

dilational (dilatational) transition

A transition in which the crystal structure is dilated (or compressed) along one (or more) crystallographic direction(s) while the symmetry about that direction is retained.

Examples:

1. The transition of a CsCl-type structure to a rock salt structure in which dilation occurs along the three-fold axis.
2. The transition at T_D in quenched NiS in which volume expansion occurs without change of symmetry on going from a metallic state ($T > T_D$) to a semiconducting state ($T < T_D$).

Source:

PAC, 1994, 66, 577 (*Definitions of terms relating to phase transitions of the solid state (IUPAC Recommendations 1994)*) on page 581