
LNOI devices for quantum integrated photonics

University of science and technology of China

Xifeng Ren

Email: renxf@ustc.edu.cn

Quantum photonic integrated circuits have garnered significant attention and experienced rapid development in recent years. As one of the most promising platforms for integrated photonics, the LNOI waveguide offers excellent material properties, such as large electro-optic, acousto-optic, and nonlinear coefficients, wide transmission window, and high laser damage threshold, which make it suitable for preparing various optical devices. Here I will introduce our recent works on LNOI based quantum integrated photonics, including cryogenic quantum photonic sources and optical filter.



Short Bio:

Xifeng Ren received his BS and PhD degree from University of science and technology of China. He is a professor of University of science and technology of China. His research is centered around quantum micro/nanophotonics, including quantum integrated photonic circuits, quantum optics, nanophotonics, integrated photonic, etc. He has published more than 130 SCI papers in these research areas, including 2 in Science/Nature, 2 in Nat. Commun., 7 in Phys. Rev. Lett., 2 in Light-Sci. Appl. and 4 in Optica, etc.