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## **Atomic Layer Etching: Application to Nanoelectronic Device Processing**

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### ***Abstract***

For the next generation nanoelectronic device processing, not only low damage processing but also precise processing with atomic precision may be required. Atomic layer etching (ALET) is a technique that can etch materials layer by layer in an atomic layer scale which can be applied to various materials not only the crystalline materials such as Si, GaAs, etc. but also amorphous materials such as SiO<sub>2</sub>, HfO<sub>2</sub>, etc. In addition, it also can be applied to the removal of 2-D materials such as graphene layer by layer. In this presentation, the results of ALET carried out various materials such as Si, GaAs, InP, HfO<sub>2</sub>, graphene will be reported. Also, the characteristics of various next generation nanoelectronic devices fabricated using ALET will be reported.