



## About the cover: *Advanced Photonics Nexus* Volume 3, Issue 2

In modern optics, generating and then using subwavelength structured light beams to realize nanoscale light–matter interaction has become one of the most effective approaches for exploring new knowledge in physics, chemistry, and biology. Recently, therefore, designing on-chip integrated photonic devices, such as metasurfaces and plasmonic structures, to generate subwavelength structured light beams has become a cutting-edge focus for research. Although these on-chip photonic devices can achieve a very high degree of integration themselves, it is usually necessary to use optical elements such as objective lenses to build strictly aligned optical paths to couple the incident light to the corresponding devices, which results in extremely limited adjustment flexibility and is not conducive to practical application. As optical fiber confines the light field in

the core, directly integrating a plasmonic structure on the fiber end to realize an all-fiber subwavelength structured light beam generator emerges as a promising solution to overcome this shortcoming.

The image on the cover for *Advanced Photonics Nexus* Volume 3 Issue 2 illustrates an all-fiber subwavelength structured light beam generator based on fiber end integrated plasma structure. It can generate a novel kind of subwavelength structured light beam: an inverted pin beam. The image is based on original research presented in the article “[Generation of subwavelength inverted pin beam via fiber end integrated plasma structure](https://doi.org/10.1117/1.APN.3.2.026003),” by Zhengchuan Cai, Zhiqiang Quan, Libo Yuan, Jian Wang, and Houquan Liu (doi: [10.1117/1.APN.3.2.026003](https://doi.org/10.1117/1.APN.3.2.026003)).