019.12.31, RMB **100,000**
- **PI**, “TV White Space Network Optimizations and Economics,” *Startup Research Fund*, Harbin Institute of Technology, Shenzhen, China, 2015.09.06–2017.12.31, RMB **200,000**

TEACHING EXPERIENCES

- “**Stochastic Network Optimization**,” 32 hours ([teaching in English](#)), *Graduate Course* in the School of Electronic and Information Engineering, Harbin Institute of Technology, Shenzhen 2016 – Now
- “**Communication Circuit Design**,” 80 hours, *Undergraduate Course* in the School of Electronic and Information Engineering, Harbin Institute of Technology, Shenzhen 2018 – Now
- “**Experiments for Communication Principles**,” 48 hours, *Undergraduate Course* in the School of Electronic and Information Engineering, Harbin Institute of Technology, Shenzhen 2018 – Now
- “**Networks: Technology, Economics, and Social Interactions (IERG 3280)**,” *Guest Lecture* in the Department of Information Engineering, The Chinese University of Hong Kong 2013
- “**Network Economics (IERG 6280)**,” *Guest Lecture* in the Department of Information Engineering, The Chinese University of Hong Kong 2011

PROFESSIONAL ACTIVITIES

- **Membership**
 - Senior Member, IEEE & IEEE Communications Society
- **Editorship**
 - Editor, China Communications (SCI), 2016–Now
 - Editor, Journal of Communications and Information Networks, 2017–Now
 - Guest Editor, Journal of Mobile Information Systems (SCI), 2015
- **Chairing**
 - TPC Vice Chair of the 16th International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt 2018), Shanghai, China, May 2018
 - Publicity & Social Media Chair of the 7th EAI International Conference on Game Theory for Networks (GameNets 2017), Tennessee, USA, May 2017
 - Publicity Chair of the 1st International Workshop on Green and Sustainable Networking and Computing (GSNC 2016), San Francisco, USA, April 2016
 - Publicity Chair of the 4th IEEE Workshop on Smart Data Pricing (SDP 2015), Hong Kong, April 2015
 - Symposium Chair (Pricing and Network Optimization Symposium) in the 5th EAI International Conference on Game Theory for Networks (GameNets 2014), Beijing, China, November 2014
- **Technical Program Committee (TPC) Members**
 - IEEE International Conference on Computer Communications (INFOCOM), 2017–2019
 - IEEE International Conference on Communications (ICC), 2012–2019
 - IEEE Global Communications Conference (GLOBECOM), 2013–2019
 - International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt), 2013–2019
- **Technical Reviewers**
 - IEEE Journal on Selected Areas in Communications (JSAC)
 - IEEE Transactions on Mobile Computing (TMC)
 - IEEE/ACM Transactions on Networking (TON)
 - IEEE Transactions on Wireless Communications (TWC)
 - IEEE Transactions on Communications (TCOM)
 - IEEE Transactions on Vehicular Technology (TVT)
 - IEEE Communications Magazine
 - Conferences: ACM MobiHoc, IEEE INFOCOM, ICC, GLOBECOM, DySPAN, WCNC, WiOpt

PUBLICATIONS

Google Scholar Citations (Feb 2019)

- Total Citations: **2518** (H-index: **23**, i10-index: **40**)
- Citations of the Most Cited Paper: **286**
- url: <https://scholar.google.com/citations?user=41wcJi4AAAAJ&hl=en>

