Dingjia Lin

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🔗 https://dingjia-lin.github.io/   in Dingjia Lin   Dingjia Lin   Dingjia Lin

Education

PhD	**University of Manchester, UK**	03/2021 – 12/2024

- Supervisor: Prof. Zhiguo Ding (FIEEE) ↗
- Department of Electrical and Electronic Engineering

MSC	**University of Southampton, UK**	09/2019 – 12/2020

- School of Electronics and Computer Science
- Mobile Communication and Smart Networking

MSC	**University of Sheffield, UK**	09/2017 – 12/2018

- Department of Electronic and Electrical Engineering
- Wireless Communication System

BEng	**Chongqing University of Posts and Telecommunications, China**	09/2013 – 06/2017

- College of Communication and Information Engineering
- Communication Engineering

Experience

King's College London, Research Associate — London, UK — Nov. 2024 – Now

- Research on the optimization process edge computing in the cell-free and massive MIMO networks.

Research Interests

Non-Orthogonal Multiple Access (NOMA), Backscatter Communication (BackCom), Convex Optimization, Non-Convex Optimization, Matching Theory, Cognitive Radio, Fluid Antenna System (FAS)

Publications

[J3] Energy-Efficiency Maximization in Backscatter Communication Based Non-Orthogonal Multiple Access System: Dinkelbach and Successive Convex Approximation Approaches — Aug 2024

Dingjia Lin, Tianqi Wang, Kaidi Wang, Zhiguo Ding

in IET Signal Processing, 2024, 4107801, 12 pages

doi: 10.1049/2024/4107801 ↗

[C1] Uplink Data Rate Maximization with Channel Uncertainties in BackCom NOMA System — Jul 2024

Dingjia Lin, Suhaib M. Al-Basit, Kaidi Wang, Zhiguo Ding

2024 International Symposium on Wireless Communication Systems (ISWCS), Rio de Janeiro, Brazil, 2024, pp. 1-6

doi: 10.1109/ISWCS61526.2024.10639114 ↗

[J2] Uplink Data Rate Maximization in Multi-Cell BackCom NOMA Systems — Jan 2024

Dingjia Lin, Kaidi Wang, Tianqi Wang, Zhiguo Ding

in IEEE Open Journal of the Communications Society, vol. 5, pp. 526-539, 2024

doi: 10.1109/OJCOMS.2023.3349277 ↗

[J1] Beamforming Design for BackCom Assisted NOMA Systems

Dingjia Lin, Kanapathippillai Cumanan, Zhiguo Ding

in IEEE Wireless Communications Letters, vol. 12, no. 9, pp. 1494-1498, Sept. 2023

doi: 10.1109/LWC.2023.3279668 ↗

May 2023

Publications (Submitted and in Preparation)

EE Maximization with Imperfect CSI at Transmitter in BackCom NOMA System

Dingjia Lin, Suhaib M. Al-Basit, Kaidi Wang, Zhiguo Ding

in IEEE Transactions on Vehicular Technology

Submitted

Power Minimization in FAS Assisted NOMA Networks

Dingjia Lin, Kaidi Wang, Tianqi Wang, Zhiguo Ding

in Preparation

Additional Skills

IT Skills: Python, MATLAB, LaTeX, MS Office, Photoshop, Lightroom.

Languages: English – fluent, Chinese – native.

Interests: Photography; Reading; Astronomical Observation; Writing

Referee

Prof. Zhiguo Ding: School of Electrical and Electronic Engineering, The University of Manchester, Manchester, M13 9PL, UK. Email: ✉ zhiguo.ding@manchester.ac.uk

Prof. Mohammed El-Hajjar: School of Electronics and Computer Science, Faculty of Engineering and Physical Sciences, University of Southampton, Southampton, SO17 1BJ, UK. Email: ✉ meh@ecs.soton.ac.uk