

Background



- surface

offer the lowest possible power consumption while То significantly improving the performance of silicon photonics in terms of high responsivity without saturation limit is critical but challenging.

Methodology

1.Fabrication processes





AlO_x: Atomic layer deposition with a thickness of ~15 nm. ZnO: Hydrothermal growth & annealed. PMMA: Spin Coated, and

etched by reactive ion etching. ITO: Physical vapor deposition RF.



References

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Dramatically Enhanced Broadband Photodetection by Dual Inversion Layers and Fowler-Nordheim Tunneling

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2. Zou, Haiyang, et al. "Dramatically Enhanced Broadband Photodetection by Dual Inversion Layers and Fowler-Nordheim Tunneling." ACS nano (2019).

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