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Hot electron assisted vertical leakage/breakdown in AlGaN/GaN heterostructures on Si substrates

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Highlights

- 1. An interesting phenomenon is investigated that high energetic hot electrons can assist vertical leakage and even accelerate vertical breakdown.
- 2. A model is proposed that high energetic electrons can detrap or ionize defect states.
- 3. The trap states which are responsible for the phenomenon are identified.

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