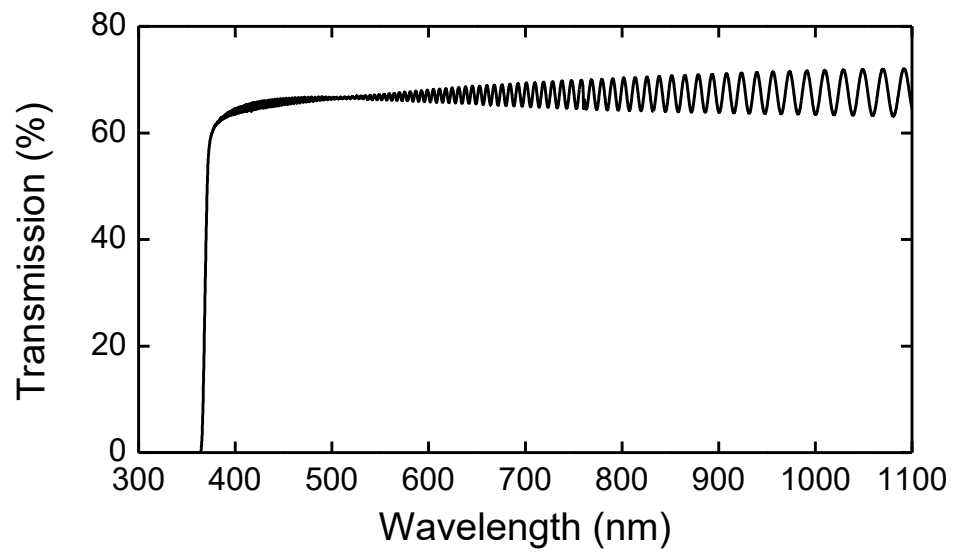
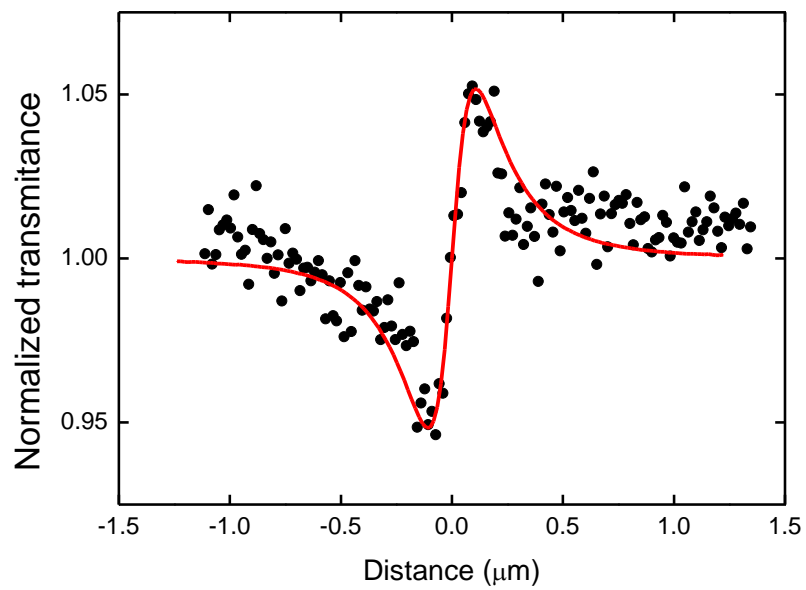


