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研究领域：无线大数据应用、机器学习算法

### 个人简介

陈宏滨，男，1981年生，桂林电子科技大学信息与通信学院教授、博士生导师，广西杰出青年基金获得者（2013年），2009年12月被评为副教授，2013年12月晋升教授，2016年7月被聘为博士生导师，2012、2014、2016、2017和2018年6月指导的硕士生获“桂林电子科技大学优秀硕士学位论文”，2012年11月获“广西优秀硕士学位论文指导教师”称号。2017年6月获广西高等教育教学成果二等奖（排名第6）。2004年6月于南京邮电学院信息工程系获工学学士学位，2009年6月于华南理工大学电子与信息学院获工学博士学位并获“华南理工大学优秀博士学位论文”称号。2006年10月-2008年5月在香港理工大学电子及资讯工程学系任研究助理，2014年3-4月在同一个系任副研究员。2015年5月-2016年5月在新加坡国立大学电气与计算机工程系做访问学者。一直从事无线通信与网络研究，目前的研究方向是无线大数据应用、机器学习算法。在包括IEEE Transactions的国外学术期刊上发表/录用论文90篇，获国家发明专利授权15项，出版中文学术专著2部。主持在研国家自然科学基金面上项目1项。主持完成国家自然科学基金地区科学基金项目、广西自然科学基金杰出青年基金项目、青年基金项目和青年基金滚动项目、教育部重点项目和东南大学移动通信国家重点实验室开放课题各1项。主持完成广西高等教育本科教学改革工程重点项目1项，主持在研广西高等教育本科教学改革工程一般项目A类1项。

### 教育背景

### 工作经历

### 主要荣誉

### 学术活动

### 教学信息

### 主要论文

- [1]Hongbin Chen, Chi K. Tse, and Jiuchao Feng. Source extraction in bandwidth constrained wireless sensor networks. IEEE Transactions on Circuits and Systems II, vol. 55, no. 9, pp. 947-951, Sept. 2008.
- [2]Hongbin Chen, Chi K. Tse, and Jiuchao Feng. Minimizing effective energy consumption in multi-cluster sensor networks for source extraction. IEEE Transactions on Wireless Communications, vol. 8, no. 3, pp. 1480-1489, Mar. 2009.
- [3]Hongbin Chen, Chi K. Tse, and Jiuchao Feng. Impact of topology on performance and energy efficiency in wireless sensor networks for source extraction. IEEE Transactions on Parallel and Distributed Systems, vol. 20, no. 6, pp. 886-897, Jun. 2009.
- [4]Hongbin Chen. Performance-energy tradeoffs for decentralized estimation in a multi-hop sensor network. IEEE Sensors Journal, vol. 10, no. 8, pp. 1304-1310, Aug. 2010.
- [5]Hongbin Chen, Xueyan Li, and Feng Zhao. A reinforcement learning-based sleep scheduling algorithm for desired area coverage in solar-powered wireless sensor networks. IEEE Sensors Journal, vol. 16, no. 8, pp. 2763-2774, Apr. 2016.
- [6]Hongbin Chen, Gang Li, and Jun Cai. Spectral-energy efficiency tradeoff in full-duplex two-way relay networks. IEEE Systems Journal, vol. 12, no. 1, pp. 583-592, Mar. 2018.
- [7]Shiwei Huang, Hongbin Chen, and Yan Zhang. Optimal power allocation for spectrum sensing and data transmission in cognitive relay networks. IEEE Wireless Communications Letters, vol. 1, no. 1, pp. 26-29, Feb. 2012.
- [8]Shiwei Huang, Hongbin Chen, Yan Zhang, and Feng Zhao. Energy-efficient cooperative spectrum sensing with amplify-and-forward relaying. IEEE Communications Letters, vol. 16, no. 4, pp. 450-453, Apr. 2012.
- [9]Shiwei Huang, Hongbin Chen, Yan Zhang, and Hsiao-Hwa Chen. Sensing-energy tradeoff in cognitive radio networks with relays. IEEE Systems Journal, vol. 7, no. 1, pp. 68-76, Mar. 2013.
- [10]Shiwei Huang, Hongbin Chen, Jun Cai, and Feng

