

**(Support information)**

**Improved Raman and Photoluminescence Sensitivity Achieved Using  
Bifunctional Ag@SiO<sub>2</sub> Nanocubes**

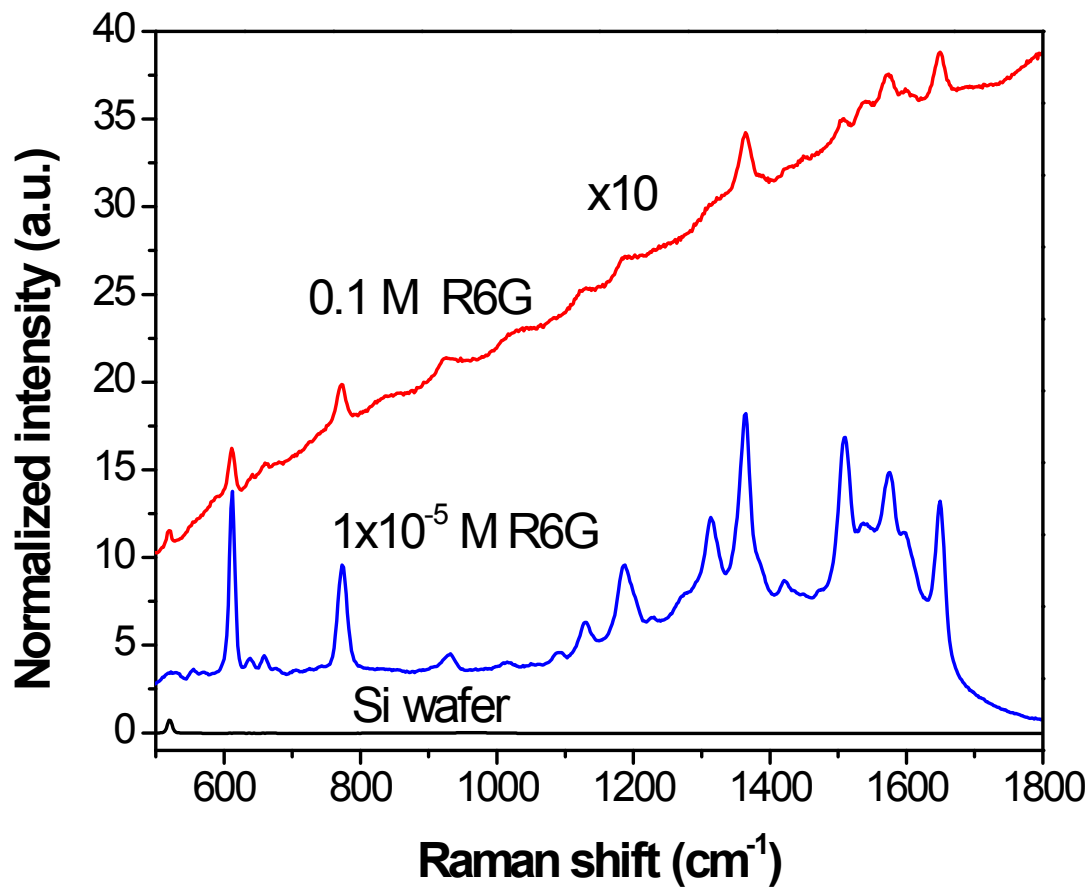
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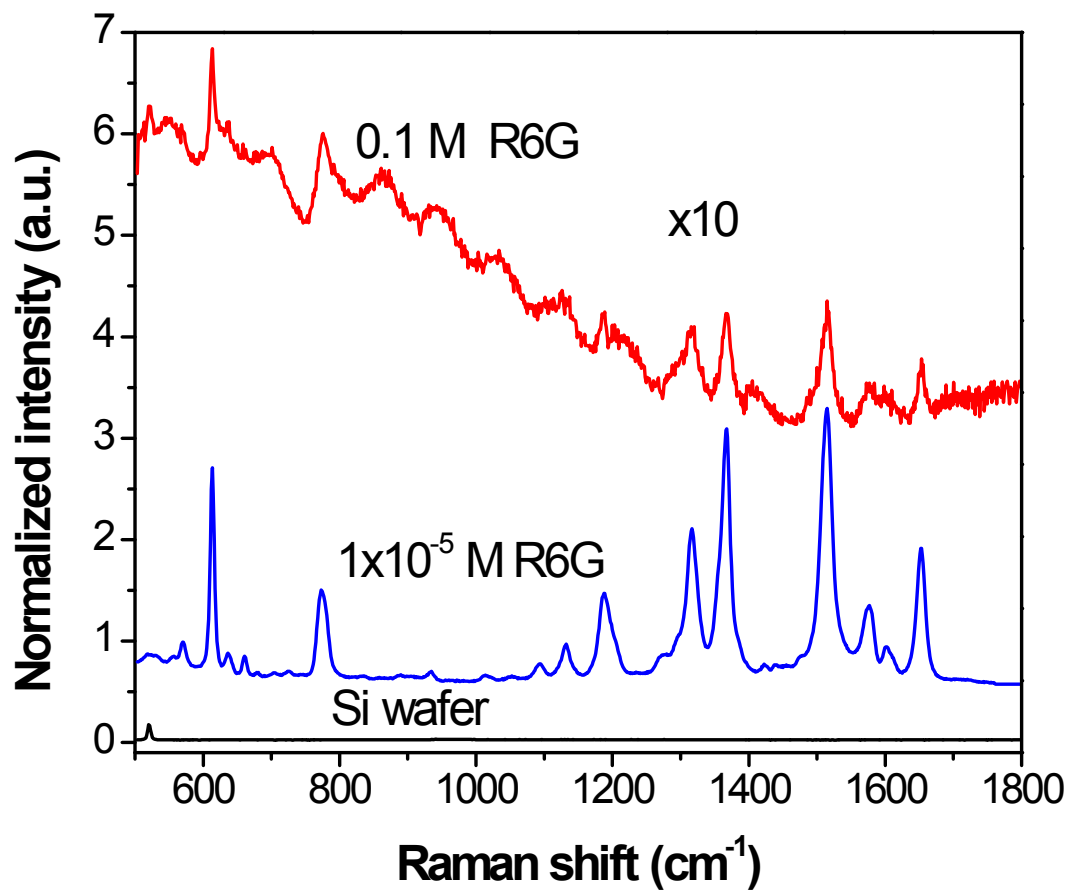
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**Fig. S1** Raman spectra with the excitation laser 532 nm of silicon wafer,  $1 \times 10^{-5}$  M R6G on the Ag NCs substrate, and 0.1 M R6G on a silicon substrate (10 times)



**Fig. S2** Raman spectra with the excitation laser 632.8 nm of silicon wafer,  $1 \times 10^{-5}$  M R6G on the Ag NCs substrate, and 0.1 M R6G on a silicon substrate (10 times)