

## low-spin

**Also contains definition of:** high-spin

In any coordination entity with a particular  $d^n$  ( $1 < n < 9$ ) configuration and a particular geometry, if the  $n$  electrons are distributed so that they occupy the lowest possible energy levels, the entity is a low-spin complex. If some of the higher energy  $d$  orbitals are occupied before all the lower energy ones are completely filled, then the entity is a high-spin complex.

**Source:**

PAC, 1997, 69, 1251 (*Glossary of terms used in bioinorganic chemistry (IUPAC Recommendations 1997)*) on page 1283