Electronic Supplementary Material (ESI) for Journal of Materials Chemistry A.

Supplementary Information

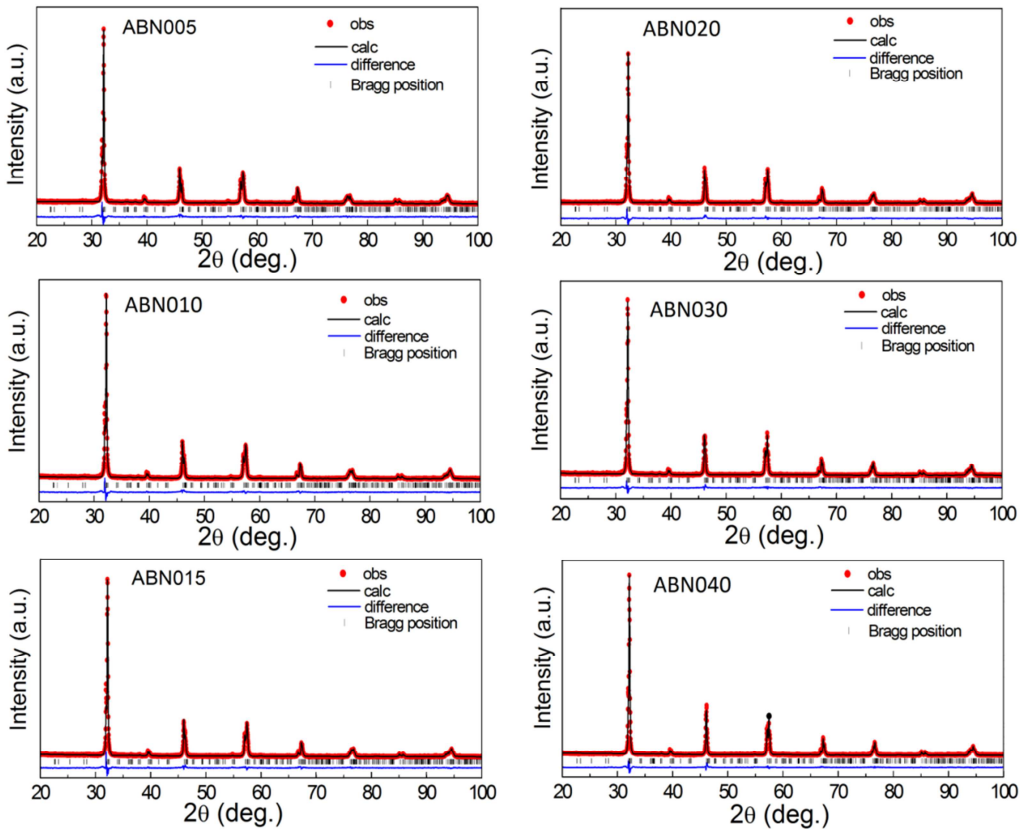

Fig. S1. Fitted X-ray diffraction profiles for crushed ABN*x* ceramic powders.

