# Jinchen Wang

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### EDUCATION University of Electronic Science and Technology of China, Chengdu, China.

B.Eng. in Electronic Information Engineering

2019

University of Glasgow, Glasgow, U.K.

B.Eng. (first-class honors) in Electronics and Electrical Engineering

2019

#### EXPERIENCE Research Experience

Electrical Engineering and Computer Science, Massachusetts Institute of Technology, Cambridge, U.S.

Visiting Student

Aug. 2018 - Oct. 2018

Research Assistant

Sep. 2019 - Present

School of Electronic Science and Engineering, University of Electronic Science and Technology of China, Chengdu, China.

Visiting Student

Mar. 2015 - Aug. 2015

Research Assistant

Sep. 2015 - Jul. 2019

School of Engineering, University of Glasgow, Glasgow, U.K.

Visiting Student

Jan. 2018

Institute of Physics, Chinese Academy of Sciences, Beijing, China.

Visiting Student

Jul. 2016 - Nov. 2016

Teaching Experience

Yingcai Honors School, University of Electronic Science and Technology of China, Chengdu, China.

Teaching Assistant

Spring 2018

• E0004360 Foundations of Analog and Digital Electronic Circuits

School of Electronic Science and Engineering, University of Electronic Science and Technology of China, Chengdu, China.

Teaching Assistant

Spring 2018

• R0212450 Foundations of Analog and Digital Electronic Circuits

Other Experience

**IEEE ISCAS** 

Reviewer

IEEE IECON

Reviewer

**IEEE Microwave and Wireless Components Letters** 

Reviewer

Journal of Electromagnetic Waves and Applications

Reviewer

IEEE MTT-S Undergraduate/Pre-graduate Scholarship

Recipient

# **PUBLICATIONS Journal Articles**

- X. Yi, **J. Wang**, M. Colangelo, C. Wang, K. E. Kolodziej, R. Han, "Realization of In-Band Full-Duplex Operation at 300 and 4.2 K Using Bilateral Single-Sideband Frequency Conversion," *IEEE Journal of Solid-State Circuits (JSSC)*, vol. 56, no. 5, pp. 1387-1397, Mar. 2021.
- C. Li, F. You, T. Yao, **J. Wang**, W. Shi, J. Peng, S. He, "Simulated Annealing Particle Swarm Optimization for High-Efficiency Power Amplifier Design," *IEEE Transactions on Microwave Theory and Techniques (TMTT)*, vol. 69, no. 5, pp. 2494-2505, Mar. 2021.
- X. Yi, C. Wang, X. Chen, **J. Wang**, J. Grajal, R. Han, "A 220-to-320-GHz FMCW radar in 65-nm CMOS using a frequency-comb architecture," *IEEE Journal of Solid-State Circuits (JSSC)*, vol. 56, no. 2, pp. 327-339, Sep. 2020.

- C. Li, F. You, **J. Wang**, J. Huang, S. He, "Third-order complex delta-sigma modulator with arbitrary poles and zeros placement," *Electronics Letters (EL)*, vol. 56, no. 2, pp. 71-73, Jan. 2020.
- J. Peng, S. He, W. Shi, T. Yao, J. Wu, **J. Wang**, "Adaptive signal separation for dual-input Doherty power amplifier," *IEEE Transactions on Microwave Theory and Techniques (TMTT)*, vol. 68, no. 1, pp. 121-131, Nov. 2019.
- C. Li, F. You, J. Peng, **J. Wang**, M. F. Haider, S. He, **J. Wang**, "Co-design of matching sub-networks to realize broadband symmetrical Doherty with configurable back-off region," *IEEE Transactions on Circuits and Systems II: Express Briefs (TCAS-II)*, vol. 67, no. 10, pp. 1730-1734, Oct. 2019.
- W Shi, S He, J Peng, **J. Wang**, M. F. Haider, S. He, **J. Wang**, "Digital dual-input Doherty configuration for ultrawideband application," *IEEE Transactions on Industrial Electronics (TIE)*, vol. 67, no. 9, pp. 7509-7518, Oct. 2019.
- C. Li, F. You, S. He, X. Tang, W. Shi, and **J. Wang**, "High-Efficiency Power Amplifier Employing Minimum-Power Harmonic Active Load Modulator," *IEEE Transactions on Circuit and System II: Express Briefs (TCAS-II)*, vol. 67, no. 9, pp. 7509-7518, Nov. 2018.
- J. Wang, S. He, F. You, W. Shi, J. Peng, and C. Li, "Codesign of High-Efficiency Power Amplifier and Ring-Resonator Filter Based on a Series of Continuous Modes and Even-Odd-Mode Analysis," *IEEE Transactions on Microwave Theory and Techniques (TMTT)*, vol. 66, no. 6, pp. 2867-2878, Jun. 2018.
- J. Wang, S. He, and D. Gan, "A 2.4/3.5/5.2/5.8-GHz Quad-Band BPF Using SLRs and Triangular Loop Resonators," *Electronics Letters (EL)*, vol. 54, no. 5, pp. 299-301, Mar. 2018.
- J. Wang, Y. Guan, H. Yu, N. Li, S. Wang, C. Shen, Z. Dai, D. Gan, R. Yang, S. He, and G. Zhang, "Transparent Graphene Microstrip Filters for Wireless Communications," *Journal of Physics D: Applied Physics (JPDAP)*, vol. 50, no. 6, pp. 34LT01, Aug. 2017.
- D. Gan, S. He, Z. Dai, and **J. Wang**, "A Quad-Band Bandpass Filter Using Split-Ring Based on T-Shaped Stub-Loaded Step-Impedance Resonators," *Microwave and Optical Technology Letters (MOTL)*, vol. 59, no. 8, pp. 2099-2104, May. 2017.

### Conference Papers

- X. Yi, **J. Wang**, C. Wang, K. E. Kolodziej, and R. Han, "A 3.4–4.6 GHz in-band full-duplex front-end in CMOS using a bi-directional frequency converter," 2020 IEEE Radio Frequency Integrated Circuits Symposium (RFIC), 47-50, 2020.
- X. Yi, C. Wang, M. Lu, **J. Wang**, J. Grajal, and R. Han, "4.8 a terahertz FMCW comb radar in 65nm CMOS with 100GHz bandwidth," 2020 IEEE International Solid-State Circuits Conference (ISSCC), 90-92, 2020.
- C. Li, F. You, X. Zhu, **J. Wang**, and S. He, "Design of Broadband Doherty Power Amplifier with Extended Efficiency Range Employing Asymmetric Structure," *Asia-Pacific Microwave Conference (APMC)*, 452-454, 2018.
- J. Wang, Y. Guan, and S. He, "Transparent 5.8 GHz Filter Based on Graphene," *IEEE International Microwave Symposium (IMS)*, 1653-1655, 2017.