

## Dielectroscopic Studies in Iron Doped $K_2Ti_4O_9$

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### ABSTRACT

The variation of  $\tan \delta$  and dielectric permittivity have been studied as a function of temperature and frequency for  $K_2Ti_4O_9$  samples with two concentrations of iron impurity and the results obtained are correlated with electron paramagnetic resonance data. The dielectric loss is visualized due to both dipoles and electrical conduction.

**Keywords:** Permittivity,  $\tan \delta$ , dielectric loss