

## displacive transition

A transition in which a displacement of one or more kinds of atoms or ions in a crystal structure changes the lengths and/or directions of bonds, without severing the primary bonds. Examples: The transitions of the low-temperature polymorphs of SiO<sub>2</sub> (quartz, tridymite and cristobalite) to their respective high-temperature polymorphs, which involve distortions or rotations of the SiO<sub>4</sub> tetrahedra. Also Jahn–Teller and ferroic transitions.

**Source:**

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