Supplementary material

The role of secondary phase in enhancing transduction coefficient of piezoelectric energy harvesting composites

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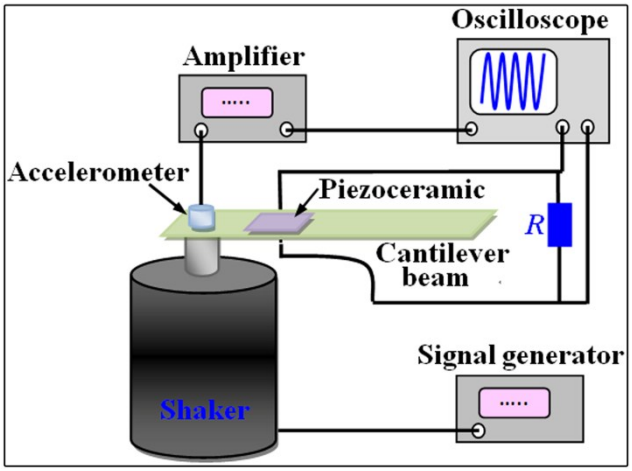

Fig. S1 The schematic diagram of the PEHs system.

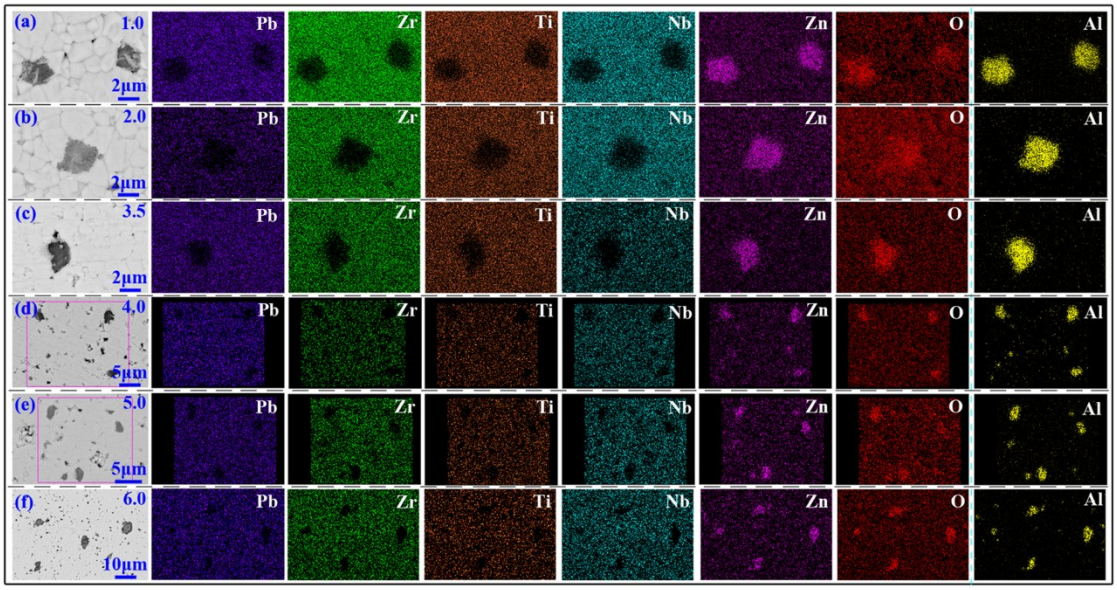

Fig. S2 Backscattered electron SEM image and corresponding element distribution mapping of PZN–PZT + *x* mol.% AlN ceramics: (a) *x*=1.0, (b) *x*=2.0, (c) *x*=3.5, (d) *x*=4.0, (e) *x*=5.0, (f) *x*=6.0.