**Supplementary data:**

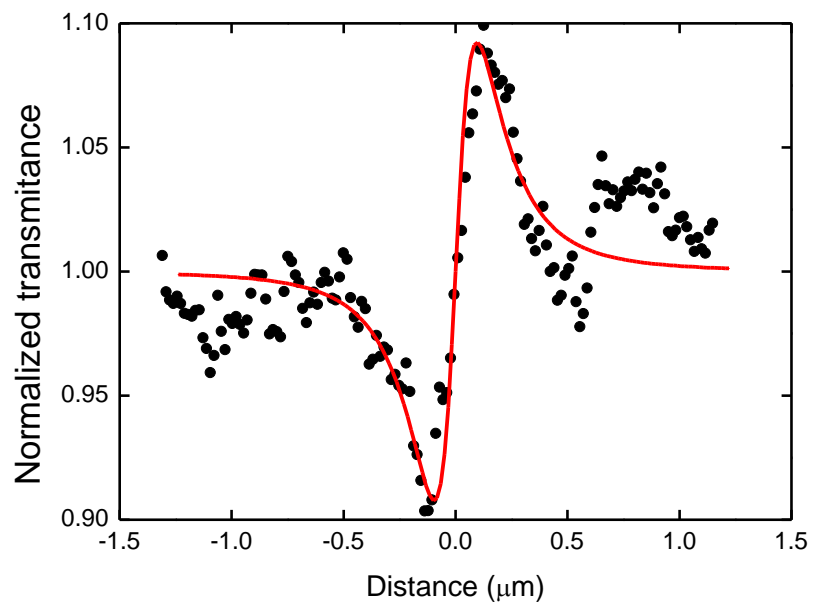
- Transmission spectra of GaN thin films on sapphire substrate.



