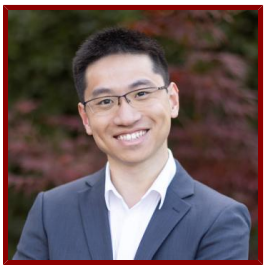
Stanford



Soon Wei Daniel Lim

Postdoctoral Scholar, Molecular and Cellular Physiology

Curriculum Vitae available Online

Bio

HONORS AND AWARDS

- Schmidt Science Fellowship, Schmidt Sciences (2024)
- Young NUS Fellow, National University of Singapore (2024-2025)
- Lindau Young Scientist, Lindau Nobel Laureate Meetings (2019)
- A*STAR Roll of Honor, Agency for Science, Technology and Research, Singapore (2017)
- D.S. Kothari Prize in Physics, California Institute of Technology (2017)
- Friends of the Caltech Libraries Senior Thesis Prize, California Institute of Technology (2017)
- Ken Hass Outstanding Student Paper Award, American Physical Society (2017)
- Haren Lee Fisher Memorial Award in Junior Physics, California Institute of Technology (2016)
- Jack E. Froehlich Memorial Award, California Institute of Technology (2016)
- National Science Scholarship, Agency for Science, Technology and Research, Singapore (2013-2023)

PROFESSIONAL EDUCATION

- Master of Science, Harvard University (2022)
- Doctor of Philosophy, Harvard University (2023)
- Bachelor of Science, California Institute of Technology , Physics (2017)

STANFORD ADVISORS

- Steven Chu, Postdoctoral Faculty Sponsor

PATENTS

- Maryna Leonidivna Meretska, Soon Wei Daniel Lim, Federico Capasso. "United States Patent 11,860,336 High-aspect ratio metalens", Harvard College, Jan 2, 2024

LINKS

- Research website: https://danlimsw.com

Publications

PUBLICATIONS

- **Addition to "All-Glass 100 mm Diameter Visible Metalens for Imaging the Cosmos".** *ACS nano*
  Park, J., Daniel Lim, S. W., Amirzhan, A., Kang, H., Karrfalt, K., Kim, D., Leger, J., Urbas, A., Ossiander, M., Li, Z., Capasso, F.
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- **All-Glass 100 mm Diameter Visible Metalens for Imaging the Cosmos.** *ACS nano*
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- **Time Reversal Differentiation of FDTD for Photonic Inverse Design** *ACS PHOTONICS*
  Tang, R., Lim, S., Ossiander, M., Yin, X., Capasso, F.
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- **Helicity and Polarization Gradient Optical Trapping in Evanescent Fields.** *Physical review letters*
  Lu, J., Ginis, V., Lim, S. W., Capasso, F.
  2023; 131 (14): 143803
- **Topologically protected optical polarization singularities in four-dimensional space** *SCIENCE ADVANCES*
  Spaegele, C. M., Tamagnone, M., Lim, S., Ossiander, M., Meretska, M. L., Capasso, F.
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- **Point singularity array with metasurfaces.** *Nature communications*
  Lim, S. W., Park, J., Kazakov, D., Spagele, C. M., Dorrah, A. H., Meretska, M. L., Capasso, F.
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- **Extreme ultraviolet metalens by vacuum guiding** *SCIENCE*
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- **Polarization Multi-Image Synthesis with Birefringent Metasurfaces**
  Hazineh, D., Lim, S., Guo, Q., Capasso, F., Zickler, T., IEEE
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- **All-Optical Tunability of Metalenses Permeated with Liquid Crystals** *ACS NANO*
  Palermo, G., Lininger, A., Guglielmelli, A., Ricciardi, L., Nicoletta, G., De Luca, A., Park, J., Lim, S., Meretska, M. L., Capasso, F., Strangi, G.
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- **A High Aspect Ratio Inverse-Designed Holey Metalens** *NANO LETTERS*
  Lim, S., Meretska, M. L., Capasso, F.
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- **Engineering phase and polarization singularity sheets** *NATURE COMMUNICATIONS*
  Lim, S., Park, J., Meretska, M. L., Dorrah, A. H., Capasso, F.
  2021; 12 (1): 4190
- **On-chip optical tweezers based on freeform optics** *OPTICA*
  Yu, S., Lu, J., Ginis, V., Kheifets, S., Lim, S., Qiu, M., Gu, T., Hu, J., Capasso, F.
  2021; 8 (3): 409-414
- **HLA Correlations with Clinical Phenotypes and Risk of Metabolic Comorbidities in Singapore Chinese Psoriasis Patients** *MOLECULAR DIAGNOSIS & THERAPY*
  Shen, M., Lim, S., Tan, E. S., Oon, H. H., Ren, E.
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- **Non-close-packed pore arrays through one-step breath figure self-assembly and reversal** *CHEMICAL SCIENCE*
  Thong, A., Lim, D., Ahsan, A., Goh, G., Xu, J., Chin, J.
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