Dr. Li (Liliane) Wang

IEEE Senior Member

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Current Position

- Professor and Head
  High Performance Computing and Networking Lab
  School of Electronic Engineering
  Beijing University of Post and Telecommunications (BUPT)
- Associate Dean
  School of software Engineering
  Beijing University of Post and Telecommunications (BUPT)

Education

09/2006-07/2009	School of Electronic Engineering, Beijing University of Posts and Telecommunications Beijing, China	**Ph.D.**
09/2003-07/2006	Institute of Electronic Technology, Information Engineering University of PLA Zhengzhou, China	**M.S.**
09/1998-07/2002	Institute of Electronic Technology, Information Engineering University of PLA Zhengzhou, China	**B.S.**

Work Experience

01/2018-Present	School of Software Engineering Beijing University of Posts & Telecommunications	**Associate Dean**
12/2016-01/2018	School of Electronic Engineering Beijing University of Posts & Telecommunications	**Professor**
12/2011-12/2016	School of Electronic Engineering Beijing University of Posts & Telecommunications	**Associate Professor**

08/2015-11/2015	Department of Signals and Systems Chalmers University of Technology	**Visiting Researcher**
12/2013-01/2015	School of Electrical and Computer Engineering Georgia Institute of Technology	**Visiting Researcher**
07/2009-12/2011	School of Electronic Engineering Beijing University of Posts & Telecommunications	**Assistant Professor**
07/2002-08/2003	China Netcom Group Corporation Puyang Branch	**Assistant Engineer**

Research Interests

- Machine Learning based Wireless Communications
- Cooperative Communications
- D2D Communications
- Vehicular and UAV Communications
- Distributed Storage Systems
- Social Networking
- Physical Layer Security

Awards

- **Beijing Nova Program** "New-star Plan of Science and Technology", 2018.
- **Certificate Appreciation** from IEEE Access for Notable Services and Fine Contributions, Jan. 2018.
- **Best Paper Award**, *International Conference on Communications in China (ICCC)*, Qingdao China, 2017.
- **Best Paper Award runner up**, *International Conference on Wireless Algorithms, Systems, and Applications (WASA)*, Qufu, China, 2015.
- **Beijing Higher Education Young Elite Teacher**, China, 2013-2015.
- **Best Paper Award,** IET International Conference on Communication Technology and Application (ICCTA), Beijing, China, 2011.

Monographs

1. **Li Wang** and Huan Tang, Device-to-Device Communications in Cellular Networks, ISBN: 978-3-319-30679-7, SpringerBriefs in Electrical and Computer Engineering, 2016.（**Chapter downloads**: **981** times in **2016,** 1379 times in **2017**)
2. **Li Wang**, Physical Layer Security in Wireless Cooperative Networks, ISBN 978-3-319-61863-0, Springer, Wireless Networks, 2017. （Chapter downloads: 354 times in 2017)
3. Networking Fundamentals Wide, Local and Personal Area Communications, Chinese Edition, 10/2011, 4th Author.

Recent Journal Publications

1. Y. Ai, **L. Wang***, Z. Han, and L. Hanzo, "Social networking and caching aided collaborative computing for the internet of things", *IEEE Comm. Magazine*, 2018, to appear.
2. K.C. Tsai, **L. Wang**, and Z. Han, "Caching for mobile social networks with deep learning:

Twitter analysis for 2016 U.S. election", *Transactions on Network Science and Engineering*, 2018, to appear.

3. S. Yu, R. Langar, X. Fu, **L. Wang**, and Z. Han, "Computation Offloading with Data Caching Enhancement for Mobile Edge Computing", *IEEE Transactions on Vehicular Technology,* 2018, to appear.

4. **L. Wang***, M. Guan, Y. Ai, Y. Chen, B. Jiao and L. Hanzo, "Beamforming aided NOMA expedites collaborative multiuser computational off-loading", *IEEE Transactions on Vehicular Technology*, 2018, to appear.

5. **Li Wang***, Huqing Wu, Zhu Han, Ping Zhang, and H. V. 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. **DOI**:10.1109/ TWC.**2017.2785250**.

6. Y. Chen, **L. Wang***, Y. Ai, B. Jiao, and L. Hanzo, "Performance analysis of NOMA-SM in vehicle-to-vehicle massive MIMO channels," *IEEE Journal on Selected Areas in Communications*, vol. 35, no. 12, pp. 2653-2666, Dec. 2017.

