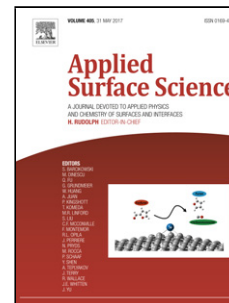


## Accepted Manuscript

Title: The (001) 3C SiC surface termination and band structure after common wet chemical etching procedures, stated by XPS, LEED, and HREELS

Author: Sven Tengeler Bernhard Kaiser Gabriel Ferro Didier Chaussende Wolfram Jaegermann



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- Piranha/NH<sub>4</sub>F, Piranha/HF, and RCA all produce clean surfaces with 1x1 surface reconstruction , and Si-OH/C-H surface termination for (001) 3C SiC
- Piranha/HF results in a small fluorine contamination of the surface
- Piranha/NH<sub>4</sub>F results in a flat band like surface situation, the other methods produce a small band bending at the 3C SiC surface (up for RCA and down for HF)
- Annealing at 900 °C for 5 minutes strongly diminishes differences from the wet chemical etching procedure and results in upward band bending

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