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List of Symbols and Abbreviations

α	Absorption coefficient
λ	Wavelength
T_C	Curie temperature
$\tan\delta$	Loss tangent (Dielectric loss)
ε'	Real part of the permittivity
ε''	Imaginary part of the permittivity
d_{33}	Piezoelectric charge coefficient measured along poling direction
E	Electric field
E_a	Activation energy
E_c	Coercive field
E_g	Optical band gap
γ	Diffusivity constant
Ω	Resistance
θ	Theta (degrees)
χ^2	Chi square (Goodness of Fit)
k_B	Boltzmann constant
T	Temperature
T_m	Transition Temperature at the maxima of temperature dependent dielectric constant plot
T_{VF}	Vogel Fulcher temperature

τ	Relaxation time
VFT	Vogel Fulcher Tammann
XRD	X-ray Diffraction
FTIR	Fourier Transform Infrared
Vis	Visible light
UV	Ultraviolet radiation
DRS	Diffuse Reflectance Spectroscopy
SEM	Scanning Electron Microscope
EDS	Energy Dispersive X-ray Spectroscopy
XPS	X-ray Photoemission Spectroscopy
PUND	Positive Up Negative Down
PL	Photo Luminescence
MPB	Morphotropic Phase Boundary
FE	Ferroelectric
DC	Direct Current
PZT	Lead Zirconate, $\text{PbZr}_x\text{Ti}_{1-x}\text{O}_3$
BFO	Bismuth Ferrite, BiFeO_3
BT	Barium Titanate, BaTiO_3
BF-BT	Bismuth Ferrite-Barium Titanate, BiFeO_3 - BaTiO_3
KNN	Potassium Sodium Niobate, $\text{K}_{0.5}\text{Na}_{0.5}\text{NbO}_3$
BNT	Bismuth Sodium Titanate, $\text{Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3$
BIT	Bismuth Titanate, $\text{Bi}_4\text{Ti}_3\text{O}_{12}$
PNR	Polar Nano Region
ϵ	Permittivity

P_s	Saturated Polarization
P_r	Remnant Polarization
E_c	Coercive Electric Field