Supplementary Materials

Effect of non-intrinsic factors on pulse discharge and energy releasing performance of dielectric ceramics

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As show the Table S1, the test equipment type, samples size and resistance are different in different paper. And even, the mostly information is missing in several papers.

Table S1. Charge-discharge condition and $t_{0.9}$ of recently developed energy storage ceramics

Ref	Composition	Equipment type	Samples Size	Over-damped resistance(Ω)	P_{max}	$W_{dis\text{-}max}$	$t_{0.9}$
[1]	(1-x)$SrTiO_3$-x($_{0.93}Bi_{0.5}Na_{0.5}TiO_3-0.07Ba_{0.94}Sm_{0.04}Zr_{0.02}Ti_{0.98}O_3$)	CPR1701-100, PloyK, USA	none	1000	none	1.1J/cm^3(150kV/cm)	0.18μs
[2]	(1-*x*)(0.75$Na_{0.5}Bi_{0.5}TiO_3$-0.25$SrTiO_3$)-*x*Ag($Nb_{0.85}Ta_{0.15}$)O_3	Self-built	none	628.5	none	0.16J/cm^3(10kV/cm)	340ns
[3]	(1-x)(0.65$Bi_{0.5}Na_{0.5}TiO_3$-0.35$Bi_{0.1}Sr_{0.85}TiO_3$)-x($K_{0.5}Na_{0.5}NbO_3$)	Self-built	none	208	none	1.21J/cm^3(120MV/m)	1.01μs

[4]	(1-*x*)($0.6Bi_{0.5}Na_{0.5}TiO_3$-$0.4Sr_{0.7}Bi_{0.2}TiO_3$)-*x*$AgNbO_3$	Tongguo instruments technology, CFD-001	Thickness: 0.2mm Diameter: 2mm	300	none	1.50J/cm^3(120kV/cm)	194ns
[5]	$0.9(Sr_{0.7}Bi_{0.2})TiO_3$–$0.1Bi(Mg_{0.5}Me_{0.5})O_3$ (Me = Ti, Zr, and Hf)	CRP1701, PolyK	none	2000	none	1.0J/cm^3(160kV/cm)	1.25μs
[6]	0.95SBKT−0.05NN	none	none	102	54.1MW/cm^3	2.1J/cm^3(220kV/cm)	0.33μs
[7]	0.98(BNT–ST)–0.02 $BaBi_2Nb_2O_9$	Tongguo instruments technology, CFD-001	none	200	30.57MW/cm^3	0.72J/cm^3(120kV/cm)	0.3μs
[8]	$0.9BaTiO_3$-$0.1(Bi_{0.9}Na_{0.1})(In_{0.8}Zr_{0.2})O_3$	none	none	270	none	0.46J/cm^3(100kV/cm)	0.19μs
This work	$0.55Bi_{0.5}Na_{0.5}TiO_3$-$0.45Ba_{0.85}Ca_{0.15}Ti_{0.85}Zr_{0.1}Sn_{0.05}O_3$	Tongguo instruments technology, CFD-003	Thickness: 0.3mm Diameter: 4mm	100	17.5MW/cm^3	0.23J/cm^3(100kV/cm)	143ns

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