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SCALING BEHAVIOUR OF RELAXATION DEPENDENCIES  
IN METALOXIDE SUPERCONDUCTORS

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ABSTRACT

Superconducting glass state has been investigated in different types of metaloxide ceramics /Y-Ba-Cu-O, Bi-Sr-Ca-Cu-O, Ba-Pb-Bi-O/ using the highly sensitive SQUID magnetometer. The analysis of long-time relaxation processes of thermoremanent magnetization

$$M^{\text{trm}}(t) = M_0 - S \ln t$$

displayed scaling dependence of the decay rate  $S = -dM/d \ln t$  on quantity of trapped magnetic flux  $M_0$ :  $\lg S = 3 \lg M_0$  - observed universal dependence  $S \sim M_0^3$  seems to one of the features of superconducting glass state in metaloxide ceramics.