Book

- [1] **Lin Gao**, L. Duan, S. Gong, and Q. Zhang, “Matching for Cooperative Spectrum Sharing”, chapter in *Encyclopedia of Wireless Networks* (Editor-in-Chief: Sherman Shen), Springer, 2018
- [2] **Lin Gao**, X. Wang, Y. Xu, and Q. Zhang, “Contract-Based Secondary Spectrum Trading”, chapter in *Handbook of Cognitive Radio: Cognitive Radio Resource Management* (Editor-in-Chief: Wei Zhang, Section Editors: Jianwei Huang and Xu Chen), Springer, 2017
- [3] Y. Luo, **Lin Gao**, and J. Huang, *Economics of Database-Assisted Spectrum Sharing*, Springer Briefs (Series Editor: Sherman Shen), Springer, 2016 (ISBN: 9783319432304, Page Number: 100)
- [4] J. Huang and **Lin Gao**, *Wireless Network Pricing*, Synthesis Lectures on Communication Networks (Series Editor: Jean Walrand), Morgan & Claypool Publishers, July 2013 (ISBN: 9781608459759, Page Number: 176) (The book has been used as a **textbook** in some universities in USA, Singapore, Hong Kong, Taiwan, etc.)
- [5] Y. Xu, D. Li, W. Zhong, and **Lin Gao**, *Resource Management of Cognitive Radio Networks: Game Theoretic Modeling and Performance Analysis* (in Chinese), Publishing House of Electronics Industry, Beijing, China, October 2013 (ISBN: 9787121212420, Page Number: 256)

Journal (name* denotes corresponding author, and name[†] denotes student that I supervise/co-supervise.)

Summary: 25 of 37 journal papers are published in CCF-A journals, and 35 of 37 journal papers are published in JCR Q1 journals.

- [1] Z. Wang[†], **Lin Gao**, and J. Huang, “Multi-Cap Optimization for Wireless Data Plans with Time Flexibility,” *IEEE Transactions on Mobile Computing (TMC)*, 2019, Early Access (IF:4.098, JCR Q1, **CCF-A**)
- [2] Z. Wang[†], **Lin Gao**, and J. Huang, “Duopoly Competition for Mobile Data Plans with Time Flexibility,” *IEEE Transactions on Mobile Computing (TMC)*, 2019, Early Access (IF:4.098, JCR Q1, **CCF-A**)
- [3] M. Zhang[†], **Lin Gao**, J. Huang, and M. Honig, “Hybrid Pricing for Mobile Collaborative Internet,” *IEEE/ACM Transactions on Networking (TON)*, 2019, Early Access (IF:3.110, JCR Q1, **CCF-A**)
- [4] Z. Wang[†], **Lin Gao**, and J. Huang, “Exploring Time Flexibility in Wireless Data Plans,” *IEEE Transactions on Mobile Computing (TMC)*, 2018, Early Access (IF:4.098, JCR Q1, **CCF-A**)
- [5] Y. Wei[†], J. Yu[†], T. M. Lok, and **Lin Gao***, “A Novel Mobile Data Contract Design with Time Flexibility,” *IEEE Transactions on Mobile Computing (TMC)*, 2018, Early Access (IF:4.098, JCR Q1, **CCF-A**)
- [6] M. Tang[†], **Lin Gao***, and J. Huang, “Enabling Edge Cooperation in Tactile Internet via 3C Resource Sharing,” *IEEE Journal on Selected Areas in Communications (JSAC)*, vol.36, no.11, pp.2444-2454, October 2018 (IF:7.172, JCR Q1, **CCF-A**)
- [7] J. Xu, Y. Zou, S. Gong, **Lin Gao**, D. Niyato, and W. Cheng, “Robust Transmissions in Wireless Powered Multi-Relay Networks with Channel Interference Constraints,” *IEEE Transactions on Communications (TCOM)*, vol.67, no.2, pp.973-987, October 2018 (IF:4.671, JCR Q1, **CCF-B**)
- [8] M. Tang[†], H. Pang[†], S. Wang[†], **Lin Gao**, J. Huang, and L. Sun, “Multi-Dimensional Auction Mechanisms for Crowdsourced Mobile Video Streaming,” *IEEE/ACM Transactions on Networking (TON)*, vol.26, no.5, pp.2062-2075, August 2018 (IF:3.110, JCR Q1, **CCF-A**)
- [9] **Lin Gao**, M. Tang, H. Pang, J. Huang, and L. Sun, “Multi-User Cooperative Mobile Video Streaming: Performance Analysis and Online Mechanism Design,” *IEEE Transactions on Mobile Computing (TMC)*, vol.18, no.2, pp.376-389, May 2018 (IF:4.098, JCR Q1, **CCF-A**)
- [10] L. Sun, H. Pang[†], and **Lin Gao**, “Joint Sponsor Scheduling in Cellular and Edge Caching Networks for Mobile Video Delivery,” *IEEE Transactions on Multimedia (TMM)*, vol.20, no.12, pp.3414-3427, May 2018 (IF:3.977, JCR Q1, **CCF-B**)