7. Giuseppe Araniti, Antonino Orsino, Leonardo Militano, **Li Wang**, and Antonio Iera, "Context-aware information diffusion for alerting messages in 5G mobile social networks," *IEEE Internet of Things Journal*, vol. 4, no.2, pp. 427-436, April 2017.

8. **Li Wang***, Huaqing Wu, and Gordon Stuber, "Cooperative jamming aided secrecy enhancement in P2P communications with social interaction constraints," *IEEE Transactions on Vehicular Technology*, vol. 66, no.2, pp. 1144-1158, February 2017.

9. **Li Wang***, Huan Tang, Huaqing Wu, and Gordon Stuber, "Resource allocation for d2d communications underlay in Rayleigh fading channels," *IEEE Transactions on Vehicular Technology,* vol. 66, no.2, pp.1159-1170, February 2017. (**Ranking: top 9** in Feb. 2017)

10. **Li Wang*** and Huaqing Wu, "Jamming partner selection for maximising the worst d2d secrecy rate based on social trust," *Transactions on Emerging Telecommunications Technologies*, vol. 28, no. 2, pp. 1-11, February 2017.

11. **Li Wang***, Huaqing Wu, Yinan Ding, Wei Chen, and H. Vincent Poor, "Hypergraph based wireless distributed storage optimization for cellular d2d underlays," *IEEE Journal on Selected Areas in Communications*, vol. 34, no. 10, pp. 2650-2666, October 2016.

12. 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 Communications*, vol.23, no.4, pp.74-81, August 2016.

13. Yingyang Chen, **Li Wang***, Zijun Zhao, Meng Ma, and Bingli Jiao, "Secure multiuser MIMO downlink transmission via precoding-aided spatial modulation," *IEEE Communication Letters*, vol. 20, no. 6, pp. 1116-1119, June 2016.

14. **Li Wang***, Ruoguang Li, Chunyan Cao, and Gordon Stuber, "SNR analysis of time reversal signaling on target and unintended receivers in distributed transmission," *IEEE Transactions on Communications*, vol. 64, no. 5, pp. 2176-2191, May 2016.

15. **Li Wang***, Huaqing Wu, and Zhu Han, "Wireless distributed storage in socially enabled d2d communications," *IEEE Access*, vol. 4, pp. 1971-1984, May 2016.

16. **Li Wang*** and Gordon Stuber, "Pairing for resource sharing in cellular device-to-device underlays," *IEEE Network*, vol. 30, no. 2, pp. 122-128, March 2016.

17. **Li Wang***, Huaqing Wu, Wei Wang, and Kwang-Cheng Chen, "Socially enabled wireless

networks: resource allocation via bipartite graph matching," *IEEE Communication Magazine*, vol. 53, no. 10, pp. 128-135, October 2015.

18. **Li Wang***, Huan Tang, and Michal Cierny, "Device-to-device link admission policy based on social interaction information," *IEEE Transactions on Vehicular Technology*, vol.64, no.9, pp. 4180-4186, September 2015.

19. **Li Wang***, Shafi Bashar, Yaman Wei, and Ruoguang Li, "Secrecy enhancement analysis against unknown eavesdropping in spatial modulation," *IEEE Communication Letter*, vol.19, no.8, pp. 1351-1354, August 2015.

20. **Li Wang***, Fei Tian, Tommy Svensson, Daquan Feng, Mei Song, and Shaoqian Li, "Exploiting full duplex for device-to-device communications in heterogeneous networks," *IEEE Communication Magazine*, vol.53, no.5, pp.146-152, May 2015. (**Ranking: top 12** in May. 2015)

21. **Li Wang***, Lu Liu, Xianghui Cao, Xiaohua Tian, and Yu Cheng, "Sociality-aware resource allocation for device-to-device communications in cellular networks," *IET Communication*, vol.9, no.3, pp.342-349, March 2015.

22. Li Wang*, Chunyan Cao, and Huaqing Wu, "Secure inter-cluster communications with socially interactive jamming cooperative against outcast," *Computer Communication*, vol. 63, 2015. DOI: 10.1016 /j.comcom.2015.02.012.

23. **Li Wang***, Giuseppe Araniti, Chunyan Cao, Wei Wang, and Yang Liu, "Device-to-device users clustering based on physical and social characteristics," *International Journal of Distributed Sensor Networks*, February 2015.

