Supporting Information

Enhancement of Magnetic Surface-Enhanced Raman Scattering Detection by Tailoring Fe_3O_4@Au Nanorod Shell Thickness and its Application in the On-site Detection of Antibiotics in Water

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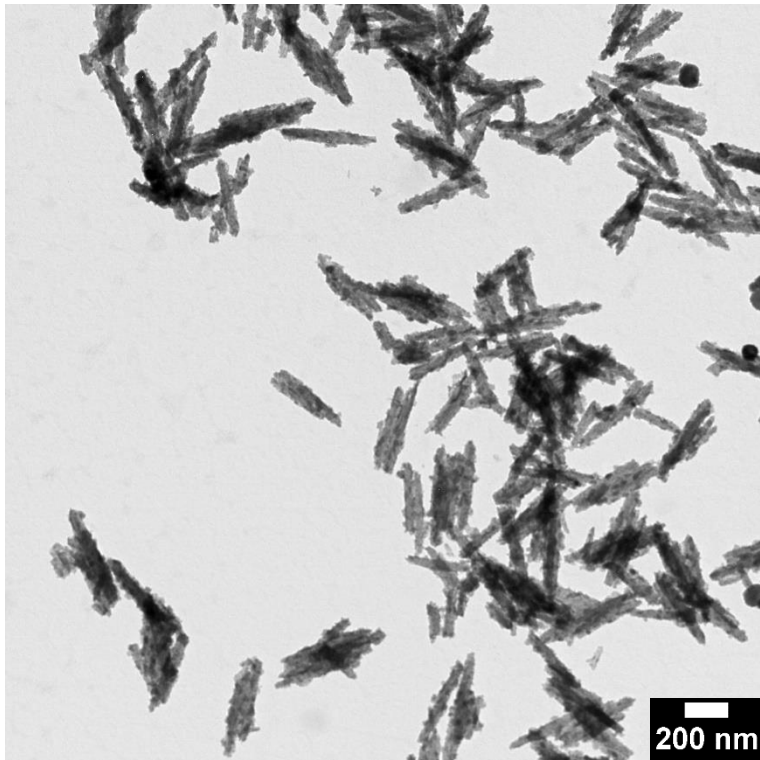*J. Reguera: javier.reguera@bcmaterials.net; L. Litti:lucio.litti@unipd.it*

Figure S1. Low magnification TEM image of Fe_3O_4-NR:Au core-satellite nanoparticles used as seed for further Au growth.
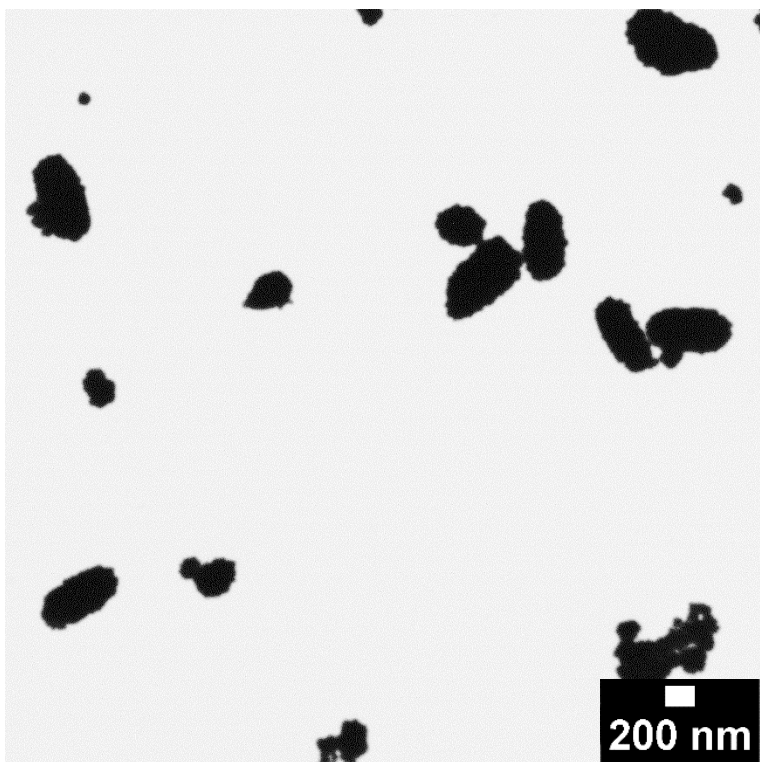

