Supplementary Information

Figure S1 (a) the beakers with AgNO₃, Pb(CH₃COO)₂·3H₂O, K(SbO)C₄H₄O₆·0.5H₂O, Na₂TeO₃ dissolved in mixture solvents of ethylene glycol and formamide, respectively. (b) the beakers with N₂H₄ added at the same time. (c) the beakers with time prolonging.

Figure S2 (a) SEM image of particles prepared for 1 h. (b) EDS spectrum of particles prepared for 1 h, the inset is the atomic ratio of each elementals.
Figure S3 EDS spectrum of as-prepared AgPb$_{10}$SbTe$_{12}$ rods.