The Cause and Mechanism of Superconductivity

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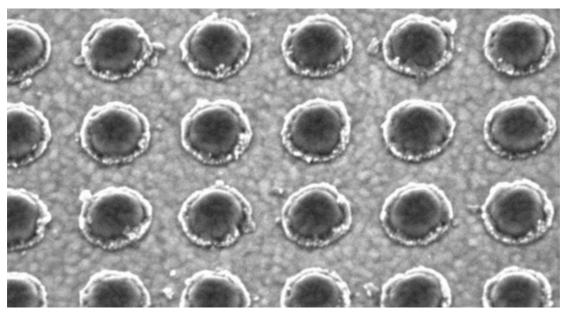
Abstract: Re-explanation the causes and mechanism of Superconductivity in a new perspective and according to a new atomic theory.

Main Viewpoints and Conclusions:

The essence of Superconductivity is that it is one kind mode of energy storage with no loss or loss rarely of the energy; rather than the conductor lost its electrical resistance.

When at Bose-Einstein condensate (BEC),^[3] the extranuclear-charges of all atoms with the same density and polymerized into a single-complete body and agglomerate together with all nucleuses in the material; that is in the state of charges-nucleuses coagulation, and the extranuclear-charges (electronics) can not be moved. Same time, it is also the reason of that insulator more easily enter into superconducting state.

The sole criterion of determining a material whether or not is a superconductor: that is to test whether it have *Meissner effect*. A material is a superconductor if it with *Meissner effect*; otherwise, it is not.



Team announces breakthrough observation of Mott transition in a superconductor http://phys.org/news/2015-09-team-breakthrough-mott-transition-superconductor.html

References

- [1] Superconductivity http://en.wikipedia.org/wiki/Superconductivity
- [2] A New Model of Atomic Structure http://vixra.org/abs/1401.0147
- [3] The Structure, State and Properties of Matter in Bose-Einstein Condensate http://rxiv.org/abs/1509.0184