Electronic Supplementary Material (ESI)

Lead-free MnTe mid-temperature thermoelectric materials: facile synthesis, p-type doping and transport properties

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Supplementary Table 1 density of different sintered samples

Samples	Pristine MnTe	0.5%Na	0.75%Na	1%Na	1.5%Na
Density (g/cm^3)	5.88	5.96	5.97	5.93	5.92

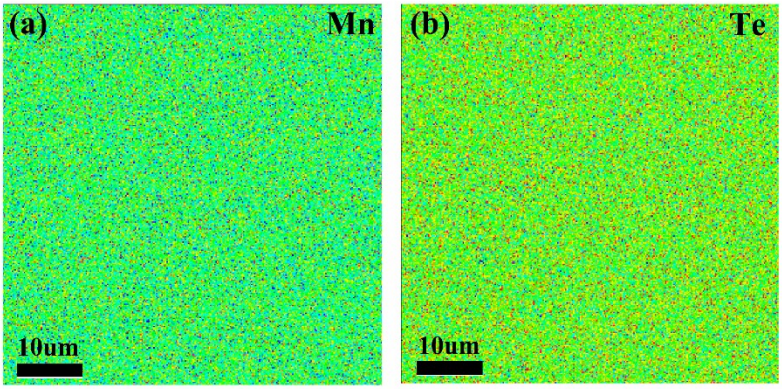

Fig.S1 EPMA mapping results ((a) Mn and (b) Te) on polished surface of pristine MnTe

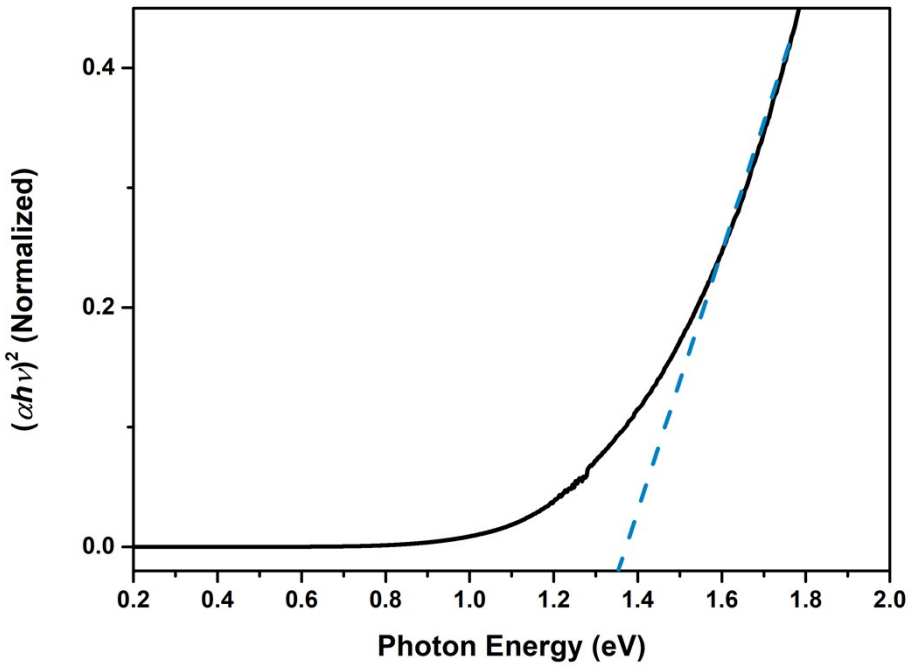

Fig.S2 Optical absorption edge measurement of pristine MnTe to determine its direct band gap.