24. **Li Wang** and Huaqing Wu, "Fast pairing of device-to-device link underlay for spectrum sharing with cellular users", *IEEE Commun. Lett.*, vol.18, no.10, pp.1803-1806, Oct. 2014. (**Ranking: top 14** in Nov. 2014)

25. **Li Wang**, Lie-liang Yang, Xin Ma, and Mei Song, "Security-oriented cooperation scheme in wireless cooperative networks", *IET Commun.*, vol.8, no.8, pp.1265-1273, May 2014.

26. Yang Liu, Yi Man, Mei Song, Hongtao Zhang, and **Li Wang**, "A cooperative diversity transmission scheme by superposition coding relaying for a wireless system with multiple relays", *Wireless Networks*, 2014, pp.1-17.

27. **Li Wang**, Xin Ma, Yue Ma, Yinglei Teng, and Yong Zhang, "Security-oriented transmission based on cooperative relays in cognitive radio", *CIC & IEEE ComSoc China Commun.*, vol.10, no.8, pp.27 -35, Aug., 2013.

28. Yifei Wei, Yinglei Teng , **Li Wang**, Mei Song, and Xiaojun Wang, "QoS provisioning energy saving dynamic access policy for overlay cognitive radio networks with hidden markov channels", *CIC & IEEE ComSoc China Commun.*, vol.10, no.12, pp.92-101, Dec. 2013.

29. **Li Wang**, Jingwei Mo, Yue Ma, and Peng Lu, "Multi-cell cooperation based on time reversal in heterogeneous wireless networks", *The Journal of China Universities of Posts and Telecommunications*, 20(suppl.): 80-85, 2013.

30. Chenhui Du, Yue Ma, **Li Wang**, Mei Song, and Yi-Hai Xing ，"Energy-aware infrastructure placement for secure communication", *The Journal of China Univ. of Posts and Telecommun.*, 20 (suppl.): 75-80, 2013.

31. Yue Ma, **Li Wang**, Tenghui Ke, Yong Zhang, Mei Song, Xiaojun Wang, "Energy-efficient jammer selection approach for QoS provisioning in distributed wireless cooperative networks", *CIC & IEEE ComSoc China Commun.*, vol.9, no.7,pp.90-98, Oct.

2012.

32. Yinglei Teng, F. Richard Yu, Yifei Wei, **Li Wang**, Yong Zhang, "Behavior modeling for spectrum sharing in wireless cognitive networks", *Wireless Networks*, 2012, vol.18, pp. 929-947.

33. **Li Wang**, Yue Ma, Tenghui Ke, *et al.* "Distributed secure relay selection approach over wireless cooperative networks", *CIC & IEEE ComSoc China Commun.*, vol.8, no.6, pp.76-85, Dec. 2011.

34. **Li Wang**, Jingyao Wang, Yifei Wei, *et al.* "Energy-efficient scheme for multiple access networks selection using principal component analysis", *CIC & IEEE ComSoc China Commun.*, vol.8, no.3, pp.133-144, May 2011.

35. Mei Song, Yinglei Teng, Yong Zhang, and **Li Wang**, "Couple subscriber cooperative relaying networks for uplink transmission using hierarchical game approach", *CIC & IEEE ComSoc China Commun.*, vol.7, no.2, pp.17-31, Apr.2010.

36. **Li Wang**, Yong Zhang, Yi Man, et al. , "A novel universal authentication protocol based on combined public key in heterogeneous networks", *The Journal of China Universities of Posts and Telecommun.*, 17 (Supp1):1-5. Jul. 2010.

Refereed Conference Publications

1. J. Wu, **L. Wang***, et al., "An erasure code based wireless distributed storage system implementation", in *Proc.* IEEE/CIC ICCC 2018, Beijing, China, August 16-18, 2018.

2. Y. Ding, **L. Wang***, H. Wu, S. Shen, and H.V, Poor, "Tradeoff of content sharing efficiency and secure transmission in coded caching systems", in *Proc.* IEEE ICC 2018, Kansas City, MO, USA, May 20-24, 2018.

3. W. Li, **L. Wang***, Y. Gu, R. Li, M. Song, and Z. Han, "Stable multiple activity matching based content sharing for mobile crowd sensing", in *Proc.* IEEE ICC 2018, Kansas City, MO, USA, May 20-24, 2018.

4. Q. Wei, **L. Wang***, Z. Feng, and Z. Ding, "Cooperative coexistence and resource allocation for V2X communications in LTE-Unlicensed", in *Proc.* IEEE CCNC 2018, Las Vegas, NV, USA, Jan.12-15, 2018.

