Electronic Supplementary Information

Observation of Large Dielectric Permittivity and Dielectric Relaxation Phenomenon in Mn Doped Lanthanum Gallate

Hari Mohan Rai[1], Shailendra K. Saxena[1], Ravikiran Late[1], Vikash Mishra[1], Parasmani Rajput[2], Archna Sagdeo[2], Rajesh Kumar[1] and P.R. Sagdeo[1*]

[1]Material Research Lab. (MRL), Department of Physics and MSE; Indian Institute of Technology Indore, Simrol, Indore (M.P.) – 452020, India.
[2]Raja Ramanna Center for Advance Technology (RRCAT), Indore (M.P.) – 452013, India.

* Corresponding author: prs@iiti.ac.in

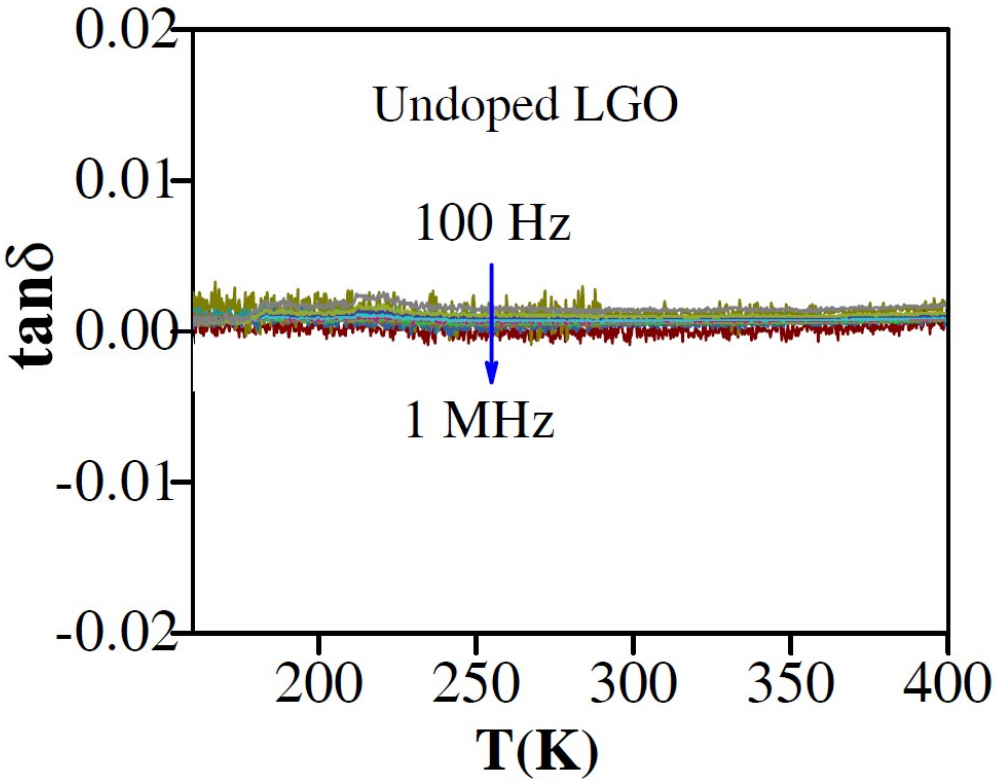

Fig. S1: (Color online) Dielectric loss (tanδ) of $LaGaO_3$ plotted as a function of temperature for probing frequencies ranging from 100 Hz to 1 MHz.

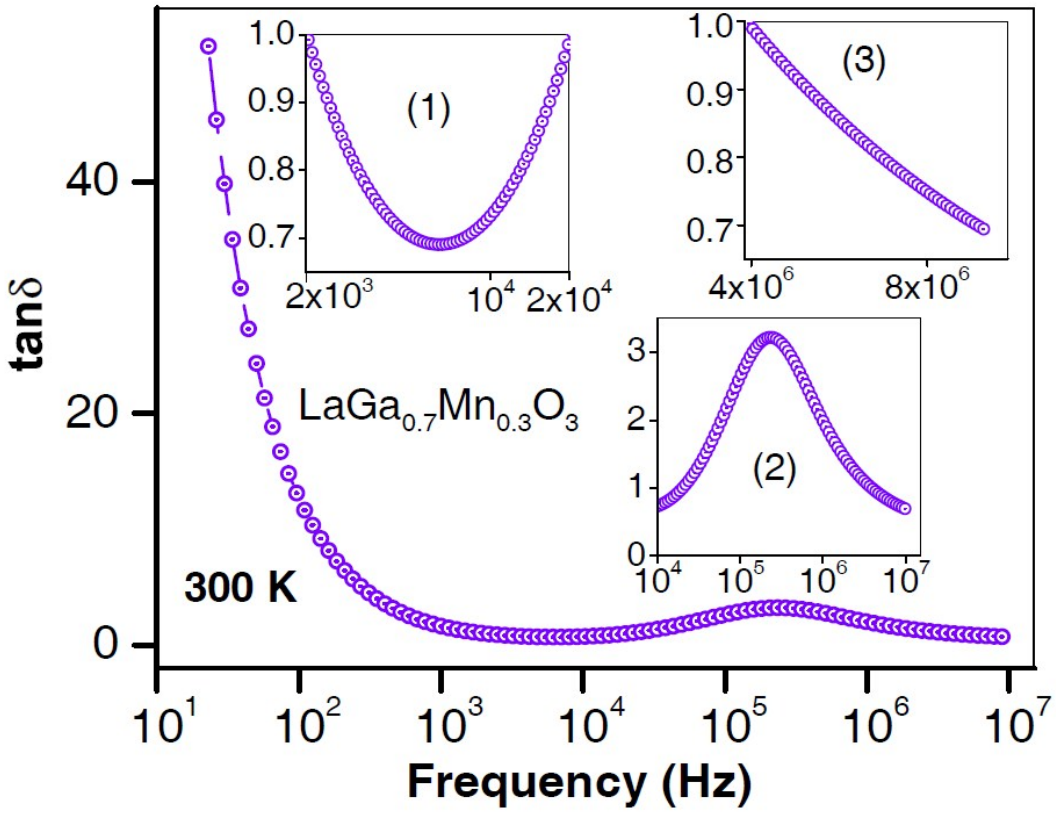

Fig. S2: (Color online) Dielectric loss (tanδ) of $LaGa_{0.7}Mn_{0.3}O_3$ plotted as a function of probing frequencies ranging from 20 Hz to 10 MHz. Inset-1 and 3 show that the value of tanδ is < 1 for corresponding low (2 kHz to 20kHz) and high (>1MHz) frequencies respectively. Inset-2 displays the magnified view of characteristic tanδ-peak.