

彭薇 电子信息与通信学院 副教授 博士生导师

个人简介

彭薇,女,通信工程博士,IEEE协会高级会员,楚天学者。

2007年获得香港大学博士学位。

2008-2013年任教日本东北大学。

2013至今, 华中科技大学电子信息与通信学院。

发表国际权威期刊和会议论文60+篇。

主持国家863项目子课题、国家自然科学基金(2项),日本学术振兴会自然科学基金(2项)、以及与企业合作项目多项。

主要研究方向:智能通信系统、大规模信号与数据处理、现代信号检测与估计理论、基于学习的无线通信系统调度与优化等。

招生公告

招收博士和科学硕士。只要你对科研探索感兴趣、善于积极主动思考、有较好的数学和英语基础,欢迎报考,本科阶段专业不限。

邮箱

pengwei@hust.edu.cn 欢迎联系!

著作

MIMO Systems, Theory and Applications, Chapter 8 Cellular MIMO system, Intech publisher, 2013.

Recent Trends in Multiuser MIMO Communications, Chapter 4 Multi-user Interference Suppression by Using Frequency Domain Adaptive Antenna Array, Intech Publisher, 2015.

期刊论文

- [1] Wei Peng, Min Li, Yuzhou Li, and Tao Jiang, "Ultra-dense Heterogeneous Network: A Hop Spot Case," IEEE Network Magazine, 2017. (影响因子: 7.230)
- [2] Wei Peng, Lu Zheng, Da Chen, Chunxing Ni, and Tao Jiang, "Distributed Precoding for BER Minimization with PAPR Constraint for Massive MIMO Systems," IEEE Access, 2017. (影响因子: 3.244)
- [3] Du Xiong, Wei Peng, Da Chen, and Tao Jiang, "Adaptive Joint Pre-coding and Pre-equalization with Reduced Complexity in Massive MIMO Systems," Wireless Communications and Mobile Computing, 2017. (影响因子: 1.899)
- [4] Wei Peng, Qingfeng Zhou, An Huang, and Shaodan Ma, "From Frequency Domain to Time Domain: Performance Analysis on Cyclic Prefixed Multi-user Single-Carrier Transmission," Science China, 2016. (影响因子: 1.719)
- [5] Wei Peng, Fumiyuki Adachi, Xiaodong Wang, and Tao Jiang, "Spectrum Efficiency Analysis and Adaptive Transceiver Design for Single-Carrier Multiuser Transmission," IEEE Transactions on Vehicular Technology, vol. 64, no. 8, pp. 3566 3577, August 2015. (影响因子: 4.066)

- [6] Guan Gui, Wei Peng and Fumiyuki Adachi, "Sub-Nyquist Rate ADC Sampling Based Compressive Channel Estimation for Broadband Wireless Communication Systems," vol. 15, no. 4, pp. 639-648, Wireless Communications and Mobile Computing, vol. 15, no. 4, pp. 639-648, March 2015. (影响因子: 1.899)
- [7] Guan Gui, Wei Peng, Li Xu, Beiyi Liu, and Fumiyuki Adachi, "Variable-step-size Based Sparse Adaptive Filtering Algorithm for Channel Estimation in Broadband Wireless Communication Systems," EURASIP Journal on Wireless Communications and Networking, vol. 2014, no.195, pp. 1-7, November 2014. (影响因子: 1.529)
- [8] Wei Peng, and F. Adachi, "Capacity of Distributed Antenna Network System by using Single Carrier Frequency Domain Adaptive Antenna Array," Wireless Communications and Mobile Computing, vol. 14, no. 13, pp. 1244-1251, September 2014. (影响因子: 1.899)
- [9] Guan Gui, Wei Peng and Fumiyuki Adachi, "High-Resolution Compressive Channel Estimation for Broadband Wireless Communication Systems," International Journal of Communication Systems, vol. 27, no. 10, pp. 2396-2407, October 2014. (影响因子: 1.066)
- [10] Wei Peng and Fumiyuki Adachi, "Single-carrier Frequency Domain Adaptive Antenna Array for Uplink Multi-user MIMO Transmission in a Cellular System," Physical Communication, vol. 8, pp. 22-30, September 2013. (影响因子: 1.583)
- [11] Abolfazl Mehbodniya, Wei Peng, Fumiyuki Adachi, and Sonia Aïssa, "A Frequency Domain Multiple-Antenna and Channel Estimation Approach for Facilitation of UWB Technologies Coexistence in Heterogeneous WPANs," Physical Communication, vol. 8, pp. 38-46, September 2013. (影响因子: 1.583)
- [12] Fumiyuki Adachi, Wei Peng, T. Obara, and T. Yamamoto, "Distributed Antenna Network for Gigabit Wireless Access," International Journal of Electronics and Communications, vol. 66, no. 8, pp. 605 612, Aug. 2012. (影响因子: 1.147)
- [13] Guan Gui and Wei Peng, "Improved Sparse Channel Estimation for Cooperative Communication Systems," International Journal of Antennas and Propagation, vol. 2012, pp. 1-7, August 2012. (影响因子: 1.147)
- [14] H. A. S. Maldia, Wei Peng, and Fumiyuki Adachi, "Impact of Antenna Placement on Frequency Domain Adaptive Antenna Array in Hybrid FRF Cellular System," International Journal of Antennas and Propagation, vol. 2012, pp. 1-9, September 2012. (影响因子: 1.164)
- [15] Wei Peng, and F. Adachi, "Single-carrier Frequency Domain Adaptive Antenna Array for uplink Transmission," IEICE Transactions on Communications, vol. 94, no. 7, pp. 2003-2012, Jul. 2011. (影响 因子: 0.827)
- [16] Wei Peng, and F. Adachi, "Hybrid Frequency Reuse Scheme for Cellular MIMO Systems," IEICE Transactions on Communications, vol. 92, no. 5, pp. 1641-1648, May 2010. (影响因子: 0.827)
- [17] Wei Peng, Shaodan Ma, T. S. Ng, and Jiangzhou Wang, "A Novel Analytical Method for Maximum Likelihood Detection in MIMO Multiplexing Systems," IEEE Transactions on Communications, vol.57, no. 8, pp. 2264-2268, August 2009. (影响因子: 4.058)

主要荣誉

- 楚天学者, 2013。
- 入选 Marguis, Who is who in the world。
- Xiao Wei, Wei Peng, and Tao Jiang, Correlation Based Direction of Arrival Estimation for the Large Scale Multi-user MIMO System, CHINACOM 2 国际学术会议最佳论文奖,2015。
- Wei Peng, and Fumiyuki Adachi, Power Planning for Power Limited Two-Relay Network, FWOCNT国际学术会议最佳论文奖, 2011。
- Wei Peng, and Fumiyuki Adachi, Study on the Capacity of Distributed Antenna Network System by using Single-Carrier Frequency Domain Adaptive Antenna Array, CHINACOM国际学术会议最佳论文奖, 2009。

教学课程

本科生课程:《通信原理》、《信息论预编码》、《通信电子线路》、《计算机网络》

研究生课程:《现代数字通信》、《无线通信前沿讲座》