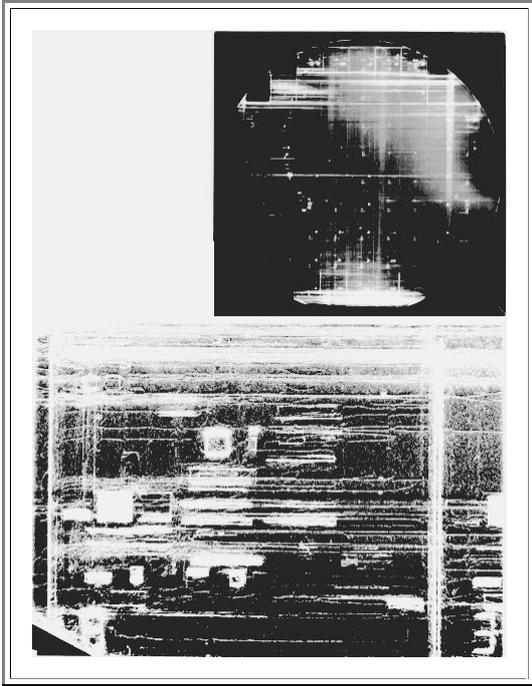


X-Ray Topography

The big advantage of x-ray topography is that it can reveal the defect structure of large samples, in the case below whole (100 mm) Si wafers. If the negatives are enlarged, details on a 10 μm scale may be seen.

Illustration



● X-ray topography of a Si wafer showing "haze" (milky area in the upper right half) and dislocation structures. The isolated bright small rectangles are transistors full of dislocations

● Enlargement of an area on the lower left. Some single dislocations are barely visible; the bright geometric structures correspond to device parts with high densities of dislocations.