- [11] Q. Ma[†], **Lin Gao**^{*}, Y.F. Liu, and J. Huang, "Incentivizing Wi-Fi Network Crowdsourcing: A Contract Theoretic Approach," *IEEE/ACM Transactions on Networking (TON)*, vol.26, no.3, pp.1035-1048, April 2018 (IF:3.110, JCR Q1, **CCF-A**)
- [12] F. Long[†], T. Wang, T. Ma, **Lin Gao**^{*}, Y. Jiang, and L. Chang, "Low-complexity Matrix-based Conjugate Gradient Channel Estimation for Cooperative Wireless Sensor Networks," *IEEE Transactions on Vehicular Technology (TVT)*, 2018, Early Access (IF:4.432, JCR Q1)
- [13] C. Jiang[†], **Lin Gao**, L. Duan, and J. Huang, "Data-Centric Mobile Crowdsensing," *IEEE Transactions on Mobile Computing (TMC)*, vol.17, no.6, pp.1275-1288, October 2017 (IF:4.098, JCR Q1, **CCF-A**)
- [14] C. Jiang[†], **Lin Gao**, L. Duan, and J. Huang, "Scalable Mobile Crowdsensing via Peer-to-Peer Data Sharing," *IEEE Transactions on Mobile Computing (TMC)*, vol.17, no.4, pp.898-912, August 2017 (IF:4.098, JCR Q1, **CCF-A**)
- [15] M. Tang[†], **Lin Gao**, H. Pang, J. Huang, and L. Sun, "Optimizations and Economics of Crowdsourced Mobile Streaming," *IEEE Communications Magazine*, vol.55, no.4, pp.21-27, April 2017 (IF:9.270, JCR Q1)
- [16] X. Chen, L. Pu, **Lin Gao**^{*}, W. Wu, and D. Wu, "Exploiting Massive D2D Collaboration for Energy-Efficient Mobile Edge Computing," *IEEE Wireless Communications*, vol.24, no.4, pp.64-71, August 2017 (IF:9.202, JCR Q1; Google Scholar Citations: 44)
- [17] H. Yu[†], M.H. Cheung, G. Iosifidis, **Lin Gao**, L. Tassiulas, and J. Huang, "Mobile Data Offloading for Green Wireless Networks," *IEEE Wireless Communications*, vol.24, no.4, pp.31-37, August 2017 (IF:9.202, JCR Q1)
- [18] H. Yu[†], M.H. Cheung, **Lin Gao**, and J. Huang, "Public Wi-Fi Monetization via Advertising," *IEEE/ACM Transactions on Networking (TON)*, vol.25, no.4, pp.2110-2121, March 2017 (IF:3.110, JCR Q1, **CCF-A**)
- [19] G. Iosifidis, **Lin Gao**, J. Huang, and L. Tassiulas, "Efficient and Fair Collaborative Mobile Internet Access," *IEEE/ACM Transactions on Networking (TON)*, vol.25, no.3, pp.1386-1400, January 2017 (IF:3.110, JCR Q1, **CCF-A**)
- [20] **Lin Gao**, L. Duan, and J. Huang, "Two-Sided Matching Based Cooperative Spectrum Sharing," *IEEE Transactions on Mobile Computing (TMC)*, vol.16, no.2, pp.538-551, February 2017 (IF:4.098, JCR Q1, **CCF-A**; Google Scholar Citations: 30, **ESI Highly Cited Paper**)
- [21] **Lin Gao**, B. Shou, Y. Chen, and J. Huang, "Combining Spot and Futures Markets: A Hybrid Market Approach to Dynamic Spectrum Access," *Operations Research (OR)*, vol.64, no.4, pp.794-821, July 2016 (IF:2.263, JCR Q2, **A⁺ Journal** in the area of Management Science & Operations Research)
- [22] Q. Ma[†], **Lin Gao**^{*}, Y.F. Liu, and J. Huang, "Economic Analysis of Crowdsourced Wireless Community Networks," *IEEE Transactions on Mobile Computing (TMC)*, vol.16, no.7, pp.1856-1869, September 2016 (IF:4.098, JCR Q1, **CCF-A**)
- [23] Y. Luo[†], **Lin Gao**, and J. Huang, "An Integrated Spectrum and Information Market for Green Cognitive Communications," *IEEE Journal on Selected Areas in Communications (JSAC)*, vol.34, no.12, pp.3326-3338, December 2016 (IF:7.172, JCR Q1, **CCF-A**)
- [24] Y. Luo[†], **Lin Gao**, and J. Huang, "MINE GOLD to Deliver Green Cognitive Communications," *IEEE Journal on Selected Areas in Communications (JSAC)*, vol.33, no.12, pp.2749-2760, December 2015 (IF:7.172, JCR Q1, **CCF-A**)
- [25] Y. Luo[†], **Lin Gao**, and J. Huang, "Spectrum Reservation Contract Design in TV White Space Networks," *IEEE Transactions on Cognitive Communications and Networks (TCCN) (Invited Paper)*, vol.1, no.2, pp.147-160, November 2015
- [26] Y. Luo[†], **Lin Gao**, and J. Huang, "Business Modeling for TV White Space Networks," *IEEE Communications Magazine*, vol.53, no.5, pp.82-88, May 2015 (IF:9.270, JCR Q1)
- [27] **Lin Gao**, G. Iosifidis, J. Huang, L. Tassiulas, and D. Li, "Bargaining-based Mobile Data Offloading," *IEEE Journal on Selected Areas in Communications (JSAC)*, vol.32, no.6, pp.1114-1125, June 2014 (IF:7.172, JCR Q1, **CCF-A**; Google Scholar Citations: 100)
- [28] Y. Luo[†], **Lin Gao**, and J. Huang, "Price and Inventory Competition in Oligopoly TV White Space Markets," *IEEE Journal on Selected Areas in Communications (JSAC)*, vol.33, no.5, pp.1002-1013, Oct 2014 (IF:7.172, JCR Q1, **CCF-A**; Google Scholar Citations: 31)
- [29] G. Iosifidis, **Lin Gao**, J. Huang, and L. Tassiulas, "A Double Auction Mechanism for Mobile Data Offloading Markets," *IEEE/ACM Transactions on Networking (TON)*, vol.23, no.5, pp.1634-1647, Sept 2014 (IF:3.110, JCR Q1, **CCF-A**; Google Scholar Citations: 113)

