Supplemental Document

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LUYI HUANG,[1] LING ZHANG,[1,5] JUNJIE ZHOU,[1] MIN LI,[1] CHUANG LI,[2] CHUANQI LI,[2] JINGQUAN ZHANG,[2,6] SHENGHAO WANG,[3] AND HEPING ZENG[1,4]

[1] *School of Optical-Electrical and Computer Engineering, University of Shanghai for Science and Technology, Shanghai 200093, China*
[2] *College of Materials Science and Engineering, Sichuan University, Chengdu 610065, China*
[3] *Materials Genome Institute, Shanghai University, Shanghai 200444, China*
[4] *State key laboratory of Precision Spectroscopy, East China Normal University, Shanghai 200062, China*
[5] *lzhang@usst.edu.cn*
[6] *zhangjq@scu.edu.cn*

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Surface Plasmon Enhanced THz Emission with Nanoporous Gold Supported CdTe

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[1]*School of Optical-Electrical and Computer Engineering, University of Shanghai for Science and Technology, Shanghai 200093, China*

[2]*College of Materials Science and Engineering, Sichuan University, Chengdu 610065, China*

[3]*Materials Genome Institute, Shanghai University, Shanghai 200444, China*

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[5]*lzhang@usst.edu.cn*

[6]*zhangjq@scu.edu.cn*

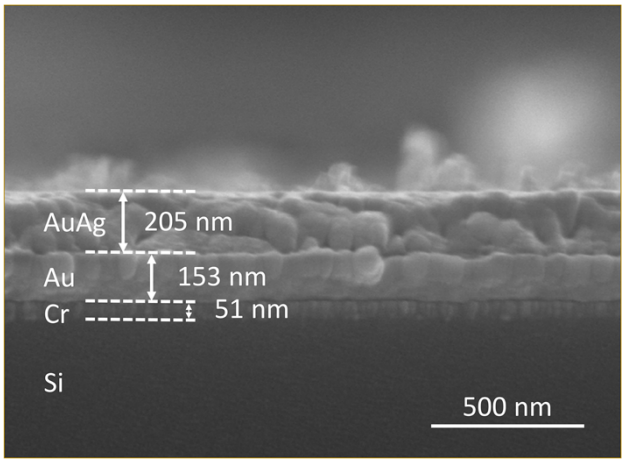

Fig. S1 SEM image of the cross section of sputtered $Au_{25}Ag_{75}$ (wt. %) alloy film.

The $Au_{25}Ag_{75}$ (wt. %) alloy film consists of three layers. On the silicon substrate, there are a Cr layer with the thickness of 51nm, an Au layer with the thickness of 153 nm and an AuAg alloy layer with the thickness of 205 nm.

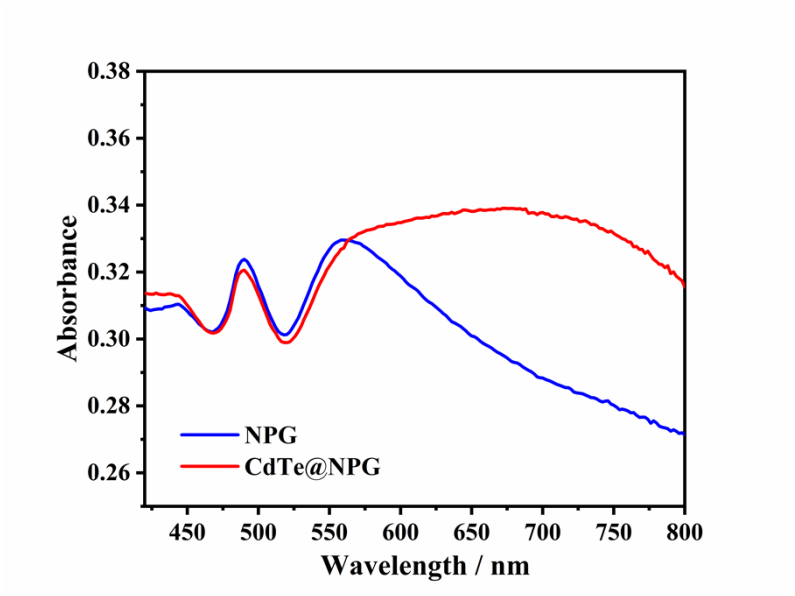

Fig. S2 Absorption spectra of NPG film and CdTe@NPG film.

Typical UV-Vis back-scattering spectra of NPG film and Cd@NPG film are presented in Fig. S2. Both the spectra shows two peaks, the lower peaks located around 500 nm represents the absorbance of Au, and the higher peaks which represents the localized surface plasmon resonance absorbance from CdTe@ NPG redshift and broaden compared to NPG.