5. **Li Wang***, H. Wu, Z. Zhu, P. Zhang, and H. Vincent. Poor, "Dynamic Resource Matching for Socially Cooperative Caching in IoT Networking," in *Proc. IEEE GLOBECOM,* Singapore, Dec. 4-8, 2017.

6. Y. Ding, **Li Wang***, Z. Yang, and Z. Han, "Moral Hazard Based Incentive Mechanism for Cooperative Caching in Multi-Hop Communications," in *Proc. IEEE GLOBECOM Workshops,* Singapore, Dec. 4-8, 2017.

7. Y. Chen, **Li Wang***, Y. Ai, B. Jiao, and L. Hanzo, "NOMA-SM for Cooperative Enhancing Vehicle-to-Vehicle Transmissions," in *Proc. IEEE GLOBECOM Workshops*, Singapore, Dec. 4-8, 2017.

8. C. Guo, Y. Zhang, **Li Wang***, Z. Han, and P. Zhang, "Efficient Resource Allocation in Wireless Network Virtualization: A Joint Design of Adverse Selection and Moral Hazard," in *Proc. IEEE/CIC International Conference on Communications in China (ICCC),* Qingdao, China, Oct. 22-24, 2017. （**Best paper award**）

9. Y. Ai, **Li Wang***, B. Jiao, and K. C. Chen, "Exploiting NOMA into Socially Enabled Computation Offloading," in *Proc. IEEE International Conference on Wireless Communications & Signal Processing (WCSP),* Nanjing, China, Oct. 11-13, 2017.

10. R. Ma, **Li Wang***, Y. Ding, Z. Han, and B. Jiao, "Adverse Selection Based Incentive

Mechanism for Cooperative Caching in Distributed Storage System," in *Proc. IEEE International Conference on Wireless Communications & Signal Processing (WCSP),* Nanjing, China, Oct. 11-13, 2017.

11. M. Guan, B. Bai, **Li Wang***, S. Jin, and Z. Han, "Joint Optimization for Computation Offloading and Resource Allocation in Internet of Things," in *Proc. IEEE Vehicular Technology Conference-fall (VTC-fall)*, Toronto, Canada, Sept. 24-27, 2017.**(Invited Paper)**

12. Y. Gong, **Li Wang***, R. Li, M. Song, Z. Han, and P. Zhang, "Power Allocation for Secrecy Efficiency in Full-Duplex Relay Assisted Cooperative Networks," in *Proc. IEEE Vehicular Technology Conference-spring (VTC-spring)*, Sydney, Australia, Jun. 4-7, 2017. **(Invited Paper)**

13. Q. Wei, W. Sun, B. Bai, **Li Wang***, E. G. Strom, and M. Song, "Resource Allocation for V2X Communications: A Local Search Based 3D Matching Approach," in *Proc. IEEE International Conference on Communications (ICC)*, Paris, France, May 21-26, 2017.

14. Y. Gu, **Li Wang**, M. Pan, and Z. Han, "Exploiting the Stable Fixture Matching Game for Mobile Crowd Sensing: A Local Event Sharing Framework," in *Proc. IEEE International Conference on Communications (ICC)*, Paris, France, May 21-26, 2017

15. Y. Chen, **Li Wang***, and B. Jiao, "Cooperative multicast non-orthogonal multiple access in cognitive radio," in Proc. IEEE International Conference on Communications (ICC), Paris, France, May 21-26, 2017.

16. **Li Wang*,** Huaqing Wu, Yinan Ding, Wei Chen, H. Vincent Poor, "Hypergraph based three-dimensional matching in wireless distributed storage over D2D Links," in *Proc. 2016 IEEE International Conference on Digital Signal Processing (DSP)*, Beijing, China, October, 2016.

17. Meng Li, Yanru Zhang, **Li Wang***, Mei Song and Zhu Han, "Incentive design for collaborative jamming using contract theory in physical layer security," in *Proc. 2016 IEEE/CIC International Conference on Communications in China (ICCC)*, Chengdu, China, October 2016.

18. Ruoguang Li, **Li Wang***, Wei Chen, Mei Song, and Zhu Han, "Bit error rate analysis in hybrid full duplex/half duplex relay cooperative networks," in *Proc. International Conference on. Wireless Communications and Signal Processing (WCSP),* Yangzhou, China, October 2016.

19. Yinan Ding, **Li Wang***, Huaqing Wu, Shuangshuang Ma, and Antti Ylä-Jääski, "Performance analysis for wireless distributed storage via d2d links," in *Proc. IEEE VTC fall,* Montreal, Canada, September 2016.