- [30] G. Iosifidis, **Lin Gao**, J. Huang, and L. Tassiulas, “Incentive Mechanisms for User-Provided Networks,” *IEEE Communications Magazine*, vol.52, no.9, pp.20-27, September 2014 (IF:9.270, JCR Q1; Google Scholar Citations: **44**)
- [31] L. Duan, **Lin Gao**, and J. Huang, “Cooperative Spectrum Sharing: A Contract-Based Approach,” *IEEE Transactions on Mobile Computing (TMC)*, vol.13, no.1, pp.174-187, January 2014 (IF:4.098, JCR Q1, **CCF-A**; Google Scholar Citations: **158**, **ESI Highly Cited Paper**)
- [32] **Lin Gao**, J. Huang, Y. Chen, and B. Shou, “An Integrated Contract and Auction Design for Secondary Spectrum Trading,” *IEEE Journal on Selected Areas in Communications (JSAC)*, vol.31, no.3, pp.581-592, March 2013 (IF:7.172, JCR Q1, **CCF-A**; Google Scholar Citations: **70**)
- [33] **Lin Gao**, X. Wang, Y. Xu, and Q. Zhang, “Spectrum Trading in Cognitive Radio Networks: A Contract-Theoretic Modeling Approach,” *IEEE Journal on Selected Areas in Communications (JSAC)*, vol.29, no.4, pp.843-855, April 2011 (IF:7.172, JCR Q1, **CCF-A**; Google Scholar Citations: **286**)
- [34] **Lin Gao**, Y. Xu, and X. Wang, “MAP: Multi-Auctioneer Progressive Auction for Dynamic Spectrum Access,” *IEEE Transactions on Mobile Computing (TMC)*, vol.10, no.8, pp.1144-1161, November 2011 (IF:4.098, JCR Q1, **CCF-A**; Google Scholar Citations: **209**)
- [35] **Lin Gao**, X. Wang, and Y. Xu, “Multiradio Channel Allocation in Multihop Wireless Networks,” *IEEE Transactions on Mobile Computing (TMC)*, vol.8, no.11, pp.1454-1468, May 2009 (IF:4.098, JCR Q1, **CCF-A**; Google Scholar Citations: **39**)
- [36] L. Qian, F. Ye, **Lin Gao**, X. Gan, T. Chu, X. Tian, X. Wang, and M. Guizani, “Spectrum Trading in Cognitive Radio Networks: An Agent-Based Model under Demand Uncertainty,” *IEEE Transactions on Communications (TCOM)*, vol.59, no.11, pp.3192-3203, October 2011 (IF:4.671, JCR Q1, **CCF-B**; Google Scholar Citations: **43**)
- [37] H. Yu, **Lin Gao**, Z. Li, X. Wang, and E. Hossain, “Pricing for Uplink Power Control in Cognitive Radio Networks,” *IEEE Transactions on Vehicular Technology (TVT)*, vol.59, no.4, pp.1769-1778, Jan 2010 (IF:4.432, JCR Q1; Google Scholar Citations: **117**)

