

## Review of Superconductivity in MgB<sub>2</sub>.

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New Superconductor MgB<sub>2</sub> with T<sub>c</sub> of 39 K was discovered three years ago. The superconductivity of this new material is quite different from the known conventional materials. These differences include 1. The superconducting transition of 39 K is quite high compared to the conventional superconductors. 2. From the isotope effect, the superconductivity of this material is originated from the conventional electron phonon interaction. 3. The two gap nature of this material is quite unique and will affect every superconducting property in this material. 4. The J<sub>c</sub> and H<sub>c2</sub> which is essential for the electronics devices is unbelievably high. 5. This material is very promising for the practical application of lower power consumption. In this review, the details of the superconductivity mentioned above will be explained in an easy way.

keywords : Superconductivity, MgB<sub>2</sub>, Two gaps