20. Huaqing Wu, **Li Wang***, Tommy Svensson, and Zhu Han, "Resource allocation for wireless caching in socially-enabled d2d communications," in *Proc. IEEE ICC*, Kuala Lumpur, Malaysia, May 2016.

21. **Li Wang***, Huaqing Wu, and Gordon Stuber, "Resource allocation with cooperative jamming in socially interactive secure d2d underlay," in *Proc. IEEE VTC spring*, Nanjing, China, May 2016.

22. A Orsino, G Araniti, **Li Wang**, and A Iera, "Enhanced C-RAN architecture supporting SDN and NFV functionalities for D2D communications," in *Proc. 2016 International Conference on Distributed Computer and Communication Networks*, Singapore, January 2016.

23. **Li Wang***, Huaqing Wu, Mugen Peng, Mei Song, and Gordon Stuber, "Secrecy-oriented

resource sharing for cellular device-to-device underlay," in *Proc. IEEE GLOBECOM*, San Diego, CA, December 2015.

24. Yaman Wei, **Li Wang***, and Tommy Svensson, "Analysis of secrecy rate against eavesdroppers in MIMO modulation systems," in *Proc. International Conference on. Wireless Communications and Signal Processing (WCSP),* Nanjing, China, October 2015.

25. Zilong Wu, **Li Wang***, Giuseppe Araniti, and Zhu Han, "Exploiting social interest interactions for user clustering and content dissemination in device-to-device communications," in *Proc. IEEE International Conference on Communication in China (ICCC)*, Shenzhen, China, November 2015. **(Invited Paper)**

26. Tiansheng Sun, **Li Wang***, and Tommy Svensson, "Spatial reuse based resource allocation in device-to-device communications," in *Proc. CYCLONE*, Roma, Italy, October 2015.

27. Luke Zhang, **Li Wang***, and Xiaojiang Du, "Secrecy-oriented adaptive clustering scheme in device-to-device communications," in *Proc. International Conference on Wireless Algorithms, Systems, and Applications (WASA),* Qufu, China, August 2015.

28. Zhongyuan Zhao, Mugen Peng, **Li Wang**, and Yong Li, "Antenna selection in large-scale multiple antenna systems," in *Proc. International Conference on Wireless Algorithms, Systems, and Applications (WASA),* Qufu, China, August 2015. (1st **Best paper runner-up).**

29. **Li Wang***, Huaqing Wu, Lu Liu, Mei Song, and Yu Cheng, "Secrecy-oriented partner selection based on social trust in device-to-device communications," in *Proc. IEEE ICC*, London, UK, June 2015.

30. L Militano, A Orsino, G Araniti, A Molinaro, A Iera, and **Li Wang**, "Efficient spectrum management exploiting D2D communication in 5G systems," in *Proc. 2015 IEEE International Symposium on Broadband Multimedia Systems and Broadcasting (BMSB),* Ghent, Belgium, June 2015.

31. Longfei Wu, Xiaojiang Du, **Li Wang**, Xinwen Fu, Ralph O. Mbouna, and Seong G. Kong, "Analyzing mobile phone vulnerabilities caused by camera", IEEE GLOBECOM 2014, Austin, USA, Dec.8-12, 2014.

32. Lu Liu, Xianghui Cao, Yu Cheng, and **Li Wang**, "On optimizing energy efficiency in multi-radio multi-channel wireless networks", IEEE GLOBECOM 2014, Austin, USA, Dec.8-12, 2014.

33. Chunyan Cao, **Li Wang**, Mei Song, and Yong Zhang, "Admission policy based clustering scheme for D2D underlay communications", IEEE PIMRC 2014, Washington D.C., USA, Sept.2-5, 2014, pp.1937-1942.

34. **Li Wang**, Chunyan Cao, Mei Song and Yu Cheng, "Joint cooperative relaying and jamming for maximum secrecy capacity in wireless networks", IEEE ICC 2014, Sydney, Australia, June 10-14, 2014.

35. **Li Wang**, Lie-liang Yang, Jacob Xin Ma, and Mei Song, "Adaptive cooperation schemes for energy efficient physical layer security", IEEE INFOCOM 2014 Poster, Toronto, Canada, Apr.27th-May 2nd, 2014.

36. **Li Wang**, Chunyan Cao, Ma, J.X., and Mei Song, "Cluster-based cooperative jamming in wireless multi-hop networks", IEEE PIMRC 2013, London, U.K., Sep. 8 -11, 2013, pp. 169-174.

