

**An effective approach to achieve high energy storage density and
efficiency in BNT-based ceramics by doping AgNbO₃**

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Table S1 Summary of energy storage performance of recently reported ceramics.

Compound	W_{rec} (J/cm ³)	η (%)	Ref	Years
(1-x)[(Na _{0.5} Bi _{0.5}) _{0.95} Ba _{0.05}] _{0.98} La _{0.02} TiO ₃ - xK _{0.5} Na _{0.5} NbO ₃	1.10	80	1	2019
Ba _{0.65} Sr _{0.245} Bi _{0.07} TiO ₃ -xCu	1.28	76	2	2019
[(Bi _{1-x} La _x) _{0.5} Na _{0.5}] _{0.94} Ba _{0.06} (Ti _{1-5y/4} Nb _y)O ₃	1.28	70	3	2019
(1-x)(0.65BaTiO ₃ -0.35Bi _{0.5} Na _{0.5} TiO ₃)- xSrY _{0.5} Nb _{0.5} O ₃	1.36	73	4	2018
0.72Bi _{0.5+x} Na _{0.5} TiO ₃ -0.22SrTi _{0.875} Nb _{0.1} O ₃ - 0.06BaTiO ₃	0.86	83	5	2019
(0.94-x)Bi _{0.5} Na _{0.5} TiO ₃ -0.06BaTiO ₃ - xSrTi _{0.875} Nb _{0.1} O ₃	1.17	91	6	2018
Srx(Bi _{1-x} Na _{0.97-x} Li _{0.03}) _{0.5} TiO ₃	1.70	87	7	2018
NaNb _{1-x} Ta _x O ₃	0.9	87	8	2019
(1-x) (Bi _{0.5} Na _{0.5})TiO ₃ -x(Ba _{0.85} Ca _{0.15})(Zr _{0.1} Ti _{0.9})O ₃	0.95	69	9	2019
This work	1.40	82	-	-

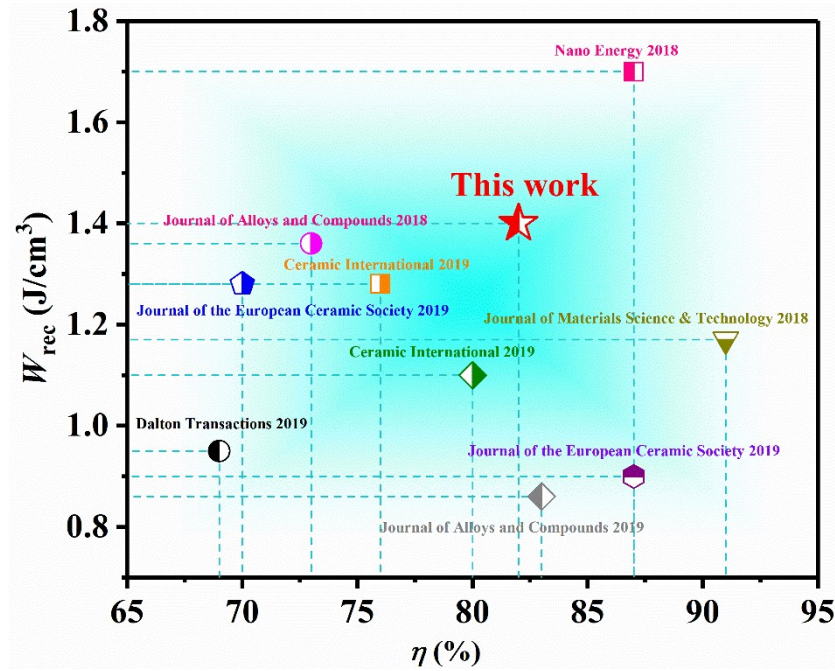


Fig S1. The comparison in the energy storage property of BNBLT-0.01AN and the other ceramics.

Table S2 refinement parameters of the BNBLT- x AN ceramics

compositions	Space				fraction/%	$R_{wp}/\%$	$R_p/\%$
	group	a	b	c			
$x=0$	P4bm	5.5253	5.5253	3.9081	20.1	3.09	2.22
	R3c	5.5231	5.5231	13.5208	44.3		
	Fd3m	10.3581	10.3581	10.3581	35.6		
$x=0.01$	P4bm	5.5340	5.5340	3.9116	16.4	3.90	2.66
	R3c	5.5295	5.5295	13.5570	42.5		
	Fd3m	10.3720	10.3720	10.3720	41.1		
$x=0.02$	P4bm	5.5324	5.5324	3.9132	16.7	3.60	2.53
	R3c	5.5254	5.5254	13.5518	50.6		
	Fd3m	10.3679	10.3679	10.3679	32.7		
$x=0.03$	P4bm	5.5276	5.5276	3.9087	12.8	4.03	2.76
	R3c	5.5274	5.5274	13.5406	52.6		
	Fd3m	10.3708	10.3708	10.3708	34.6		
$x=0.04$	P4bm	5.5243	5.5243	3.9116	10.9	3.62	2.74
	R3c	5.5212	5.5212	13.5431	55.2		
	Fd3m	10.3701	10.3701	10.3701	33.9		

