

# Dingjia Lin

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🌐 <https://dingjia-lin.github.io/>    in Dingjia Lin    📺 Dingjia Lin    📺 Dingjia Lin

## Education

<b>PhD</b>	<b>University of Manchester, UK</b> <ul style="list-style-type: none"><li>• Supervisor: Prof. Zhiguo Ding (FIEEE) <a href="#">🔗</a></li><li>• Department of Electrical and Electronic Engineering</li></ul>	03/2021 – 12/2024
<b>MSC</b>	<b>University of Southampton, UK</b> <ul style="list-style-type: none"><li>• School of Electronics and Computer Science</li><li>• Mobile Communication and Smart Networking</li></ul>	09/2019 – 12/2020
<b>MSC</b>	<b>University of Sheffield, UK</b> <ul style="list-style-type: none"><li>• Department of Electronic and Electrical Engineering</li><li>• Wireless Communication System</li></ul>	09/2017 – 12/2018
<b>BEng</b>	<b>Chongqing University of Posts and Telecommunications, China</b> <ul style="list-style-type: none"><li>• College of Communication and Information Engineering</li><li>• Communication Engineering</li></ul>	09/2013 – 06/2017

## Research Interests

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

## Publications

<b>Energy-Efficiency Maximization in Backscatter Communication Based Non-Orthogonal Multiple Access System: Dinkelbach and Successive Convex Approximation Approaches</b> <i>Dingjia Lin</i> , Tianqi Wang, Kaidi Wang, Zhiguo Ding <i>in IET Signal Processing</i> , 2024, 4107801, 12 pages <a href="#">doi: 10.1049/2024/4107801</a> <a href="#">🔗</a>	Aug 2024
<b>Uplink Data Rate Maximization with Channel Uncertainties in BackCom NOMA System</b> <i>Dingjia Lin</i> , Suhaib M. Al-Basit, Kaidi Wang, Zhiguo Ding <i>2024 International Symposium on Wireless Communication Systems (ISWCS), Rio de Janeiro, Brazil, 2024, pp. 1-6</i> <a href="#">doi: 10.1109/ISWCS61526.2024.10639114</a> <a href="#">🔗</a>	Jul 2024
<b>Uplink Data Rate Maximization in Multi-Cell BackCom NOMA Systems</b> <i>Dingjia Lin</i> , Kaidi Wang, Tianqi Wang, Zhiguo Ding <i>in IEEE Open Journal of the Communications Society</i> , vol. 5, pp. 526-539, 2024 <a href="#">doi: 10.1109/OJCOMS.2023.3349277</a> <a href="#">🔗</a>	Jan 2024
<b>Beamforming Design for BackCom Assisted NOMA Systems</b> <i>Dingjia Lin</i> , Kanapathippillai Cumanan, Zhiguo Ding <i>in IEEE Wireless Communications Letters</i> , vol. 12, no. 9, pp. 1494-1498, Sept. 2023 <a href="#">doi: 10.1109/LWC.2023.3279668</a> <a href="#">🔗</a>	May 2023

## Publications (Submitted and in Preparation)

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### **EE Maximization with Imperfect CSI at Transmitter in BackCom NOMA System**

Submitted

**Dingjia Lin**, Suhaib M. Al-Basit, Kaidi Wang, Zhiguo Ding  
*in IEEE Transactions on Vehicular Technology*

### **Power Minimization in FAS Assisted NOMA Networks**

in Preparation

**Dingjia Lin**, Kaidi Wang, Tianqi Wang, Zhiguo Ding

## Additional Skills

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**IT Skills:** Python, MATLAB,  $\text{\LaTeX}$ , MS Office, Photoshop, Lightroom.

**Languages:** English – fluent, Chinese – native.

**Interests:** Photography; Reading; Astronomical Observation; Writing