Present Status of Development of Superconducting Materials in China

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***Abstract*— There is an increasing demand for more economical magnets used for MRI, NMR. The energy problem provides strong reasons to consider widespread use of superconductivity in the electric power industry, like cables, rotating machines, fault current limiters and SMES. There are also huge opportunities for HTS materials to either partially replace or to significantly expand superconducting magnet applications that presently depend only on Nb-Ti or Nb_3Sn. In China, supported by the large national projects, a significant progress has been made in increasing the length and performances of high-Tc superconducting materials produced at an industrial basis, including fabrication of kilometer long 2G coated conductors and km-level MgB_2 wires, and latest achievement of the first 100 m long iron-based superconducting tapes with the high J_C. In this presentation, fabrication issues, key properties and recent advances of YBCO, BSCCO, MgB_2 and Iron-based superconductors in China are reviewed.**

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***Keywords (Index Terms)*— Superconducting wire, Nb-Ti, Nb_3Sn, Bi-2223, Bi-2212, YBCO, MgB_2, iron-based superconductor.**

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