Conference (name[†] denotes student that I supervise/co-supervise.)

Summary: **35** of **58** conference papers are published in **CCF-A/B/C** conference proceedings.

- [38] Z. Wang[†], **Lin Gao**, J. Huang, and B. Shou, “Economic Viability of Data Trading with Rollover,” *IEEE International Conference on Computer Communications (INFOCOM)*, Paris, France, May 2019 (**CCF-A**, Acceptance Rate: **20%**)
- [39] C. Jiang[†], **Lin Gao**^{*}, J. Luo, and S. Gong, “Crowdsourcing for Mobile Edge Caching: A Game-Theoretic Analysis,” *IEEE International Conference on Communications (ICC)*, Shanghai, China, May 2019 (**CCF-C**)
- [40] X. Luo[†], J. Xu, Y. Zou, S. Gong, **Lin Gao**^{*}, and D. Niyato, “Collaborative Relay Beamforming with Direct Links in Wireless Powered Communications,” *IEEE Wireless Communications and Networking Conference (WCNC)*, Marrakech, Morocco, April 2019 (**CCF-C**)
- [41] W. Chen[†], W. Liu, **Lin Gao**^{*}, S. Gong, C. Li, and K. Zhu, “Backscatter-Aided Relay Communications in Wireless Powered Hybrid Radio Networks,” *IEEE Wireless Communications and Networking Conference (WCNC)*, Marrakech, Morocco, April 2019 (**CCF-C**) (**Best Paper Award**)
- [42] H. Lin[†], X. Zhu, Y. Jiang, Y. Liu, Y. Zhuang, and **Lin Gao**, “PA-Efficiency-Aware Hybrid PAPR Reduction for F-OFDM Systems with ICA Based Blind Equalization,” *IEEE Wireless Communications and Networking Conference (WCNC)*, Marrakech, Morocco, April 2019 (**CCF-C**)
- [43] H. Duan[†], Y. Jiang, X. Zhu, Z. Wei, Y. Liu, and **Lin Gao**, “Treating Self-Interference as Source: An ICA Assisted Full-Duplex Relay System,” *IEEE Wireless Communications and Networking Conference (WCNC)*, Marrakech, Morocco, April 2019 (**CCF-C**)
- [44] W. Chen[†], C. Li, S. Gong, **Lin Gao**, and J. Xu, “Joint Transmission Scheduling and Power Allocation in Wirelessly Powered Hybrid Radio Networks,” *International Conference on Computing, Networking and Communications (ICNC)*, Honolulu, Hawaii, USA, February 2019
- [45] Y. Zhong[†], **Lin Gao**^{*}, T. Wang, S. Gong, B. Zou, and D. Yu, “Achieving Stable and Optimal Passenger-Driver Matching in Ride-Sharing System,” *IEEE International Conference on Mobile Ad-hoc and Sensor Systems (MASS)*, Chengdu, China, October 2018 (**CCF-C**)