37. **Li Wang**, Xi Zhang, Jingwei Mo, and Mei Song, "A secrecy evaluation scheme for infrastructure deployment in radio access network", IEEE ICC 2013, Budapest, Hungary,

June 9-13, 2013, pp. 2090-2094.

38. **Li Wang**, Xi Zhang, Wen Zhu, and Mei Song, "Picocell-density based energy-saving for QoS provisioning in heterogeneous networks", IEEE WCNC 2013 , Shanghai, China，April 7 -10, 2013, pp. 175-180.

39. **Li Wang**, Xi Zhang, Xin Ma, and Mei Song, "Joint optimization for energy consumption and secrecy capacity in wireless cooperative networks", IEEE WCNC 2013, April 7-10, 2013.

40. **Li Wang**, Xi Zhang, Mei Song, and Tenghui Ke, "A novel security-oriented cooperative scheme for wireless relay networks in presence of eavesdroppers," IEEE GLOBECOM 2012, Anaheim, CA, USA, Dec. 3-7, 2012, pp. 4560–4565.

41. **Li Wang**, Xi Zhang, Mei Song, and Tenghui Ke, "A novel multi-objective relay-jammer pair selection scheme in wireless cooperative networks", IEEE GLOBECOM 2012，Anaheim, CA, United states, Dec. 3-7, 2012，pp. 5663-5668.

42. **Li Wang**, Mei Song, Yue Ma, Chao Dai, Tenghui Ke, and Xiaojun Wang, "An efficient scheme for access selection over a novel green heterogeneous network architecture", IEEE VTC-Fall 2011, San Francisco, CA, U.S., Sep.5-8, 2011, pp.1-5.

43. Yifei Wei, **Li Wang**, Yinghe Wang, and Mei Song, "Energy saving spectrum selection in cognitive radio networks using stochastic control theory", IET ICCTA 2011, Beijing, China, Oct. 14-16, 2011, pp.561-565. **(Best Paper Award)**

44. **Li Wang**, Mei Song, and Junde Song, "A dynamic periodic distributing scheme for authentication data based on EAP-AKA in heterogeneous interworking networks," *IEEE 2009 VTC-Fall*, Anchorage, U.S.,Sep.20-23, 2009, pp.1-5.

45. **Li Wang**, Mei Song, Junde Song, and Yong Zhang, "A novel dynamic hierarchy AAA scheme for interworking authentication in heterogeneous networks," *2009 IEEE ICC workshops*, Dresden, Germany, June 14-18, 2009, pp.1-5.

Professional Service

- **Associate Editor**, China Communications, 2017,01 - present.
- **Editor,** IEEE Transactions on Vehicular Technology, 2017, 01 - present.
- **Associate Editor**, IEEE Access 2016, 06 - present.
- **Chair**, Special Interest Group (SIG) on "Social Behavior Driven Cognitive Radio Networks" for IEEE Technical Committee on Cognitive Networks (TCCN), 2017.09-present.
- **Symposium Chair**, IEEE ICC 2019, Cognitive Radio and Networks Symposium.
- **Publication Chair**, IEEE/CIC ICCC 2018, August 2018.
- **Chair**, 18th IEEE International Workshop on Signal Processing Advances in Wireless Communications (SPAWC 2017), Special Session of "Signal Processing and Networking for Internet-of-Things", July 2017.
- **SWAT Team member**, IEEE Transactions on Vehicular Technology, 2016, 01 - 2017.01.
- **Lead Guest Editor,** IEEE Access Special Section on Socially Enabled Networking and Computing, Nov. 2016.
- **Organizer**, International Conference on Wireless Algorithms, Systems, and Applications (WASA) 2015, Special Session on "Emerging technologies for 5G communications".
- **Panelist，** IEEE VTC-FALL 2016 Panel regarding the topic "Publishing Tools and Tips for Young Professionals".
- **TPC Member**, IEEE GLOBECOM 2014, IEEE ICNC 2015, IEEE WCNC 2015, ACM

SAC 2015, IEEE ICC 2015, IEEE ICCC 2015, WASA 2015, IEEE WCSP 2015, IEEE GLOBECOM 2015, IEEE ICC 2016, IEEE VTC Spring 2016, IEEE VTC Fall 2016, IEEE ICNC 2016, IEEE WCNC 2016, ICCCN 2016, IIEEE ICC 2017, IEEE GLOBECOM 2017, IEEE VTC 2017, IEEE ICCC 2017, WCSP 2017, IEEE ICC 2018, IEEE GLOBECOM 2018, IEEE VTC 2018.

