

Supporting Informations:

Manuscript ID TA-ART-03-2014-001380 entitled “Enhanced Thermoelectric Performance of a New half-Heusler Derivative $Zr_9Ni_7Sn_8$ Bulk Nanocomposite: Enhanced Electrical Conductivity and Low Thermal Conductivity.

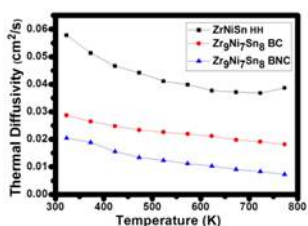


Figure S1: Temperature dependence of thermal diffusivity of ZrNiSn normal HH, $Zr_9Ni_7Sn_8$ bulk composite (BC) and $Zr_9Ni_7Sn_8$ bulk nanocomposite (BNC).

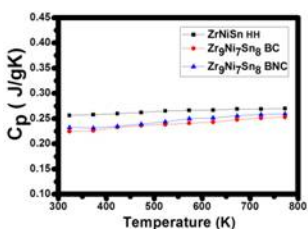


Figure S2: Temperature dependence value of specific heat (C_p) of ZrNiSn normal HH, $Zr_9Ni_7Sn_8$ bulk composite (BC) and $Zr_9Ni_7Sn_8$ bulk nanocomposite (BNC).

Table T1. Density of ZrNiSn normal HH, $Zr_9Ni_7Sn_8$ bulk composite (BC) and $Zr_9Ni_7Sn_8$ bulk nanocomposite (BNC).

Composition	ZrNiSn HH	$Zr_9Ni_7Sn_8$ BC	$Zr_9Ni_7Sn_8$ BNC
Density (g/cm ³)	7.15	7.07	7.01

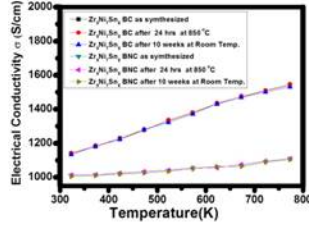


Figure S3: Comparison of temperature dependence of electrical conductivity of $Zr_9Ni_7Sn_8$ bulk composite (BC) and $Zr_9Ni_7Sn_8$ bulk nanocomposite (BNC) measured for same samples, as-synthesized, after 24 hrs at 850 °C and after 10 weeks at room temperature respectively.

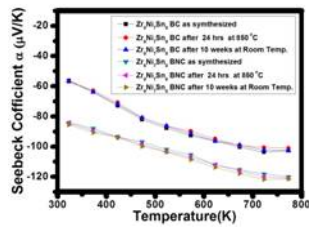


Figure S4: Comparison of temperature dependence of Seebeck Coefficient of $Zr_9Ni_7Sn_8$ bulk composite (BC) and $Zr_9Ni_7Sn_8$ bulk nanocomposite (BNC) measured for same sample, as-synthesized, after 24 hrs at 850 °C and after 10 weeks at room temperature respectively.