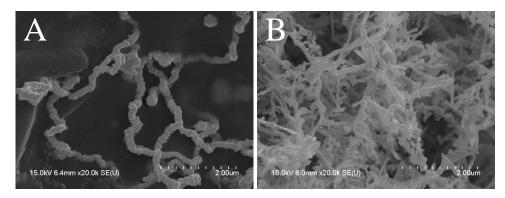
Article

## One-Step Synthesis of Au-Ag Nanowires through Microorganism-Mediated, CTAB-Directed Approach

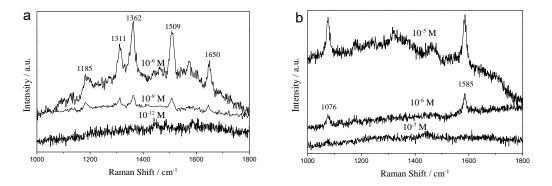
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## Cultivation of PPCs and Preparation of Their Powder

The typical conditions are as follows. The medium used for growing PPCs contained yeast extract (10 g L<sup>-1</sup>), peptone (20 g L<sup>-1</sup>), and glucose (20 g L<sup>-1</sup>) in deionized water. After the cells were incubated for 48 h at 30 °C and 150 rpm, they were harvested through centrifugation, and then dried in an oven (60 °C) for 24 h. The dried cells were then crushed into fine powders, which were screened through a 100-mesh sieve. The screened cell powder was stored in a desiccator.



**FigS1.** (A) SEM image of the Au-Ag NWs synthesized using *Escherichia coli* cells (*E.coli*) (B) absence of PPC.



**FigS2**. SERS spectra of (**a**) R6G (10<sup>-6</sup>, 10<sup>-10</sup>, 10<sup>-12</sup>mol L<sup>-1</sup>) and (**b**) MBA, (10<sup>-5</sup>, 10<sup>-6</sup>, 10<sup>-7</sup>mol L<sup>-1</sup>) in water on Au-Ag NWs obtained at the laser wavelength of 632.8 nm.