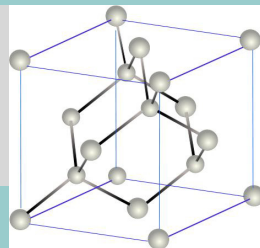


A Diamond Based LASER

Properties Of Diamond

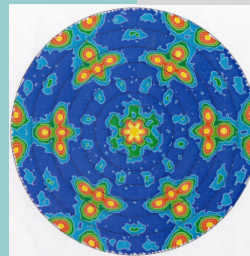
Diamond:

- extreme hardness
- high thermal conductivity
- color centers



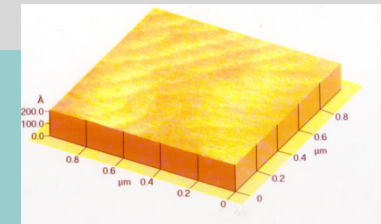
X-ray Analysis

Polefigures of poly- (left)
and single (right) crystals



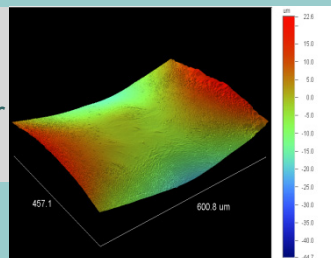
Surface Morphology

Atomic Force Microscopy picture of
the surface



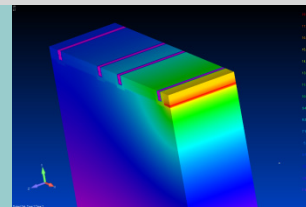
Stress Behaviour

Mechanical stress
simulation of a
diamond based laser
structure



Thermal Management

Simulation of thermal heat propagation of
a diamond based laser structure



Summary

Due to its unique material properties
diamond laser diodes are extremely
useful for high power applications