

## **Industrial Applications of MeV Light Ion Beams**

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Implanters used by the semiconductor industry have typical energy ranges from some keV to several hundred keV. Some “high-energy” machines operate in the range up to 4 MeV, mostly for the production of so called “buried layers” or “deep wells”. The ion species used in these machines are the typical doping materials like boron, phosphorous and arsenic.

Proton or alpha beams have not been used for a long time, the reasons equally divided by radiation safety concerns and missing applications. These applications have been found in the last fifteen years and are growing each day. The presentation covers two applications (hydrogen and helium) which have already left the research labs and are used in “real-world” products.