Zhao. Energy efficiency and spectral-efficiency tradeoff in amplify-and-forward relay networks. *IEEE Transactions on Vehicular Technology*, vol. 62, no. 9, pp. 4366-4378, Nov. 2013. [11]Feng Zhao, Lina Wei, and Hongbin Chen. Optimal time allocation for wireless information and power transfer in wireless powered communication systems. *IEEE Transactions on Vehicular Technology*, vol. 65, no. 3, pp. 1830-1835, Mar. 2016. [12]Shiwei Huang, Jun Cai, Hongbin Chen, and Hong Zhang. Transmit power optimization in amplify-and-forward relay networks with reduced overheads. *IEEE Transactions on Vehicular Technology*, vol. 65, no. 7, pp. 5033-5044, Jul. 2016. [13]Jing Chen, Hongbin Chen, Han Zhang, and Feng Zhao. Spectral-energy efficiency tradeoff in relay-aided massive MIMO cellular networks with pilot contamination. *IEEE Access*, vol. 4, pp. 5234-5242, Sept. 2016. [14]Jiaming Li, Han Zhang, Dong Li, and Hongbin Chen. On the performance of wireless-energy-transfer-enabled massive MIMO systems with superimposed pilot-aided channel estimation. *IEEE Access*, vol. 3, pp. 2014-2027, Oct. 2015. [15]Xiaohuan Li, Binjie Hu, Hongbin Chen, Guillaume Andrieux, Yide Wang, and Zongheng Wei. An RSU-coordinated synchronous multi-channel MAC scheme for vehicular ad hoc networks. *IEEE Access*, vol. 3, pp. 2794-2802, Dec. 2015. [16]Han Zhang, Shan Gao, Dong Li, Hongbin Chen, and Liang Yang. On superimposed pilot for channel estimation in multi-cell multiuser MIMO uplink: large system analysis. *IEEE Transactions on Vehicular Technology*, vol. 65, no. 3, pp. 1492-1505, Mar. 2016. [17]Yong Zeng, Hongbin Chen, and Rui Zhang. Bidirectional wireless information and power transfer with a helping relay. *IEEE Communications Letters*, vol. 20, no. 5, pp. 862-865, May 2016. [18]Bin Li, Zesong Fei, and Hongbin Chen. Robust artificial noise-aided secure beamforming in wireless-powered non-regenerative relay networks. *IEEE Access*, vol. 4, pp. 7921-7929, Nov. 2016. [19]Yuehua Ding, Nanxi Li, Yide Wang, Suili Feng, and Hongbin Chen. Widely linear sphere decoder in MIMO systems by exploiting the conjugate symmetry of linearly modulated signals. *IEEE Transactions on Signal Processing*, vol. 64, no. 24, pp. 6428-6442, Dec. 2016. [20]Manman Cui, Binjie Hu, Xiaohuan Li, Hongbin Chen, Shiwei Hu, and Yide Wang. Energy-efficient power control algorithms in massive MIMO cognitive radio networks. *IEEE Access*, vol. 5, pp. 1164-1177, Jan. 2017. [21]Zesong Fei, Bin Li, Shaoshi Yang, Chengwen Xing, Hongbin Chen, and Lajos Hanzo. A survey of multi-objective optimization in wireless sensor networks: metrics, algorithms and open problems. *IEEE Communications Surveys and Tutorials*, vol. 19, no. 1, pp. 550-586, First Quarter 2017. [22]Kun Wang, Liqiu Gu, Song Guo, Hongbin Chen, Victor C. M. Leung, and Yanfei Sun. Crowdsourcing-based content-centric network: a social perspective. *IEEE Network*, vol. 31, no. 5, pp. 12-18, Sept. 2017. [23]Shiwei Huang, Jun Cai, Hongbin Chen, and Feng Zhao. Low-complexity priority-aware interference-avoidance scheduling for multi-user coexisting wireless networks. *IEEE Transactions on Wireless Communications*, vol. 17, no. 1, pp. 112-126, Jan. 2018. [24]Xiang Zhao, Hongbin Chen, and Jinyong Sun. On physical-layer security in multiuser visible light communication systems with non-orthogonal multiple access. *IEEE Access*, vol. 6, pp. 34004-34017, Jun. 2018. [25]Gang Li, Hongbin Chen, and Jun Cai. Joint user association and power allocation for hybrid half-duplex/full-duplex relaying in cellular networks. *IEEE Systems Journal*, published online.

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## 学术著作

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## 科研项目

[1] 国家自然科学基金面上项目：基于协作和认知的网络化传感系统中大数据传输技术研究

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