## Precisely determining the band offsets at GaN/AlGaN interfaces by effectively control the surface and interface states

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Nano-X is a R&D facility with 30+ tools connected through 100 meter UHV tubes, so wafers/samples could be transferred quickly from one to another without



MOCVD and MBE tools are directly hooked with XPS/UPS/ARPES for III-V heterojunctions growth and characterization of band offsets.



Surface band bending could be measured experimentally by using angleresolved XPS, and surface states have effects on the binding energies.