

6. Materials and Processes for Silicon Technology

6.1 Silicon

6.1.1 Producing Semiconductor-Grade Silicon

6.1.2 Silicon Crystal Growth and Wafer Production

6.1.3 Uses of Silicon Outside of Microelectronics

6.1.4 Summary to: 6.1 Materials and Processes for Silicon Technology

6.2 Si Oxides and LOCOS Process

6.2.1 Si Oxide

6.2.2 LOCOS Process

6.2.3 Summary to: 6.2 Si Oxide and LOCOS Process

6.3 Chemical Vapor Deposition

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6.3.3 CVD for Poly-Silicon, Silicon Nitride and Miscellaneous Materials

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6.5.2 Chemical Etching

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6.6.1 Basic Lithography Techniques

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