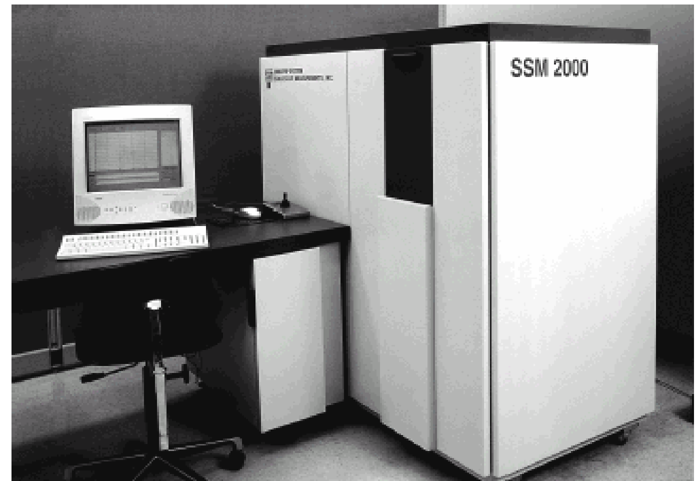
NEW CAPABILITIES FOR MICROELECTRONICS AND SILICON SOLAR INDUSTRY -

DOPANT PROFILING IN SILICON BY SSM 2000

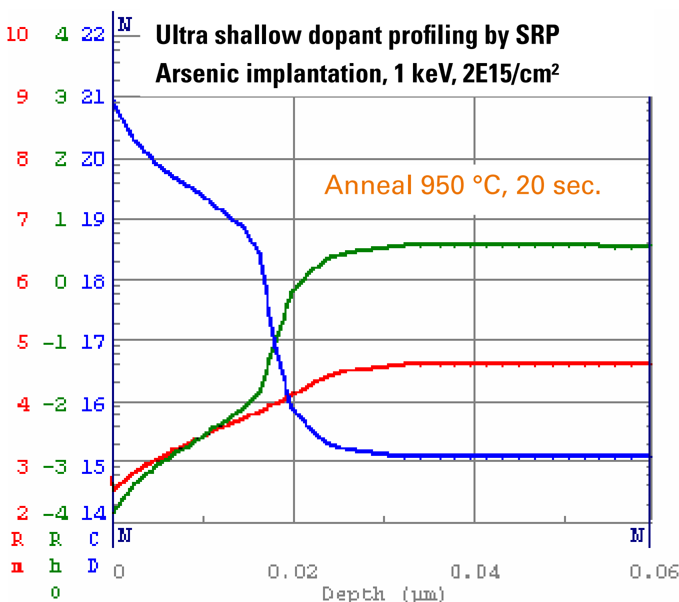
Doping is an important process in semiconductor technology. Exact depth profiling of the doped elements and measurement of the electrically active dopant profiles are necessary for device and process development, process control, testing of simulation results and failure analysis.

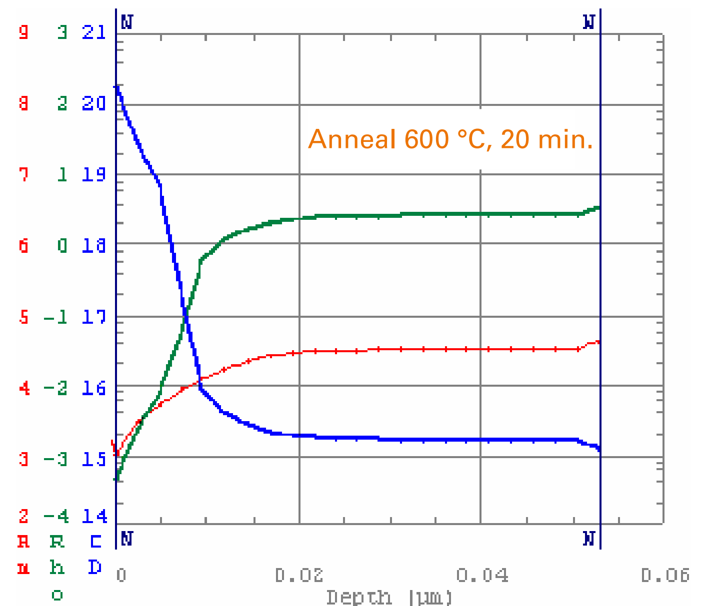
SGS INSTITUT FRESENIUS provides two methods for this purpose that have been proving their reliability for many decades. Secondary ion mass spectrometry, which is used to measure element depth profiles as well as the SRP technique which is predestinated for the measurement of electrically active carrier distribution are both extremely sensitive and provide a high dynamic range. The two methods perfectly complement one another.

SGS INSTITUT FRESENIUS acquired a new SRP prober SSM 2000 and consequently upgrades its capabilities in dopant profiling for microelectronics and silicon solar technique.



The new measuring technique establishes enables us to perform the measurement of ultra shallow dopant profiles and guarantees a higher accurateness and repeatability.





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