CHAPTER VI

FUTURE WORKS

The future works are recommended as follows;

1. To investigate the segregation of the dopants at grain boundary and try to study the mechanism of the dopants in the system.

2. To investigate the Curie temperature by the dielectric permittivity peak as a function with temperature of all sample in order to select the suitable working temperature and to study the dielectric behavior as a function of temperature.

3. For Zr-BNLT samples which were obtained high conductivity due to poling process could not obtain, so to dope Mn in Zr-BNLT system in order to reduce the conductivity and investigate electrical, dielectric, ferroelectric and piezoelectric properties.

4. Since the Fe doped BNLT at the 1.0 at% of Fe concentration is performed the highest piezoelectric coefficient, it would be interesting to try with new processing such as templated grain growth in order to orient grain and growth in the same direction to obtain the better piezoelectric properties.