- **Reviewer** for Journals including IEEE Journal on Selected Areas in Communications, IEEE Communications Magazine, IEEE Wireless Communications, IEEE Transactions on Wireless Communications, IEEE Transactions on Communications, IEEE Transactions on Mobile Computing, IEEE Transactions on Vehicular Technology, IEEE Communications Letters, IEEE Wireless Communications Letters, etc.

IEEE Journal Papers with High Popularity

- The paper titled "Resource allocation for D2D communications underlay in Rayleigh fading channels", ranked as **Top 9** in terms of popularity by *IEEE Transactions on Vehicular Technol.*, and was ranked in Top 30 for two months in 2017.
- The paper titled "Hypergraph based wireless distributed storage optimization for cellular D2D underlays", ranked as **Top 28** in terms of popularity by *IEEE Journal on Selected Areas on Communications*, and was ranked as Top 50 for several months in 2016.
- The paper titled "Exploiting full duplex for device-to-device communications in heterogeneous networks", ranked as **Top 12** in terms of popularity by *IEEE Communication Magazine* in 2015.

Invited IEEE Conference Papers

- Zilong Wu, **Li Wang**, Giuseppe Araniti, and Zhu Han, "Exploiting social interest interactions for user clustering and content dissemination in device-to-device communications", *IEEE International Conference on Communications in China (ICCC)*, Shenzhen, China, Nov. 2015.
- Yunchao Gong, **Li Wang**, Ruoguang Li, Mei Song, Zhu Han, and Ping Zhang, "Power allocation for secrecy efficiency in full-duplex relay assisted cooperative networks", *IEEE Vehicular Technology Conference (VTC)- Spring*, Sydney, Australia, June 2017.
- Mengling Guan, **Li Wang**, Bo Bai, Zhu Han, and Shi Jin, "Joint optimization for computation offloading and resource allocation in Internet of Things", IEEE Vehicular Technology Conference (VTC)-Fall, Toronto, Canada, Sept. 2017.

Selected Patents (Issued)

1. China Patent Office No：ZL 2014100965669, 24/04/2018.
2. China Patent Office No：ZL 201410540028.4, 06/02/2018.
3. China Patent Office No：ZL 201410455447.8, 27/10/2017.
4. China Patent Office No：ZL 201310088736.4, 10/01/2017.
5. China Patent Office No：ZL 201310320208.7, 08/06/2016.
6. China Patent Office No：ZL 201310112412.X, 15/07/2015.
7. China Patent Office No：ZL 201210285583.8, 19/08/2015.
8. China Patent Office No：ZL 201110241820.6, 30/07/2014.
9. China Patent Office No：ZL 201110241792.8, 30/07/2014.
10. China Patent Office No：ZL 201110241820.6, 20/11/2013.

11. China Patent Office No：ZL 201110358208.7, 10/04/2013.
12. China Patent Office No：ZL 201010608042.5, 24/06/2015.
13. China Patent Office No：ZL200910000677.4, 08/06/2011.
14. China Patent Office No：ZL200910178841.0, 27/04/2011.
15. China Patent Office No：ZL200910142249.5, 13/04/2011.
16. China Patent Office No：ZL200810181187.4, 27/07/2011.
17. China Patent Office No：ZL 200810103312.X, 18/05/2011.
18. China Patent Office No：ZL 200710307853.X, 29/02/2012.
19. China Patent Office No：ZL 200710307854.4, 20/10/2010.

Standard Contributions

1. China Standard YD/T 2141-2010, Wireless Network Domain System Proposals Based on Wireless Applications Protocols.
2. China Standard Report SR 101-2011, Internet of Things and Application Research Report.
3. China Standard Report SR 99-2011, Cognitive Mobile Internet and Service Application Research Report.
4. China Standard Contribution 2009B58, Next Generation Signaling Techniques for Network Service Quality Based on IETF NSIS Workgroup.
5. China Standard Contribution 2009B59, Modern Intelligent Commercial Service Research based on Mobile Internet.

Institutions with Academic Collaborations

- Princeton University, USA
- Georgia Institute of Technology, USA.
- UC Davis, USA.
- Texas A & M, USA.
- University of Southampton, UK.
- Illinois Institute of Technology, USA.
- Temple Univeristy, USA.
- University of Reggio Calabria, Italy.
- Chalmers University of Technology, Sweden.
- Aalto University, Finland.

