

Surface Modification of Materials

Novel technology based on adiabatic dissipation of beam energy in the thin layer of materials allows to dramatically change the properties of this layer without change of stoichiometric relations.

Semiconductors:

- * Surface modification of semiconductors.
- * Rapid annealing.
- * Re-crystallization.
- * Synthesis of semiconductor structures.

High Temperature Superconductors

- * Surface modification of HTSC.
- Surface melting and re-crystallization for increasing of critical current.

Metals and conducting materials

- Surface hardness.
- Cleaning of surface.
- Increasing of electrical threshold electrical field for breakdown

Polymers & Plastics

- Activation of surface.
- Cleaning of surface.
- Curing and polymerization