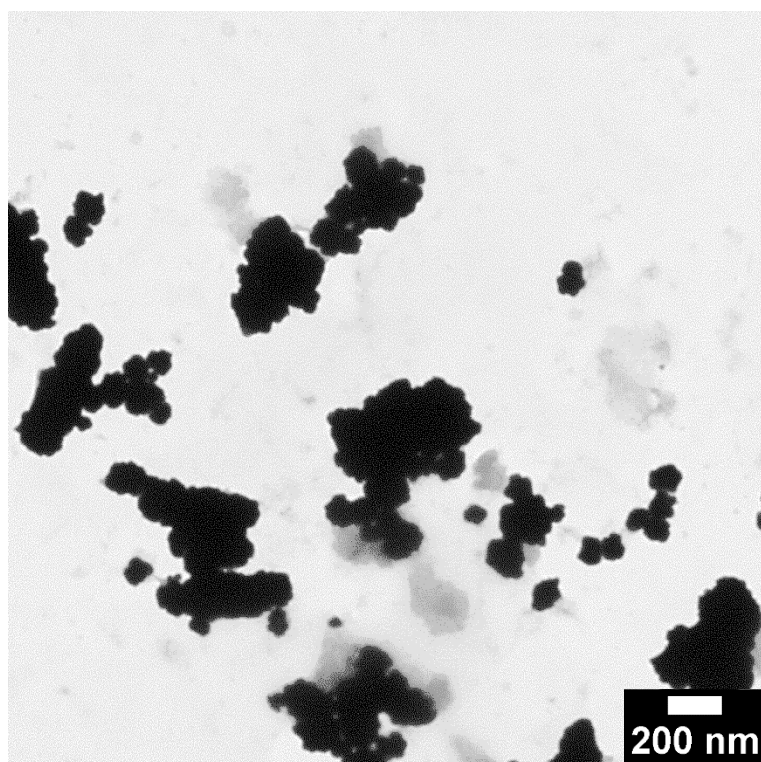**Figure S2**. Low magnification TEM image of Au coated nanorods corresponding to sample NR@Au1.

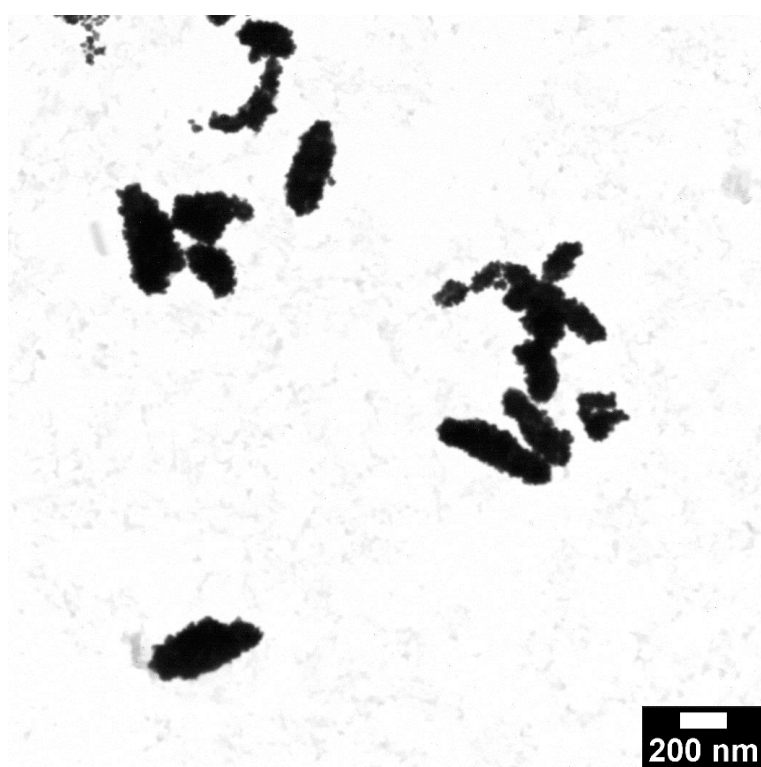**Figure S3**. Low magnification TEM image of Au coated nanorods corresponding to sample NR@Au2.

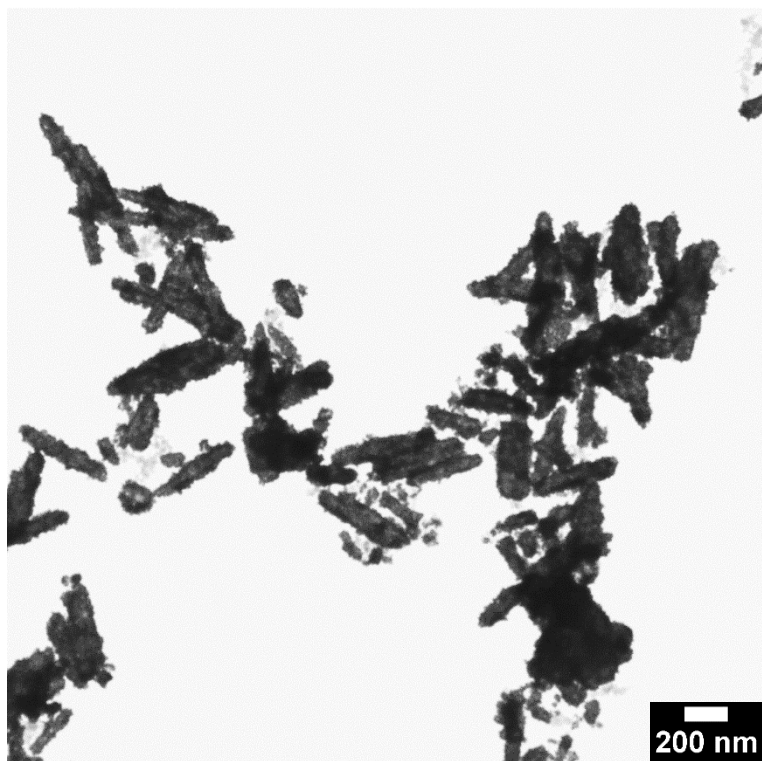**Figure S4**. Low magnification TEM image of Au coated nanorods corresponding to sample NR@Au3.

