

# Professor Howard Lee becomes fellow of the International Society for Optics and Photonics

The honor recognizes advances in nano-optics research.

Tuesday, January 09, 2024

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UCI Physical Sciences Communications



"To be creative, we sometimes need to be a little bit crazy and not pay too much attention to what other people say'," Lee recalled his former Ph.D. advisor, physicist Philip Russel at the Max Planck Institute for the Science of Light in Germany, telling him about making breakthroughs in his field.

Picture Credit:

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Professor Howard Lee of the UC Irvine Department of Physics & Astronomy recently became a fellow of the International Society for Optics and Photonics ([SPIE](#)). Lee's lab researches ways of using optical materials, nano-scale structures and advanced nanophysics to actively control the optical properties of nano-scale materials. This includes the development of so-called metasurfaces and metalenses, which are flat lenses made of light-altering nanostructures that may one day replace things like conventional, bulky lenses. The SPIE recognized Lee for his lab's advances in the development of tunable optical nano-materials and advanced optical fibers enhanced with nano-scale structures. "I am grateful to be elected as an SPIE Fellow," said Lee. "This is an important recognition of all the hard work and achievements from my group members and research group, and it motivates all of us to further contribute impactful research in optics and nanophotonics. We really appreciated all the support and resources from UCI for us to advance nano-optical sciences and technologies." Lee and his lab hope to continue advancing meta-optical science to develop new applications for biomedical technologies, ultrafast communication devices, quantum photonic and energy harvesting technologies.

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