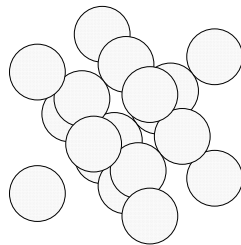


Experimental

Specimen

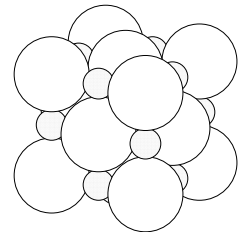
Si

Diamond-type
 $a = 0.54307 \text{ nm}$



MgO

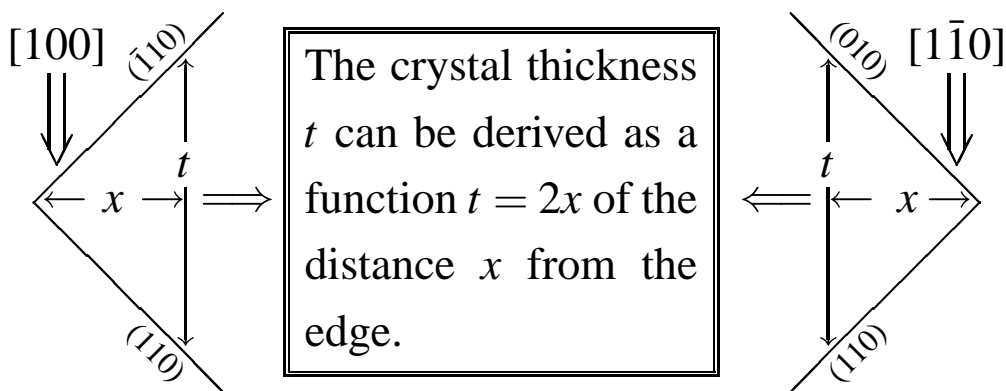
NaCl-type
 $a = 0.42112 \text{ nm}$



prepared by cleaving a Si (001) wafer along the $\{110\}$.

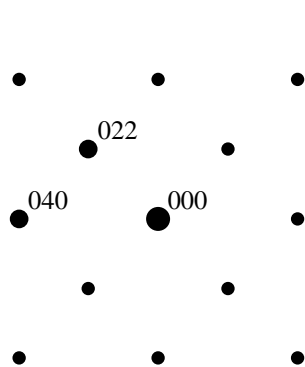
prepared by burning Mg in air.

Observed direction

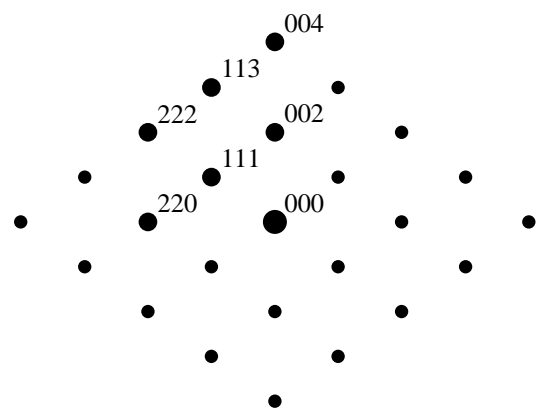


The crystal orientations were exactly adjusted by Kikuchi lines.

Observed diffraction spots



000, 022, 040



000, 002, 111, 220, 004, 113, 222