

Recent Main Events in Applied Superconductivity in China

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Abstract — With strong support from China government bodies such as the National High Technology Research and Development Program of China, National Natural Science Foundation of China and the National Basic Research Program of China, the field of applied superconductivity in China has been developed in different areas. Especially in the fusion application area, the first fully-superconducting tokamak, EAST (Experimental Advanced Superconducting Tokamak), has been successfully constructed and commissioned in the last two years. Based on the requirement from the ITER project, high performance Bi-2223 HTS tape, and Nb₃Sn and NbTi strands have been developed as well. In the area of HTS applications for electric power systems, R&D has been focused on superconducting power cable, superconducting magnetic energy storage, superconducting transformer, superconducting fault current limiters. In this paper, the recent progresses in applied superconductivity in China are reported.

Keywords (Index Terms) — Superconductivity, EAST, ITER, HTS

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