

# Kai Wang

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## Education

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Sep. 2020 – June 2024:

Institute of Theoretical Physics, University of Chinese Academy of Sciences.  
(PhD, Supervisor: DongSheng Wang)

Sep. 2017 – June 2020:

School of Information and Optoelectronic Science Engineering, South China Normal University.  
(MSc, Supervisor: ZhiMing Zhang)

Sep. 2013 – June 2017:

School of Physics, Henan Normal University. (BSc)

## Publications

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1. Nonreciprocal photon blockade in a two-mode cavity with a second-order nonlinearity,  
**Kai Wang**, Qin Wu, Ya-Fei Yu, Zhi-Ming Zhang,  
Phys. Rev. A, 100, 053832, (2019).
2. Quantum circuit simulation of superchannels,  
**Kai Wang**, Dong-Sheng Wang,  
New J. Phys. 25 043013. (2023).
3. A survey of universal quantum von Neumann architecture,  
Yuan-Ting Liu, **Kai Wang**, Yuan-Dong Liu, Dong-Sheng Wang,  
Entropy, 25, 1187. (2023).
4. Experimental simulation of quantum superchannels,  
Hang Li, **Kai Wang**, Shijie Wei, Fan Yang, Xinyu Chen, Barry C. Sanders,  
Dong-Sheng Wang, Gui-Lu Long,  
New J. Phys. 26 013037. (2024).

## Research Interests

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Quantum networks, Quantum error correction, Quantum optomechanics