

List of Dissertation Abstract

Name	Supervisor	Title	Abstract
Yosiko HIGASHI	Junichi TATAMI	Nonlinear property of SrCoO ₃ -doped ZnO ceramics sintered in a reducing atmosphere and multilayer ceramic varistors with base metal electrodes	SrCoO ₃ -doped ZnO varistors have high protection performance and excellent stability against ESD. MLCV co-fired with base metal is studied, using the varistor material, to reduce the cost of electrodes. The nonlinearity is able to be obtained by a combination of reduced sintering and post-annealing in air. The variation with post-annealing is attributed to the formation of electrical barrier, owing to p-type carrier densification of SrCoO ₃ by oxygen diffusion. On the basis of the findings, for the first time, MLCVs with base metal are successfully produced, which are sufficient for practical use.