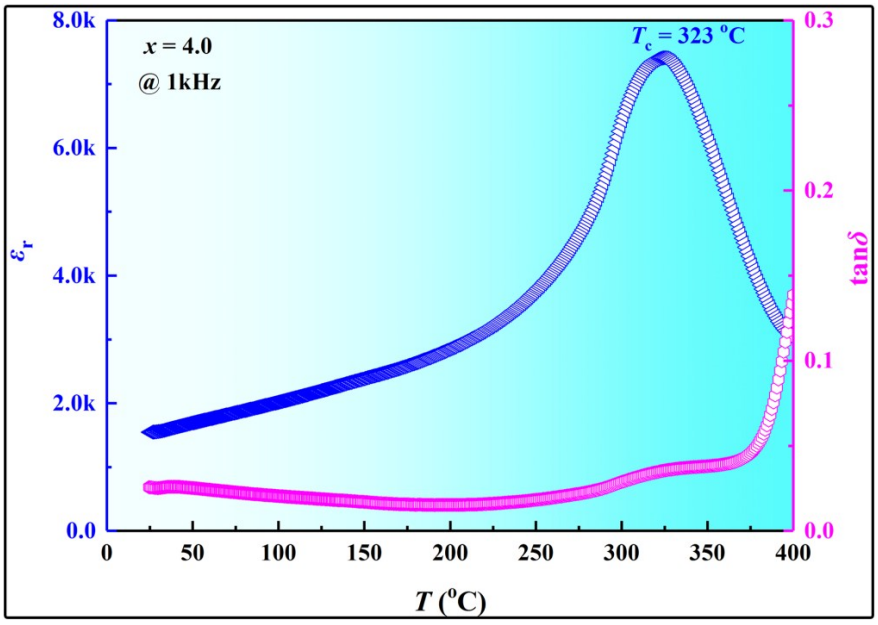

Fig. S3 Temperature dependence of dielectric properties measured at 1 kHz for poled x=4.0 composite.

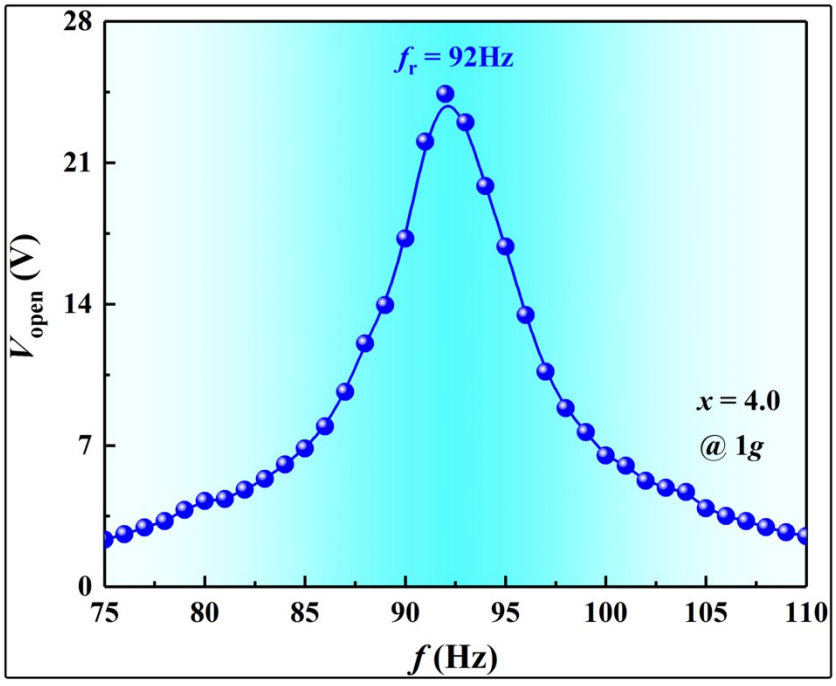

Fig. S4 The open circuit voltage (V_{open}) as a function of frequency (f) for the x = 4.0 PEHs.

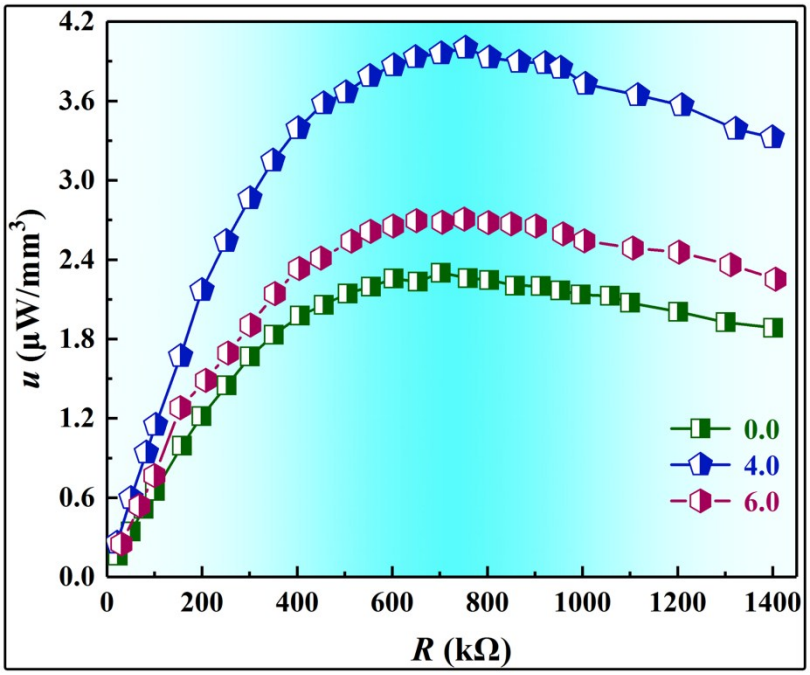

Fig. S5 Output power density (u) as a function of load resistance (R) for x = 0.0, 4.0 and 6.0 PEHs at 1 g acceleration.