

## spin-state transition

An electronic transition from a high-spin state to a low-spin state, or vice versa. Example: With an increase in temperature  $\text{Co}^{3+}$  ions in  $\text{LaCoO}_3$  transform from a low-spin state ( $t_{2g}^6 e_g^0$ ) to the high-spin state ( $t_{2g}^4 e_g^2$ ).

**Source:**

PAC, 1994, 66, 577 (*Definitions of terms relating to phase transitions of the solid state (IUPAC Recommendations 1994)*) on page 591