



About the Cover: *Advanced Photonics Nexus* Volume 1, Issue 1

The image on the cover for *Advanced Photonics Nexus* Volume 1 Issue 1 depicts the generation of high-dimensional orbital angular momentum (OAM) comb by an azimuthal binary phase. The proposed azimuthal phase is $0-\pi$ binarized, with a series of azimuthal transition lines divide the phase value 0 and π . Such phase element can transform a Gaussian beam into an OAM multiplexed beam consisting of multiple equally spaced OAM channels with identical power—namely, an OAM

comb. This work offers a noniteration scheme to produce OAM comb in real time, paving the way for lots of OAM-based photonics technologies.

The image is based on original research presented in the report by Shiyao Fu, Zijun Shang, Lan Hai, Lei Huang, Yanlai Lv, and Chunqing Gao, “Orbital angular momentum comb generation from azimuthal binary phases,” *Adv. Photon. Nexus* 1(1), 016003 (2022), doi [10.1117/1.APN.1.1.016003](https://doi.org/10.1117/1.APN.1.1.016003).