Figure S5. Low magnification TEM image of Au coated nanorods corresponding to sample NR@Au4.
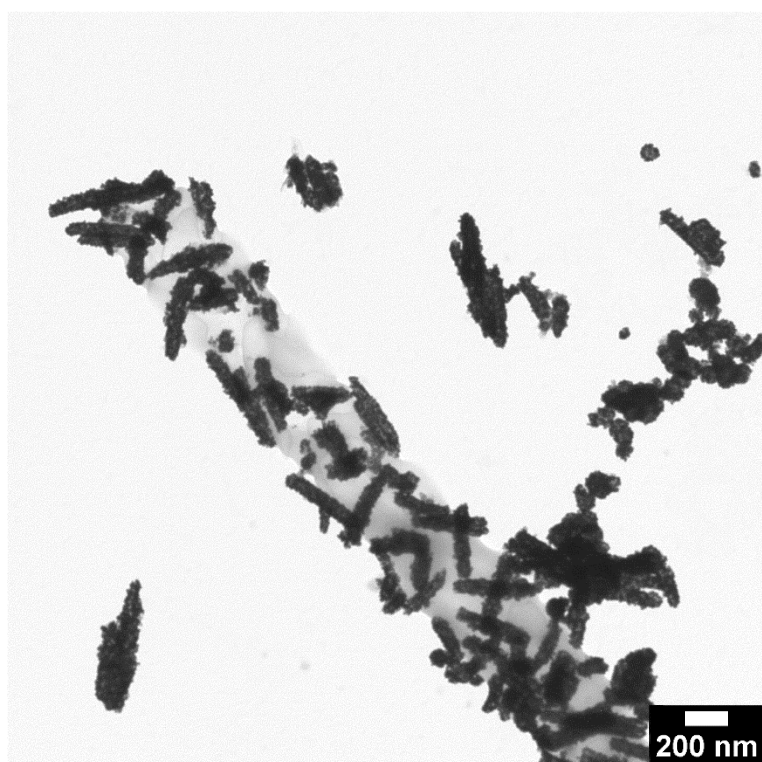

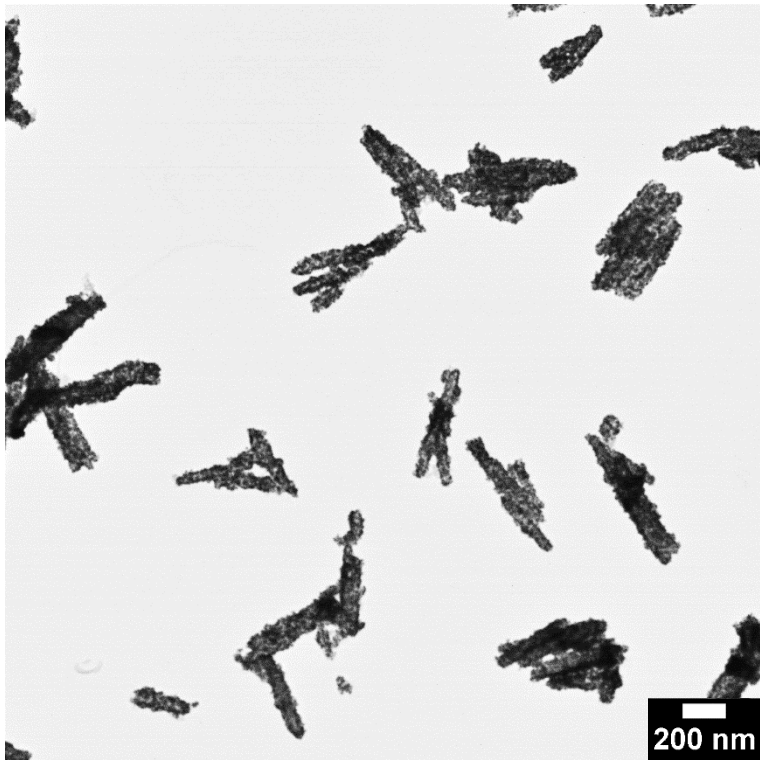**Figure S6**. Low magnification TEM image of Au coated nanorods corresponding to sample NR@Au5.

Figure S7. Low magnification TEM image of Au coated nanorods corresponding to sample NR@Au6