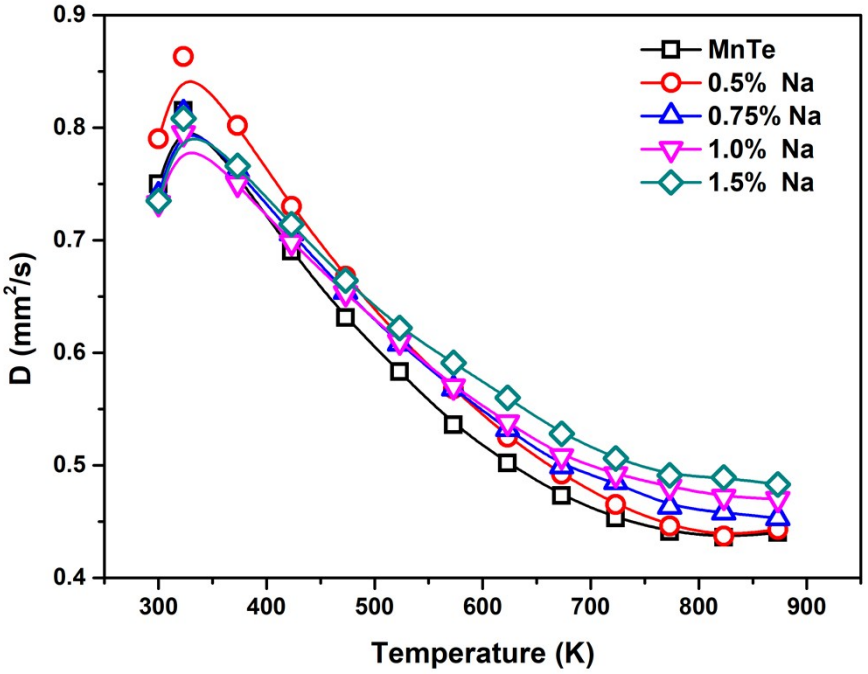

Fig.S3 Temperature dependence of thermal diffusivity for pristine and sodium doped MnTe.

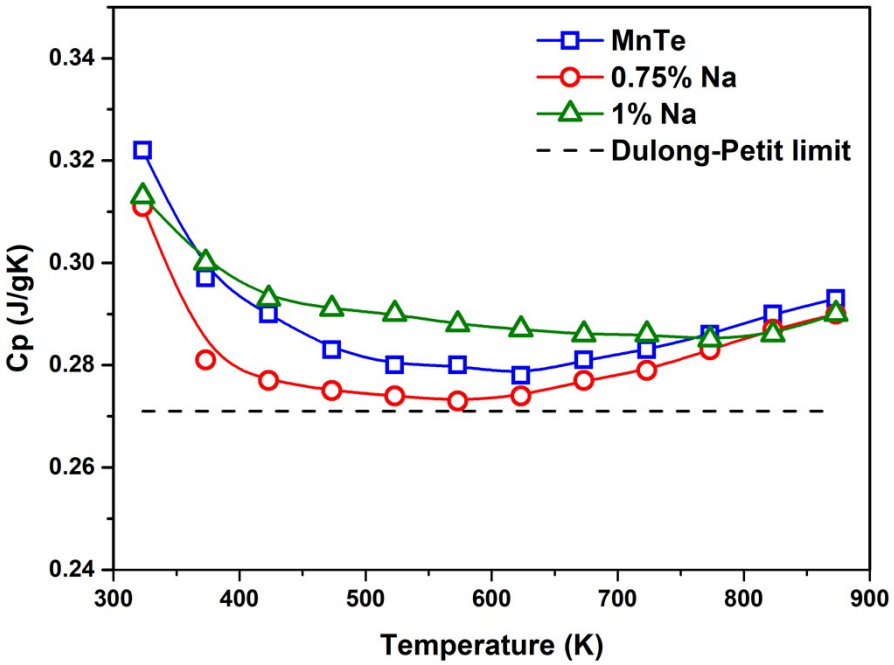

Fig.S4 Dulong-Petit *C*p and experimentally measured one as a function of temperature.

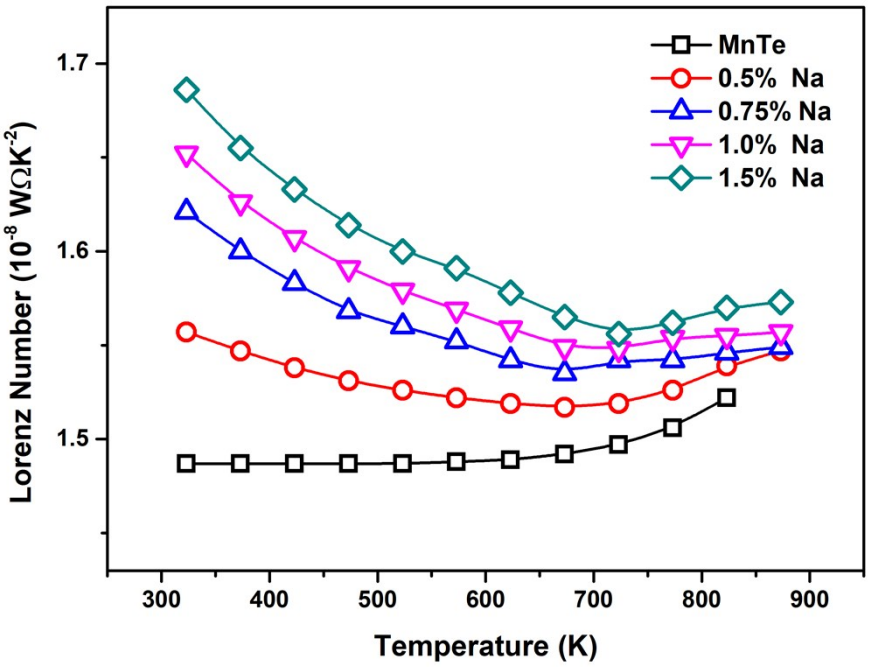

Fig.S5 Temperature dependent Lorenz Number calculated by the SPB model.