Pb(111)

[110] 75.0 keV PROTONS

α
Pb (111) relaxation

\[ \Delta d_{12}/d \] %

\[ P_{11} \]

\[ T_m \]

TEMPERATURE (K)

300 350 400 450 500 550 600
Pb (110) relaxation

![Graph showing Pb (110) relaxation](image)

Temperature (K) vs. Δd_{110} / d (%)

- Points represent measured values.
- Error bars indicate measurement uncertainties.
- Hatched regions denote transition regions.

Key:
- θ_D
- T_M

Note: The graph illustrates the temperature-dependent relaxation of Pb (110) with respect to changes in thickness.
Pb(111) melting

SURFACE PEAK AREA (monolayer)

TEMPERATURE T (K)

Pb(111)
[110] 75.0 keV protons
[001]

T_m
Pb(110) premelting

SURFACE PEAK AREA (monolayer)

TEMPERATURE T (K)

300 400 500 600

NR. OF MOLten LAYERS

0 5 10 15

97.5 keV protons

[101] [011]

T_M
Al(110) premelting

Graph showing the relationship between the number of visible Al(110) monolayers and temperature (K).