Review of: "Controlling polarization direction in epitaxial Pb(Zr0.2Ti0.8)O3 films through Nb (n-type) and Fe (p-type) doping"

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Potential competing interests: The author(s) declared that no potential competing interests exist.

The manuscript titled “Controlling polarization direction in epitaxial Pb(Zr0.2Ti0.8)O3 films through Nb (n-type) and Fe (p-type) doping” is an seemed to be an excellent piece of writing. All experimental results are well explained.

I have few reservations regarding to this article. The authors should consider the same to further explain the significance of their work.

1- Authors claimed “the doping was in the limit of 1% atomic in both cases”, why is it so, they have not mentioned the clear aspect. Why was it taken up to 1% only. References with literature comparison are required.

2- “Dielectric constants are slightly higher in the doped PZT flms. Tis can be explained by the larger amount of structural defects carrying charges able to respond to the small a.c. voltage” reference literature required to support the statement.

3- “ relatively low doping concentrations of Fe and Nb can trigger significant differences in the macroscopic properties of the epitaxial PZT flms” if so, the authors should also consider the level of doping below 1%. No doubt, results are impressive and supported theoretically as well.

4- There is a gap of study, how the polarization directly linked with doping. Why only Fe and Nb are selected. Can the authors support this study with other elements from literature in terms of polarization.

5- Authors put a lot of efforts to explain results. There is need to remove some grammatical errors as well.

Above minor revision is requested for further considerations.