

The Present Situation and Application of Superconducting Materials

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High superconducting material is classified into tape material and bulk material according to its shape and its application, and the research and development are advanced actively for the practical use. In this paper, we introduce the technology of their processing and applications of the high superconducting material. In order to evaluate the electric properties of superconducting tapes, we measure the critical current characteristic of the tapes when winding and the over current property. In order to improve the mechanical strength properties of the superconducting bulks, epoxy resin is permeated into the bulks. Resin-impregnated bulk RE-Ba-Cu-O materials have already been applied to several practical uses.