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(54) Title: LARGE AREA METROLOGY AND PROCESS CONTROL FOR ANISOTROPIC CHEMICAL ETCHING

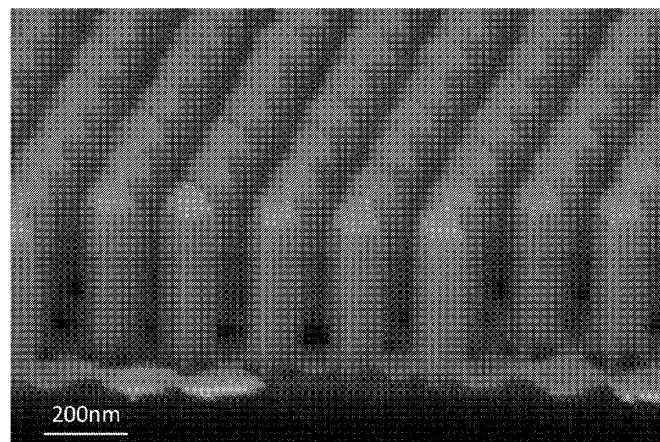


FIG. 1

(57) Abstract: Various embodiments of the present technology generally relate to semiconductor device architectures and manufacturing techniques. More specifically, some embodiments of the present technology relate to large area metrology and process control for anisotropic chemical etching. Catalyst influenced chemical etching (CICE) can be used to create high aspect ratio semiconductor structures with dimensions in the nanometer to millimeter scale with anisotropic and smooth sidewalls. However, all aspects of the CICE process must be compatible with the equipment used in semiconductor fabrication facilities today, and they must be scalable to enable wafer scale processing with high yield and reliability. This invention relates to metrology and control of etch and CMOS compatible methods of patterning the catalyst and removing it without damaging the etched structures.

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