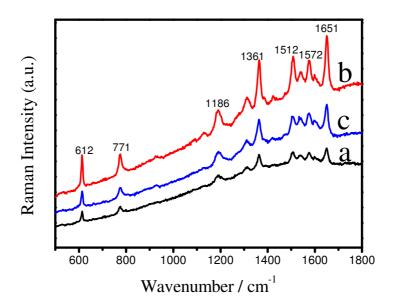
## **Supporting Information**

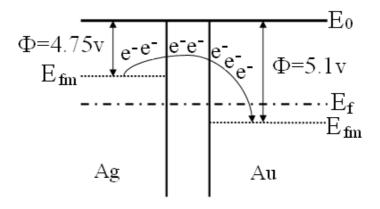
Selective Growth of Ag Nanodewdrop on the Tips of Nanopetals of Au Flowers: A New Type Bimetallic Heterostructure

Li Gao<sup>a</sup>, Louzhen Fan<sup>a</sup>\*, Jian Zhang<sup>b</sup>\*

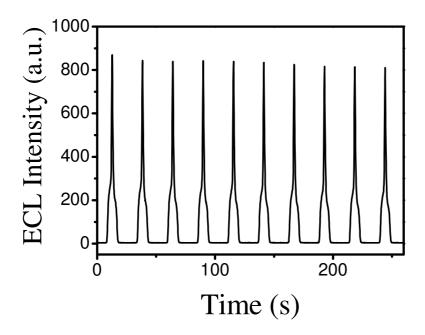
<sup>a</sup>Department of Chemistry, Beijing Normal University, Beijing, China, 100875 <sup>b</sup>Center for Fluorescence Spectroscopy, University of Maryland School of Medicine, Department of Biochemistry and Molecular Biology, 725 West Lombard Street, Baltimore, MD 21201



**Figure S1**. SERS spectra (a 514 nm line of a He-Cd laser as the excitation source) of R6G molecules absorbed onto the (a) bare Au flowers, (b) orientated Au-Ag HSFs, and (c) non orientated Au-Ag HSFs in Figure 3 with the Ag particles on the either tips or falloff petals of the Au flowers.



**Figure S2.** The band structure of Ag and Au with uniform Fermi level induced by electron transfer between Ag and Au components.



**Figure S3.** ECL emission from Au-Ag HSFs in 0.1 M PBS (pH 7.0) with 1 mM  $H_2C_2O_4$  under continuous and repeatable cyclic scans from 0 to 1.25 V at scan rate = 100 mV s<sup>-1</sup>.