# EIGHTH INTERNATIONAL CONFERENCE ON TERNARY AND MULTINARY COMPOUNDS

## P2-34 THE ANISOTROPY OF THE MAGNETIC-FIELD-INDUCED RESISTIVE TRANSITION IN SINGLE CRYSTAL $Bi_2Sr_2CaCu_2O_8$

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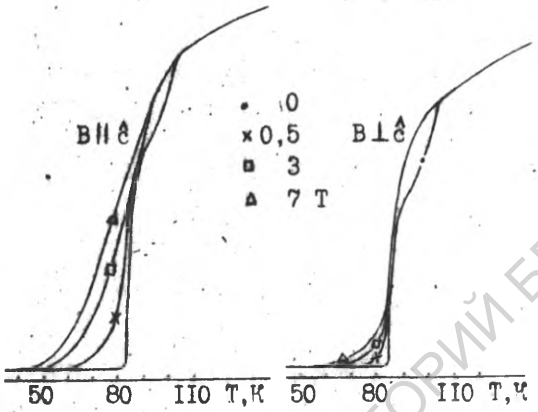


We report here detailed measurements of the temperature dependence of the resistive transition in samples of Bi-Sr-Ca-Cu-O. Samples for this study were grown from the starting compounds of $Bi_2O_3$, $CaCO_3$, $SrCO_3$, CuO taken in the ratio 2:1:2:2 in metal and 10-30 wt % NaCl-KCl and melted in a $Al_2O_3$ crucible. The samples formed as parallelepiped typicaly $5 \cdot 3 \cdot 12$ $mm^3$ consisted of thin single crystal plates with the ĉ axis normal to the plate and disoriented about three degrees. An external magnetic field was oriented both parallel and perpendicular to the ĉ axis. Resistivity data were taken with a standard ac phase-sensitive technique with 5 mA excitation current at 37 Hz. The shape of the resistivity transition depends strongly on the orientation of the sample in the magnetic field. So, in the presence of a magnetic field the samples exhibit nonzero resistance even for temperatures far below $T_c$ that suggests that the resistive transition does not reflect only the upper-critical field but is complicated by flux-flow effects.