Selected Funded Research Projects

1. Beijing Science and Technology Nova Program under Grant No. xx2018083, "Collaborative Optimization Mechanism and Theory for Cross-domain Resource of Commucations, Caching, and Computing", 01/2018—12/2020，RMB 350,000, **PI**.
2. Natural Science Foundation of China Project under Grant No. 61571056, "Research on Multi-objective Wireless Resource Management Based on Socially-Oriented User Clusters and Cross-Domain Cooperation", 01/2016—12/2019, RMB 764,444, **PI.**
3. National High Technology Research and Development Program of China under Grant No. 2014AA01A701, "Research and Development of 5G Dense Wireless Network Infrastructure and Key Technologies", 01/2014—12/2016, RMB 23.44 Millions, Co-PI.
4. Natural Science Foundation of China Project under Grant No. 61372117, "Research on Infrastructure and Key Technologies for Green Cognitive Cross-layer Communications Networks", 01/2014—

12/2017, RMB 880,000, Co-PI.

5. Natural Science Foundation of China Project under Grant No. 61201150, "Research on Energy-efficiency Oriented Cooperative Security Techniques for Wireless Access Networks", 12/2013—12/2015, RMB 260,000, **PI**.

6. Beijing Higher Education Young Talent Initiative, YETP0442, 12/2013—12/2015, RMB 150,000, **PI**.

7. Ministry of Education, Special Program for Young Researchers Project under Grant No. 2013RC0202, Secure and Green Transmission Technologies for Future Cooperative Communications", 01/2013—10/2014, RMB 160,000, **PI**.

8. China Mobile Inc., "Research and Development on Junk SMS Monitoring Strategies and Efficacy", 04/2013—12/2013, RMB 95,000, **PI**.

9. State Major Science and Technology Special Projects of China under Grant No. 2012ZX03004-001, "Access Technologies and Demonstration for Low Cost Wide Coverage Broadband Networks", 01/2012—12/2014, RMB 2.124 Millions, Co-PI.

10. China Mobile Inc., "Research on Business Support System (BSS) and Related Techniques", 11/2011—09/2013, RMB 280,000, Co-PI.

11. Ministry of Education, Special Program for Young Researchers Project under Grant No. 2011RC0306, "Research on Energy Saving and Smart Router Techniques," 01/2011—12/2012, RMB 100,000, PI.

12. China Mobile Inc., "Key Technologies of Smart Packet Networks", 05/2011—07/2013, RMB 319,440, Co-PI.

13. China Mobile Inc., "Research on Key Technologies, Standards, and Testing for SAE Functions and Mutual Interactions", 12/2010—04/2011, RMB 249,900, Co-PI.

14. China Mobile Inc., "Next Generation Network Resource Modeling, Distribution, and Management System", 12/2010—09/2011, RMB 71,900, **PI**.

15. Natural Science Foundation of China Project under Grant No. 60971083, "Research on Smart Access Selection and Dynamic QoS Guarantee for Future Cognitive Heterogeneous Networks", 01/2010—12/2012, RMB 280,000, Co-PI.

16. **Sino-Canada collaborative project**, supported by Ministry of Science and Technology of China under Grant No. 2010DFA11320, "Key Techniques of Wireless Broadband Green Communications and Related Applications in Smart Grid", 01/2010—12/2012, RMB 1.7 Millions, Co-PI.

17. **Sino-Swedish collaborative project**, supported by Ministry of Science and Technology of China under Grant No. 2008DFA12090, "Ad Hoc、Sensor、Mesh and Cooperative Networks：Research on Self-organizing Techniques for Wireless Access Networks", 07/2008—12/2010, RMB 170,000, Co-PI.

18. National High Technology Research and Development Program of China under Grant No. 2007AA01Z226, "Collaborative Management Techniques for Next Generation Heterogeneous Networks", 07/2007—12/2009, RMB 930,000, Co-PI.

19. Intel Inc. of USA under Grant No. 4507384665, "Investigation on unified AAA and efficient handoff in future heterogeneous networks", 03/2008—09/2009, RMB 70,000, **PI**.

20. State Initiative for the National 11th Five-year Plan under Grant No. 2006BAH02A03-05, "Integration of Basic IT Components in Modern Service Industry", 12/2006—05/2010, RMB 2.9 Millions, Co-PI.

Innovative Teaching Grant

- Teaching Design for International Graduate Students Specialized in Electronics Science and Technology, BUPT (2014, PI)