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## NEWS RELEASE

For Immediate Release

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### ***Xiang Zhang Elected SPIE Fellow***

SPIE will honor 72 new Fellows of the Society this year. Fellows are members of distinction who have made significant scientific and technical contributions in the multidisciplinary fields of optics, photonics, and imaging. They are honored for their technical achievement, for their service to the general optics community, and to SPIE in particular. More than 500 SPIE members have become Fellows since the Society's inception in 1955.

"The annual recognition of Fellows provides an opportunity for us to acknowledge outstanding members for their service to the general optics community," says Kevin G. Harding, SPIE President.

**Xiang Zhang**, Chancellor's Professor, Department of Mechanical Engineering, University of California/Berkeley, Berkeley, CA, USA, for specific achievements in nanophotonics, optical lithography, and diffractionless imaging.

A pioneer in 3-D optical micro-stereo-lithography and plasmonic nanolithography, Zhang's research spans a wide range of topics including nano-optical biosensors, negative-index materials, and superlensing. He was the first to propose and demonstrate plasmonic lithography, he demonstrated the first magneto-plasmonic waveguide, and has broken records in Raman sensing with a novel nano-optical resonator for ultra-high sensing of prostate cancer.

In the area of negative-index materials, Zhang's group was the first to propose and physically manufacture a metallic structure that operates in the terahertz range and has negative permeability—a first step toward bringing the concept of negative refraction into the optical range. And in the area of superlensing, his group was the first to physically demonstrate that a metallic system can project an object below the diffraction limit—a fundamental limit in science. This historic breakthrough was selected as one of the *Top Ten Nanotechnology Breakthroughs* in 2005.

Zhang is an active participant in the optics community, serving as a frequent reviewer for a large number of journals and as the associate editor for the *Journal of Nanoparticle Research*. He is the director of the National Science Foundation Nanoscale Science and Technology Center, and director of the Dept. of Defense MURI Center on Metamaterials and Devices, as well as a member of ASME and IEEE. His service with SPIE includes program committee member for the Photorefractive Crystals and Fibers conference and session chair in the Plasmonics conference, both at SPIE Optics + Photonics 2006.

#### **About SPIE**

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