- [46] F. Long[†], T. Wang, T. Ma, **Lin Gao**, Y. Jiang, and L. Chang, “Set-Membership Conjugate Gradient Channel Estimation for Wireless Sensor Networks,” *International Conference on Wireless Communications and Signal Processing (WCSP)*, Hangzhou, China, October 2018
- [47] Z. Wang[†], **Lin Gao**, and J. Huang, “Multi-Dimensional Contract Design for Mobile Data Plan with Time Flexibility,” *ACM International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc)*, Los Angeles, USA, June 2018 (CCF-B, Acceptance Rate: **16.9%**)
- [48] H. Pang[†], **Lin Gao**, Q. Ding, J. Liu, and L. Sun,, “Competitive Analysis of Data Sponsoring and Edge Caching for Mobile Video Streaming,” *ACM SIGMM Workshop on Network and Operating Systems Support for Digital Audio and Video (NOSSDAV)* (co-located with ACM MMSys), Amsterdam, Netherlands, June 2018 (CCF-B)
- [49] X. Zeng[†], **Lin Gao***, C. Jiang, T. Wang, J. Liu, and B. Zou, “A Hybrid Pricing Mechanism for Data Sharing in P2P-based Mobile Crowdsensing,” *International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt)*, Shanghai, China, May 2018
- [50] J. Liu[†], **Lin Gao***, T. Wang, X. Zeng, W. Lu, Y. Zhong, “Crowdsourcing: A Novel Approach to Organizing WiFi Community Networks,” *International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt)*, Shanghai, China, May 2018
- [51] Z. Wang[†], **Lin Gao**, and J. Huang, “Duopoly Competition for Mobile Data Plans with Time Flexibility,” *International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt)*, Shanghai, China, May 2018
- [52] S. Gong, J. Xu, **Lin Gao**, X. Huang, and W. Liu, “Passive Relaying Scheme via Backscatter Communications in Cooperative Wireless Networks,” *IEEE Wireless Communications and Networking Conference (WCNC)*, Barcelona, Spain, April 2018 (CCF-C)
- [53] **Lin Gao** and J. Huang, “Achieving an Efficient and Fair Equilibrium Through Taxation,” *Asia-Pacific Conference on Communications (APCC) (Invited Paper)*, Perth, Australia, December 2017
- [54] M. Tang[†], **Lin Gao**, and J. Huang, “A General Framework for Crowdsourcing Mobile Communication, Computation, and Caching,” *IEEE Global Communications Conference (GLOBECOM)*, Singapore, December 2017 (CCF-C)
- [55] H. Pang[†], **Lin Gao**, Q. Ding, and L. Sun, “When Data Sponsoring Meets Edge Caching: A Game-Theoretic Analysis,” *IEEE Global Communications Conference (GLOBECOM)*, Singapore, December 2017 (CCF-C)
- [56] X. Mo[†], Z. Li[†], **Lin Gao***, B. Cao, T. Zhang, and T. Wang, “User-Centric Participatory Sensing: A Game Theoretic Analysis,” *IEEE Global Communications Conference (GLOBECOM)*, Singapore, December 2017 (CCF-C)
