

## Electronic Supplementary Information

### **A high performance photothermal film with spherical shell-type metallic nanocomposites for solar thermoelectric conversion**

Atsuko Kosuga,\* Yasuyuki Yamamoto, Moe Miyai, Mie Matsuzawa,  
Yushi Nishimura, Shimpei Hidaka, Kohei Yamamoto, Shin Tanaka,  
Yojiro Yamamoto, Shiho Tokonami, and Takuya Iida\*

Table S1. Resistance ( $R$ ), open circuit voltage ( $V_o$ ), maximum output power ( $P_{\max}$ ), and maximum power density ( $P'_{\max}$ ) of PTF-TE using AuNP-FB, AgNP-FB, single AuNP films, a reference film with no metallic NPs and with black body tape.

	AuNP-FB	AgNP-FB	Single AuNP	Reference (no metallic NPs)	Reference (black body)
$R$ ( $\Omega$ )	213	215	215	214	215
$V_o$ (mV)	274	231	183	61	264
$P_{\max}$ (mW)	0.088	0.062	0.039	0.004	0.081
$P'_{\max}$ (mW cm $^{-2}$ )	1.04	0.73	0.46	0.05	0.96