

## Linear dependence of the square of radius of coordination sphere of crystal on the order number of coordination sphere

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### Abstract

It is shown that the dependence on the order number of coordination sphere of the square of the radius of coordination sphere of simple, bode centered and face centered cubic lattices, crystals with hexagonal close packing, packing of diamond, tetrahedral packing, lattice of hexagonal ice, lattice of  $\beta$  – tungsten can be described with good accuracy by linear function. On the basis of this dependence is established that order number of first vanishing peak of the radial distribution function of crystal is inverse proportional to the temperature.