

metal–insulator transition

A transition characterized by a sudden change in electrical transport properties (conductivity) due to a reversible change from localized to itinerant behaviour of the electrons.

Example:

The transition at 339 K in VO₂ where it changes from a high-temperature metallic behaviour to a low-temperature semiconductor behaviour.

Synonymous with metal–nonmetal transition.

See *localized-itinerant transition*.

1994, 66, 586