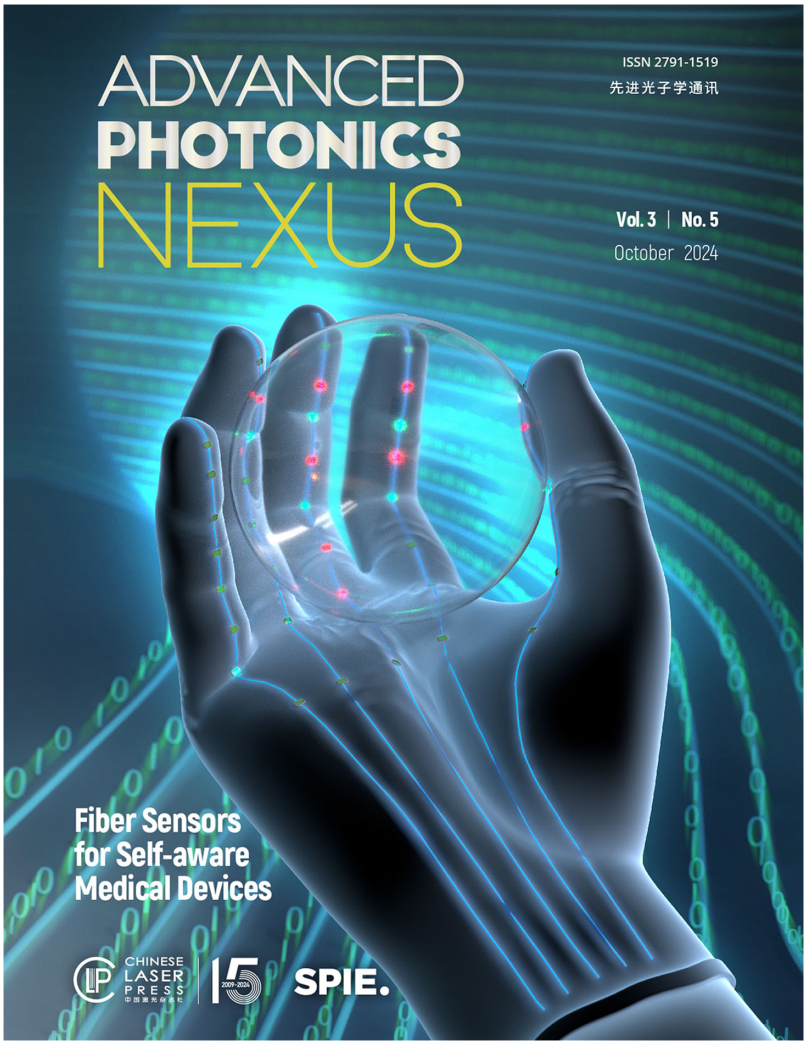


# About the cover: *Advanced Photonics Nexus* Volume 3, Issue 5

Fibers with sensing and feedback features are transforming health-monitoring wearables and smart clothing, allowing them to respond to the wearer's physiological and environmental changes. Recently, these fiber devices have been adapted for use in more sensitive medical contexts, interfacing directly with living tissue. Made from biocompatible polymers, these fibers are soft, long, and flexible, making them ideal for incorporation into medical devices like catheters and guide wires. This "self-awareness" in catheters can significantly lower the risk of trauma during procedures. However, to fully realize this potential in medical applications—where performance demands are higher than in wearables—improvements in fiber technology are essential.

The image on the cover for *Advanced Photonics Nexus* Volume 3 Issue 5 illustrates the concept of fibers monitoring physiological data, with sensitivity and spatial resolution suitable for demanding medical applications. Such capabilities can also boost the performance of functional textiles and apparel for secure cyber-physical interfacing, environmental and situational awareness, and surveillance.

The image is based on original research presented in the article by Merve Gokce, Eilam Smolinsky, Louis Alexandre van der Elst, Jillian Noblet, Creasy Clauser Huntsman, and Alexander Gumennik, "Multimodal fiber antenna for proximity and stress sensing" *Adv. Photon. Nexus* **3**(5), 056011 (2024), doi: 10.1117/1.APN.3.5.056011.