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ABBREVIATIONS AND SYMBOLS

A Area of disc face

A_T Antiferroelectric tetragonal Phase

Ao Antiferroelectric octahedral phase

AC Alternating current

AFE Antiferroelectric

AFE_{ortho} Antiferroelectric and orthorhombic phase

D Thickness

DTA Differential Thermal Analysis

ε_r Relative permittivity or dielectric constant

FE Ferroelectric

 $FE_{tet}(F_T)$ Ferroelectric and tetragonal phase

FE_{rhom}(F_R) Ferroelectric and rhombohedral phase

FRA Frequency response analyzer

HP Hydrothermal Process

JCPDS Joint Committee for Powder Diffraction Standards

K_p Electromechanical Coupling Coefficient

MPB Morphotropic Phase Boundary

Pc Paraelectric cubic Phase

PE Paraelectric

PLZT Lead Lanthanum Zirconate Titanate

PMN Lead Magnesium Niobate

PT Lead Titanate

PZ Lead Zirconate

PZT Lead Zirconate Titanate

Q_m Resonance Frequency

S_d Linear shrinkage

SEM Scanning Electron Microscope

T_c Curie Temperature

TEM Transmission Electron Microscope

TGA Thermogravimetric Analysis

XRD X-ray Diffraction

tan δ Dielectric loss factor

ω Angular frequency

Phase angle

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