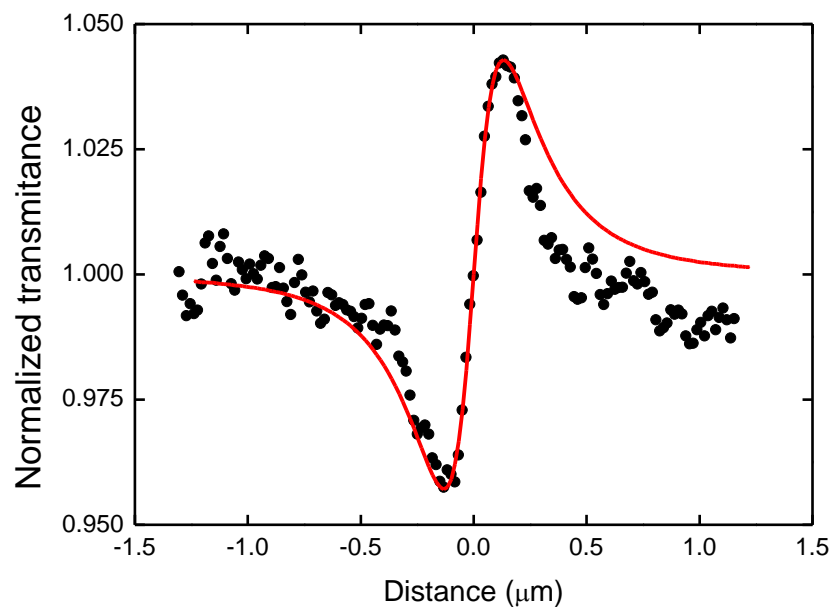
- Z-scan @ 700nm



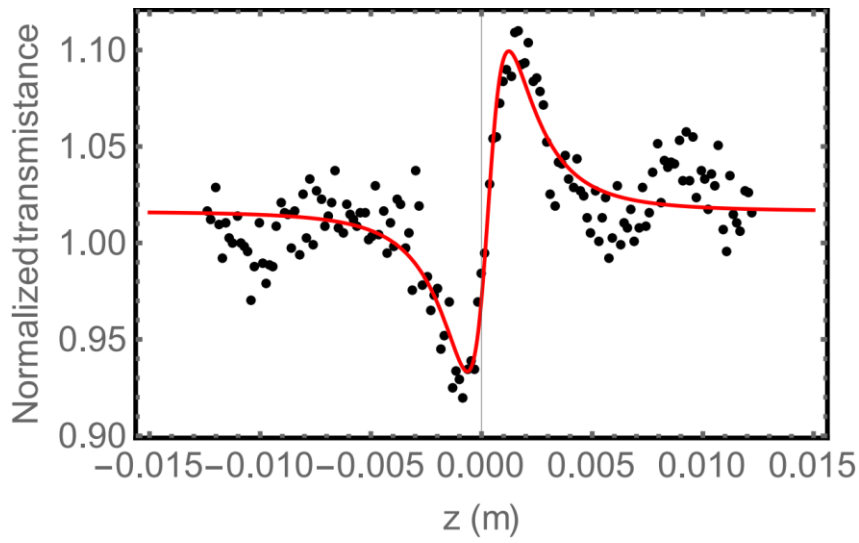
- Z-scan @ 800nm



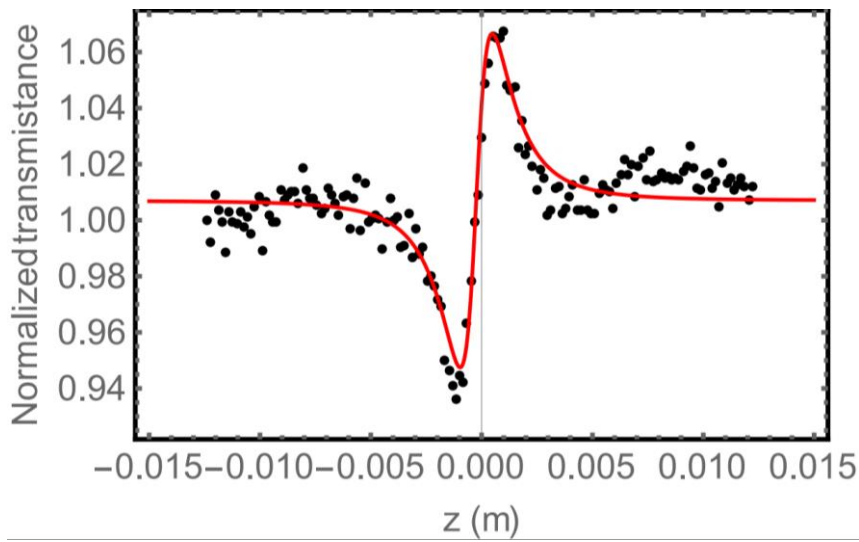
- Z-scan @ 900nm



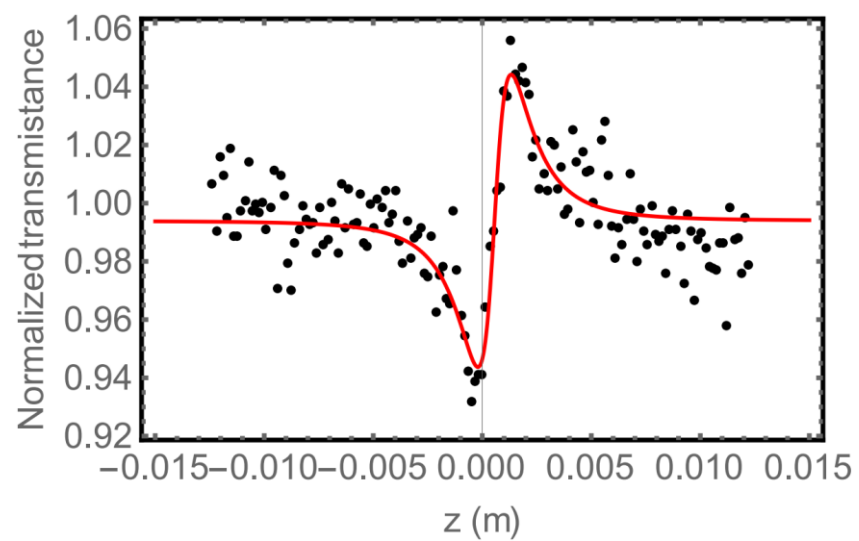
- Z-scan @ 800nm



