

## Modelling of Anisotropic Etching of Silicon: Anomalies due to Facet Boundary Effects

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In the crystal-based modelling of wet anisotropic etching of silicon, one begins with the hypothesis that the etch rate in a specific etchant composition at a given temperature should depend only on the crystal features of the surface exposed to the etchant. However, analysis of experimental data reveals interesting features which contradict this hypothesis. A given crystal surface having particular crystal indices, under a particular set of etchant conditions (composition, temperature), may exhibit significant differences in etch rate. These anomalies are hypothesized to be driven by effects due to the boundaries of the under-etched facets.