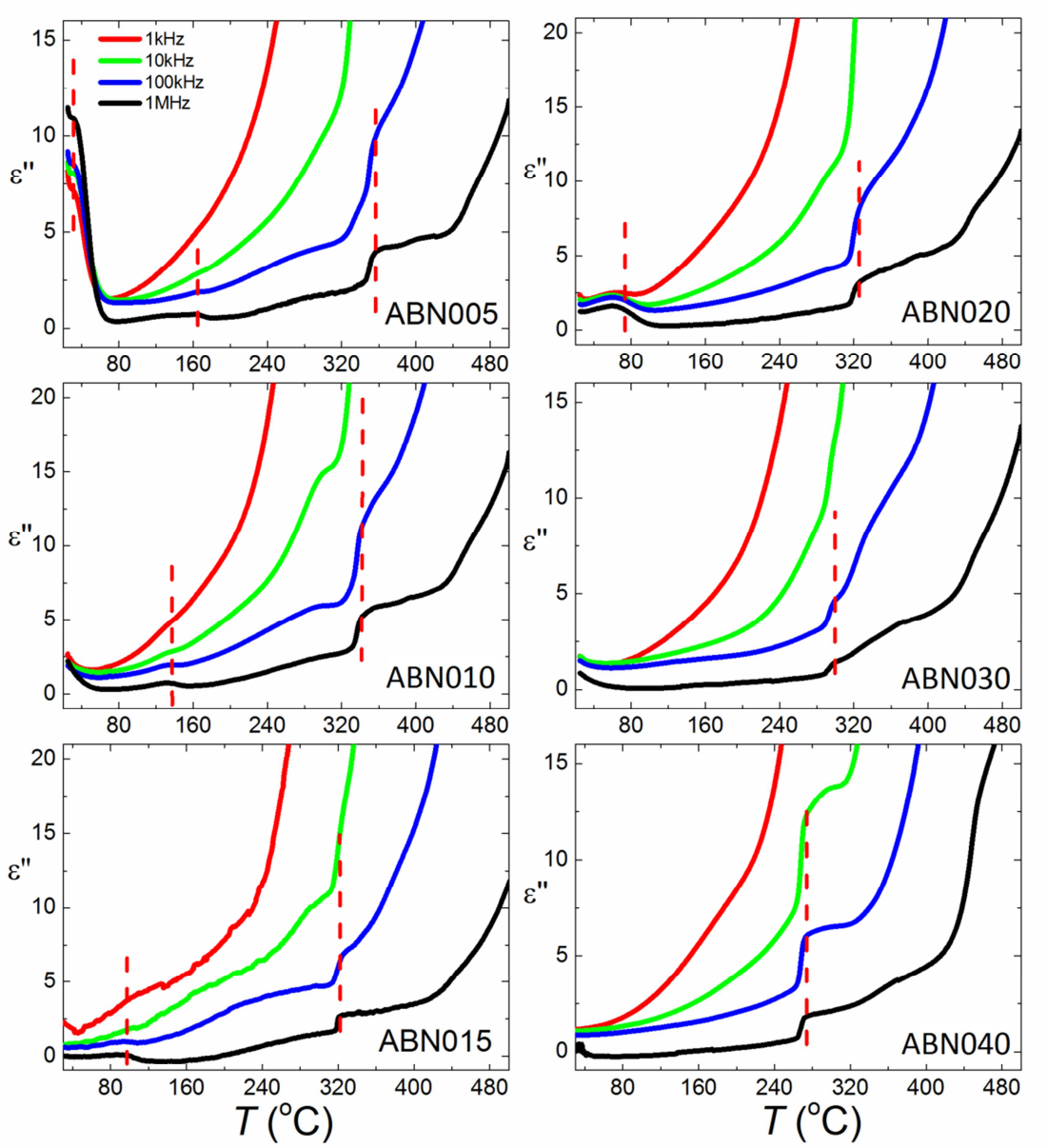

Fig. S2. Temperature dependence on heating of imaginary (ε″) part of dielectric permittivity in ABN*x* ceramics.

Table S1: Crystal and Refinement parameters for $Ag_{1-3x}Bi_xNbO_3$. Estimated standard deviations are given in parentheses.

Chemical formula	$Ag_{0.985}Bi_{0.005}NbO_3$	$Ag_{0.97}Bi_{0.01}NbO_3$	$Ag_{0.955}Bi_{0.015}NbO_3$	$Ag_{0.94}Bi_{0.02}NbO_3$	$Ag_{0.91}Bi_{0.03}NbO_3$	$Ag_{0.88}Bi_{0.04}NbO_3$
Formula weight	248.20 g mol^{-1}	257.62 g mol^{-1}	247.05 g mol^{-1}	246.48 g mol^{-1}	245.33 g mol^{-1}	244.19 g mol^{-1}
Crystal system	Orthorhombic	Orthorhombic	Orthorhombic	Orthorhombic	Orthorhombic	Orthorhombic
Space group	*Pbcm*	*Pbcm*	*Pbcm*	*Pbcm*	*Pbcm*	*Pbcm*
Unit cell dimensions	a = 5.5502(2) Å	a = 5.5484(2) Å	a = 5.5471(2) Å	a = 5.5448(2) Å	a = 5.5426(1) Å	a = 5.5411(1) Å
	b = 5.6059(2) Å	b = 5.6033(2) Å	b = 5.6011(2) Å	b = 5.5986(2) Å	b = 5.5952(1) Å	b = 5.5923(1) Å
	c = 15.6607(5) Å	c = 15.6688(5) Å	c = 15.6765(5) Å	c = 15.6819(5) Å	c = 15.6935(4) Å	c = 15.7055(3) Å
Volume	487.27(3) $Å^3$	487.14(3) $Å^3$	487.08(3) $Å^3$	486.83(3) $Å^3$	486.69(2) $Å^3$	486.68(2) $Å^3$
Z	8	8	8	8	8	8
Density(calculated)	6.766 g cm^{-3}	6.753 g cm^{-3}	6.738 g cm^{-3}	6.724 g cm^{-3}	6.696 g cm^{-3}	6.665 g cm^{-3}
R-factors[a]	R_{wp} = 0.0401	R_{wp} = 0.0373	R_{wp} = 0.0409	R_{wp} = 0.0369	R_{wp} = 0.0328	R_{wp} = 0.0348
	R_p = 0.0282	R_p = 0.0256	R_p = 0.0289	R_p = 0.0263	R_p = 0.0243	R_p = 0.0251
	R_{ex} = 0.0165	R_{ex} = 0.0160	R_{ex} = 0.0166	R_{ex} = 0.0163	R_{ex} = 0.0164	R_{ex} = 0.0595
	R_F^2 = 0.1274	R_F^2 = 0.1084	R_F^2 = 0.1757	R_F^2 = 0.1208	R_F^2 = 0.1081	R_F^2 = 0.1164
Total No. of variables	27	27	27	27	27	27
No. of profile points used	3460	3460	3460	3460	3460	3460

[a] For definition of R-factors see A. C. Larson and R. B. Von Dreele, *Los Alamos National Laboratory Report*, No. LAUR-86–748, 1987.