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ABBREVIATIONSAND SYMBOLS

BNZ	bismuth sodium zirconate
BNT	bismuth sodium titanate
BNZT	bismuth sodium zirconate titanate
Bi	bismuth
Na	sodium
Zr	zirconate
Ti	titanate
MPB	morphotropic phase boundary
ABO ₃	perovskite structure
PVA	polyvinyl alcohol
T_c	Curie temperature
T_m	Temperature at maximum dielectric constant
XRD	X-ray diffraction
SEM	scanning electron microscope
EDX	energy dispersive X-ray
°C/min	degree Celsius per minute

λ	wavelength
χ	dielectric susceptibility
D	electric displacement
V	voltage
Q	charge
C	capacitance
ρ	bulk density
$ ho_w$	density of water
r	ionic radius
φ	diameter
t	thickness
P-E	polarization-electric field
α	thermal expansion coefficient
P_d	local or defect polarization
Er	material's relative permittivity (also simply called permittivity or
	dielectric constant)
\mathcal{E}_0	vacuum permittivity (8.85×10 ⁻¹² F/m)

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$tan\delta$	dielectric loss or dissipation factor
σ	conductivity
Ea	activation energy
K	Boltzmann constant ($1.38 \times 10^{-23} \text{ J/K}$)
Emax	maximum electric field
E _{sw}	switching electric field
<i>P</i> _r	remanent polarization
P_s	spontaneous polarization
P _{max}	maximum polarization

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