- [57] X. Zhang[†], **Lin Gao***, B. Cao, Z. Li, and M. Wang, “A Double Auction Mechanism for Mobile Crowd Sensing with Data Reuse,” *IEEE Global Communications Conference (GLOBECOM)*, Singapore, December 2017 (CCF-C)
- [58] C. Lou[†], B. Cao, **Lin Gao**, L. Sun, and Q. Zhang, “MOSTPC: Performance of A Massive Oblique Space-TimePolarization Precoding System over Ricean-K Fading Channel,” *IEEE Vehicular Technology Conference (VTC)*, Toronto, Canada, September 2017
- [59] Z. Wang[†], **Lin Gao**, and J. Huang, “A Contract-Theoretic Design of Mobile Data Plan with Time Flexibility,” *ACM Workshop on the Economics of Networks, Systems and Computation (NetEcon)* (in conjunction with ACM EC), MIT, Cambridge, MA, USA, June 2017
- [60] M. Zhang[†], **Lin Gao**, J. Huang, and M. Honig, “Cooperative and Competitive Operator Pricing for Mobile Crowdsourced Internet Access,” *IEEE International Conference on Computer Communications (INFOCOM)*, Atlanta, GA, USA, May 2017 (CCF-A, Acceptance Rate: **21%**)
- [61] M. Tang[†], S. Wang, **Lin Gao**, J. Huang, and L. Sun, “MOMD: A Multi-Object Multi-Dimensional Auction for Crowdsourced Mobile Video Streaming,” *IEEE International Conference on Computer Communications (INFOCOM)*, Atlanta, GA, USA, May 2017 (CCF-A, Acceptance Rate: **21%**)
- [62] Z. Wang[†], **Lin Gao**, and J. Huang, “Pricing Optimization of Rollover Data Plan,” *International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt)*, Paris, France, May 2017
- [63] Y. Gao[†], X. Zhang[†], X. Mo[†], and **Lin Gao***, “An Evolutionary Game Theoretic Analysis for Crowdsourced WiFi Networks,” *IEEE International Conference on Communications (ICC)*, Paris, France, May 2017 (CCF-C)
- [64] C. Jiang[†], **Lin Gao**, L. Duan, and J. Huang, “Exploiting Data Reuse in Mobile Crowdsensing,” *IEEE Global Communications Conference (GLOBECOM)*, Washington, DC, USA, December 2016 (CCF-C)

- [65] H. Pang[†], **Lin Gao**, and L. Sun, “Joint Optimization of Data Sponsoring and Edge Caching for Mobile Video Delivery,” *IEEE Global Communications Conference (GLOBECOM)*, Washington, DC, USA, December 2016 (CCF-C)
- [66] Y. Wei[†], J. Yu[†], T.M. Lok, and **Lin Gao**^{*}, “A Novel Mobile Data Plan Design from the Perspective of Data Period,” *IEEE International Conference on Communication Systems (ICCS)*, Shenzhen, China, December 2016
- [67] S. Zuo[†], **Lin Gao**, H. Xu, and T. Zhang, “Power Allocation Game for Wireless Network Localization,” *IEEE International Conference on Ubiquitous Wireless Broadband (ICUWB) (Invited Paper)*, Nanjing, China, October 2016
- [68] Q. Ma[†], **Lin Gao**, Y.F. Liu, and J. Huang, “A Contract-Based Incentive Mechanism for Crowdsourced Wireless Community Networks,” *International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt)*, Arizona, USA, May 2016
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