

**Determination of the Critical Temperature and Oxygen Content Variations
Along the c-axis of YBCO Epitaxial Films**

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Abstract - The existence of non-superconducting zones in $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ (YBCO) films below the transition temperature to the non-resistive state can be the cause of losses that limit the performances of YBCO devices. In this contribution, from the dependence on temperature of the surface critical current density of YBCO films we examine the possibility that their superconducting critical temperature is non-uniform along their c-axis.

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