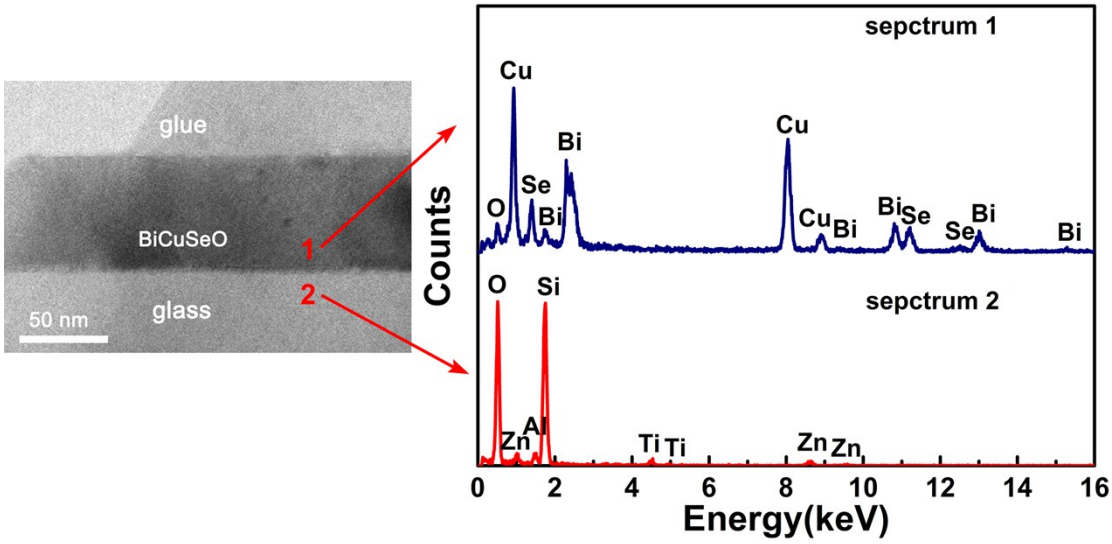

Figure 1 Cross-sectional TEM/EDX analysis of the sample at the interface between the glass substrate and the BiCuSeO film.

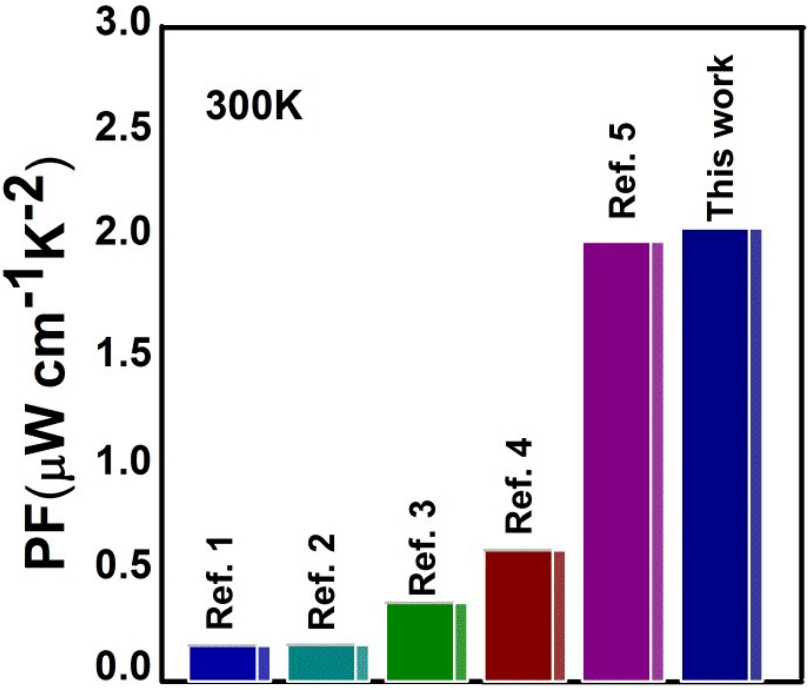

Figure 2 Comparison of power factor *PF* of the BiCuSeO thin film to that of bulk polycrystalline samples reported in Ref.1-5.

Table 1 Comparison of power factor *PF* of the BiCuSeO thin film to that of bulk polycrystalline samples with the carrier concentration in the same order as the film

Sample	**n** (cm^{-3})	**μ** ($cm^2V^{-1}s^{-1}$)	**PF** ($\mu WK^{-2}cm^{-1}$)	**Ref.**
BiCuSeO thin film	$1.1*10^{20}$	1.5	1.73	This work
$Bi_{0.09}Pb_{0.01}CuSeO$ bulks	$1.2*10^{20}$	3.3	3.40	Appl. Phys. Lett.2013, 102, 023902
$Bi_{0.975}Ca_{0.025}CuSeO$ bulks	$1.5*10^{20}$	3.2	2.40	J. Mater. Chem. A, 2013, 1,11942
$Bi_{0.95}Ca_{0.05}CuSeO$ bulks	$1.0*10^{20}$	6.0	1.20	NPG Asia Mater. 2013, 5, 47
$Bi_{0.9}Sn_{0.1}CuSeO$ bulks	$1.3*10^{20}$	2.3	1.30	Dalton Trans. 2017, 46, 2510
$Bi_{0.92}Sb_{0.08}CuSeO$ bulks	$8.6*10^{19}$	1.3	0.04	J. Alloy. Compound. 2017, 712, 386