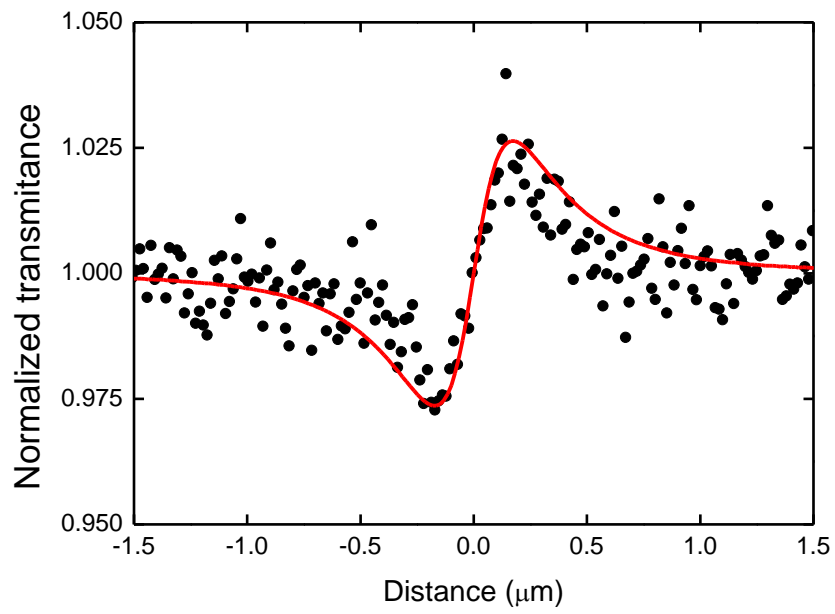
- Z-scan @ 1000nm



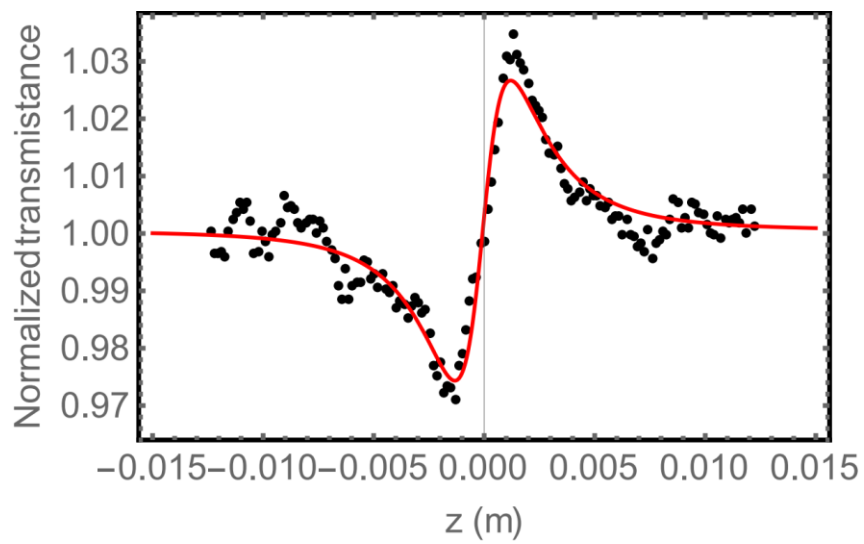
- Z-scan @ 1100nm



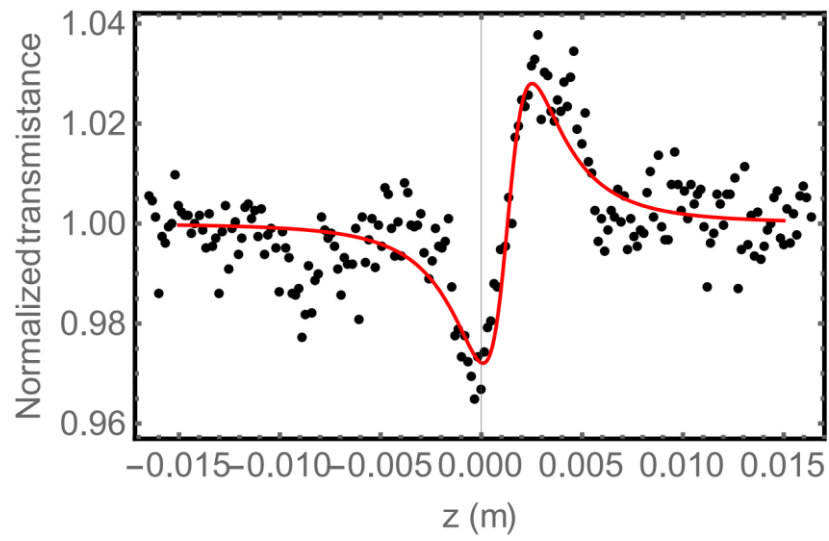
- Z-scan @ 1200nm



- Z-scan @ 1350nm



- Z-scan @ 1400nm



- Z-scan @ 1500nm

