

1.62: Lattice complex

A *lattice complex* is the set of all point configurations that may be generated within one type of Wyckoff set. All Wyckoff positions, Wyckoff sets and types of Wyckoff sets that generate the same set of point configurations are assigned to the same lattice complex.

Concretely, two Wyckoff positions are assigned to the same lattice complex if there is a suitable transformation that maps the point configurations of the two Wyckoff positions onto each other and if their space groups belong to the same crystal family. The 72 (in E^2) or 1731 (in E^3) Wyckoff positions are classified in 51 (E^2) or 1128 (E^3) types of Wyckoff sets. They are assigned to 30 (E^2) or 402 (E^3) lattice complexes.

The name *lattice complex* comes from the fact that an assemblage of points that are equivalent with respect to a group of symmetry operations including lattice translations can be visualized as a set of equivalent lattices.

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