

30 - 40 IMPROVEMENT IN SWITCHING CHARACTERISTICS OF HTS
POWER ELECTRIC DEVICE PREPARED BY PULSED-
LASER DEPOSITION

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High quality YBCO film was prepared on the YSZ buffered Hastelloy substrate by PLD method with an effective in-situ anneal. The T-C (zero) and the J (C) of the YBCO film on YSZ/Hastelloy is 83.4K and 6.6×10^{-3} A/cm² (at 77K), respectively. The phase transition between the superconducting state and the normal conducting state of the film showed higher response due to the high thermal conductivity and the small thermal capacity than that of the YBCO film deposited on MgO substrate.

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