

Investigation on Effect of Sintering Time on (Bi,Pb)₂Sr₂(Ca,Sm)₃Cu₄O₁₂ System

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Abstract

We have investigated the superconductive and structural properties of the system Bi_{1.7}Pb_{0.3}Sr₂Ca_{2.94}Sm_{0.06}Cu₄O₁₂ sintered in air at 860oC for the different sintering times. XRD, R-T, DTA, TGA and SEM techniques have been used for the structural analysis. We have also measured the DC magnetic properties of the system by using a VSM equipment.