

INFLUENCE OF B₄C-DOPING AND HIGH-ENERGY BALL MILLING ON PHASE FORMATION AND CRITICAL CURRENT DENSITY OF (Bi,Pb)-2223 HTS

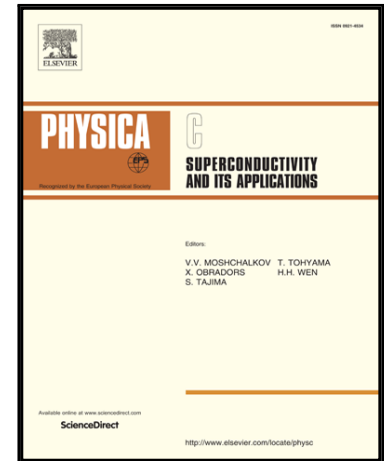
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- The effects of the B₄C addition and dry planetary ball milling on the phase formation, microstructure and transport properties of Bi_{1.7}Pb_{0.3}Sr₂Ca₂Cu₃O_y HTS have been investigated.
- The results obtained suggest that the boron carbide has to be considered as a promising dopant for enhancing the formation kinetics and *current-carrying capability* of (Bi,Pb)-2223 phase.
- It has been shown that the J_c values of B₄C-added (Bi,Pb)-2223 HTS can be further increased by using a planetary ball milling treatment of precursor powders.

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