

Status of ion track technology - Prospects of single tracks

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A glimpse on the present status of ion track technology is provided: irradiation, etching and electro-replication of single and multiple ion tracks. The uses of an electrolytic cell for single and counted track studies are sketched. In connection with a data acquisition system such a device enables to determine in real-time: track and bulk etch rate, cone angle, and size. Processing can be terminated at a preset time, current, diameter, or length (of wires). The system can be used to rapidly screen new track materials, etchants, and electro-replication processes.