ABSTRACT

Piezoelectric oxide, Pb(Zr$_x$Ti$_{1-x}$)O$_3$ has been made by using citric metal complex without substrate. Citric metal complex were made from citric-Pb(II), citric- Zr(IV), and citric-Ti(IV) solution. Complex solution were mixtured for 30 minutes and solution pH were varied by adding NH$_4$OH 25% became 5,5 ; 6,5 ; 7,5 and 8,5. Complex solution were heated at 120 °C for 2 hours until became gel precursor and then this gel precursor were calsined at 650 °C. The precursor were analyzed by X – ray Diffraction. The best precursor were produced from pH = 5,5.