

# Nanophotonics and energy applications

## Shanhui Fan

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Refreshments will be served

<https://usc.zoom.us/j/99755735840?pwd=9wy4p6Ncgv8bMyNaJHOFF2yaJnCLFB.1>

Meeting ID: 997 5573 5840

Passcode: 066919

**Abstract:** Light, or electromagnetic wave, represents a fundamental carrier of energy. New ability to control light, as provided by nanophotonic structures, therefore has important implications in energy technology. In this talk, we will discuss some of the efforts in developing nanophotonic structures for energy applications, Examples include radiative cooling, and reciprocity breaking towards ultimate limit for solar energy harvesting.



**Biography:** Shanhui Fan is the Joseph and Hon Mai Goodman Professor of the School of Engineering at the Stanford University. He received his Ph. D in 1997 in theoretical condensed matter physics from MIT. His research interests are in nanophotonics. He has published over 700 refereed journal articles and has given over 400 invited talks, and was granted over 70 US patents. His recent awards include the R. W. Wood Prize from the Optica, a Simons Investigator in Physics, and a Vannevar Bush Faculty Fellowship. He is a member of the U. S. National Academy of Engineering, and a Fellow of APS, OSA, SPIE, and IEEE.