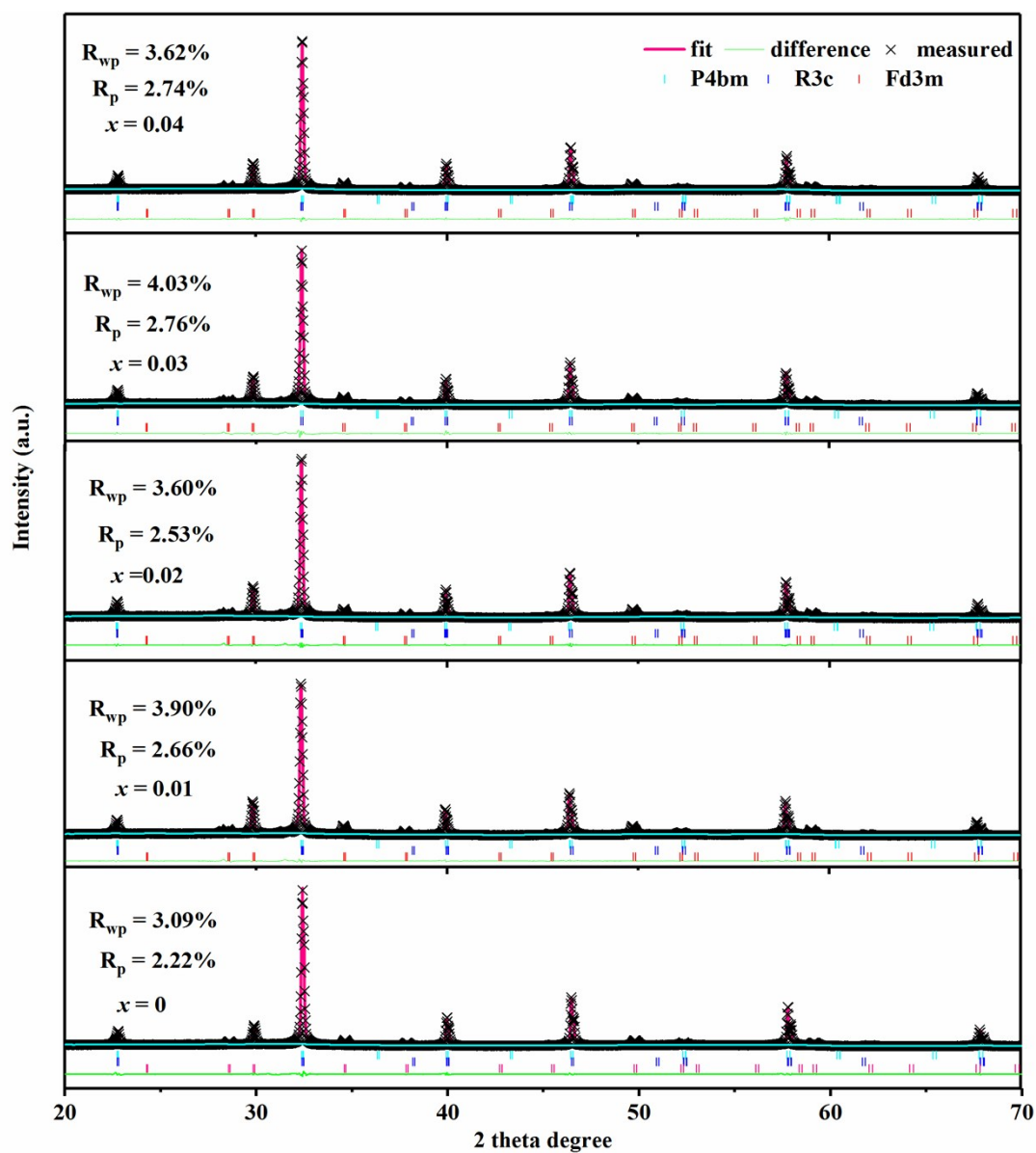


Fig S2. Rietveld refinement for XRD patterns of BNBLT- x AN ceramics with $x = 0, 0.01, 0.02, 0.03$ and 0.04 .

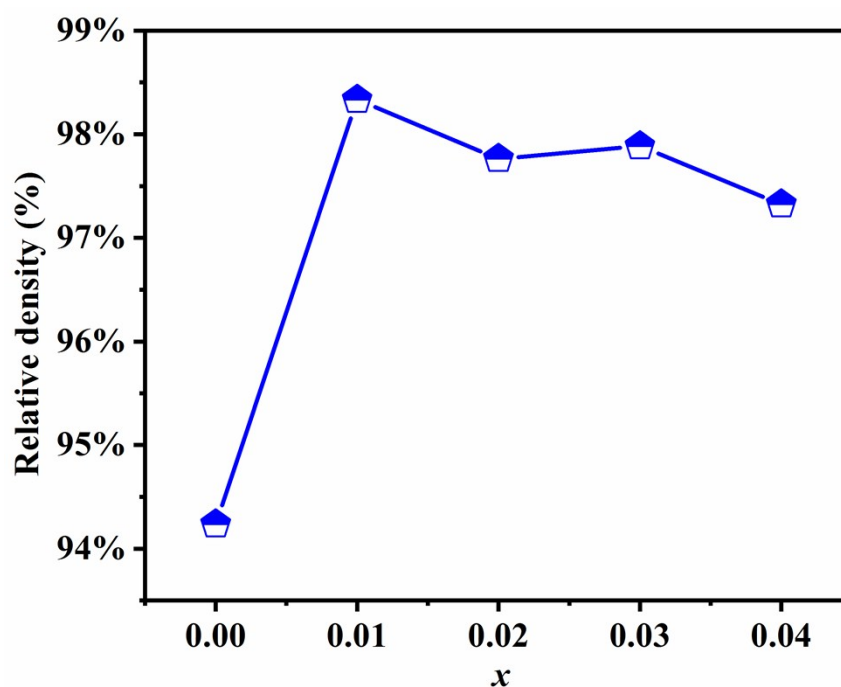


Fig S3. The relative density of BNBLT- x AN ceramics with $x = 0, 0.01, 0.02, 0.03$ and 0.04 .

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