

NONDESTRUCTIVE METHOD FOR SELECTIVE IN-DEPTH LAYER DIAGNOSIS OF DEFECTS



Device for nondestructive diagnosis of several types of single crystal defects

Areas of Application

Research equipment engineering, nanoindustry, and microelectronics

Specification

Sensitivity to defects (by concentration or volume share) is $10^{-8} - 10^{-6}$

Advantages

The method enables diagnosis without damaging the research object; an increase in sensitivity to the structural defects by 4–6 orders of magnitude; simultaneous determination of many structural parameters; layer-by-layer determination of structure with a nanosize pitch; identification of structural changes as a result of rapid-going processes; use of simplified techniques

Stage of Development.

Suggestions for Commercialization

IRL3, TRL3

Vending of patent under license agreement

IPR Protection

IPR2

Contact Information

Vitalii P. Bevz, G.V. Kurdyumov Institute for Metal Physics of the NAS of Ukraine;
+38 044 424 12 05; e-mail: BevzV@ukr.net