



Lingling Fan

Ph.D. Student in Electrical Engineering, admitted Autumn 2018

Bio

BIO

Lingling Fan is a Ph.D. candidate in electrical engineering at Stanford University. Prior to her appointment at Stanford, she received her Bachelor of Science degree in physics, while she worked in the Department of Applied Physics at Yale University. Her research interests are in computational, experimental, and theoretical studies of photonic structures and devices, especially for neural networks, information processing, and radiative cooling applications. She has published more than 21 papers in this field, has given five invited talks at major international conferences, and currently holds two U.S. patents. In addition to her academic research, she completed internships at SWS research Shanghai in 2018 summer and X the Moonshot Factory of Google LLC in 2022 summer working on industry research projects. Lingling is a recipient of the National Scholarship from the Ministry of education of China from 2015 to 2018, a Hong Kong Shan-Yuan (C. W. Chu) scholarship in 2016, a Kathy Xu scholarship in 2018, an Engineering Fellowship from Stanford University in 2018, a CLEO presenter award in 2020, a DARE fellowship finalist in 2021 and an EECS rising star travel grant in 2022.

LINKS

- Google Scholar Profile: <https://scholar.google.co.in/citations?hl=en&user=Ft7VbWcAAAAJ>

Publications

PUBLICATIONS

- **Multidimensional Convolution Operation with Synthetic Frequency Dimensions in Photonics** *PHYSICAL REVIEW APPLIED*
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- **Coloured low-emissivity films for building envelopes for year-round energy savings** *NATURE SUSTAINABILITY*
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- **Deep-Subwavelength Thermal Switch via Resonant Coupling in Monolayer Hexagonal Boron Nitride** *PHYSICAL REVIEW APPLIED*
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- **Design of Nighttime Power Generation System to Optimally Utilize Outer Space Darkness**

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- **Nonreciprocal radiative heat transfer between two planar bodies**

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