

Supporting Information for

Selective Etching of Gold Nanorods by Ferric Chloride at Room Temperature

Renxian Zou,^{†,‡} Xia Guo,[†] Jian Yang,^{†,*} Dandan Li,[†] Feng Peng,[†] Lei Zhang,[‡] Hongjuan Wang[†] and Hao Yu[†]

[†] Department of Chemical Engineering, School of Chemistry and Chemical Engineering, South China University of Technology, Guangzhou 510640.

[‡] Department of Pharmaceutical Engineering, School of Chemistry and Chemical Engineering, South China University of Technology, Guangzhou 510640.

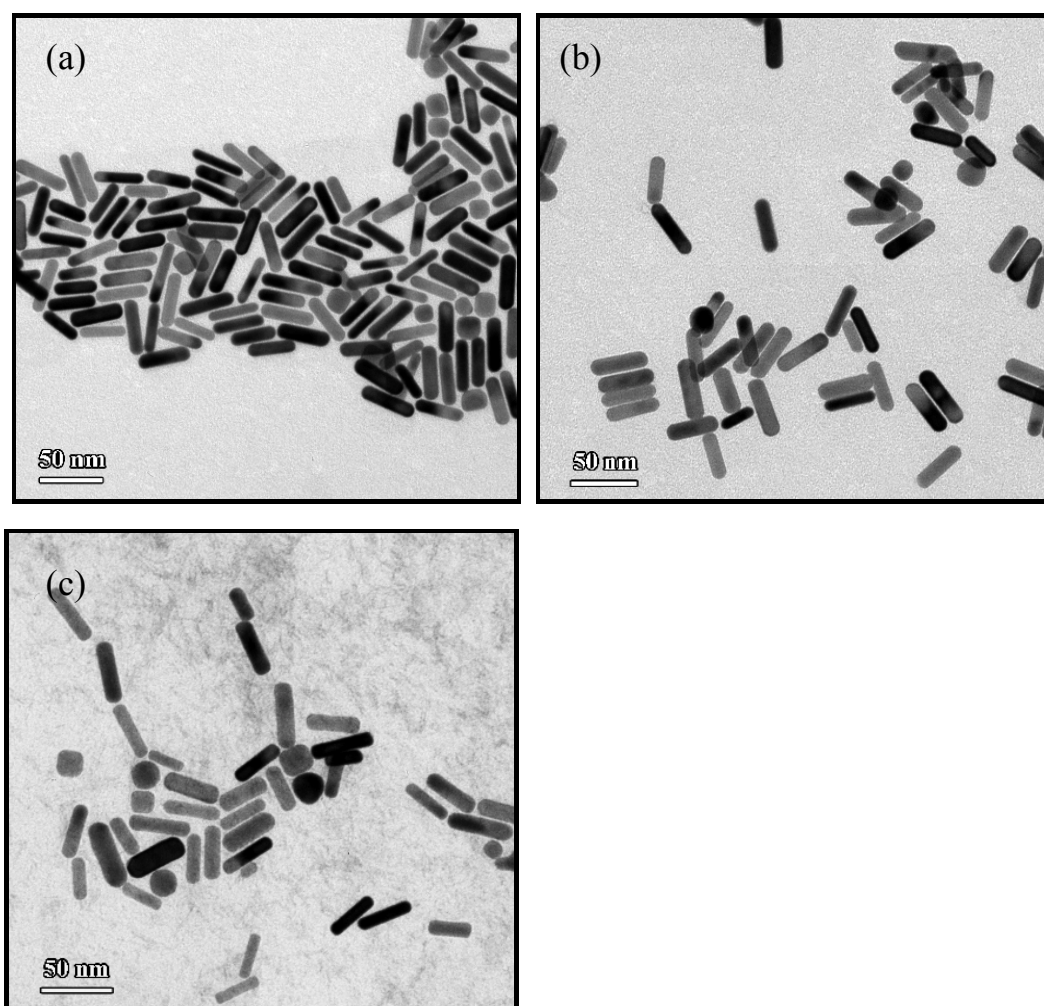


Fig. S1 TEM images of the gold nanorods (a, Length: 40.2 ± 5.3 nm, Diameter: 10.6 ± 1.2 nm) and those treated with CuCl_2 (b, Length: 41.0 ± 4.2 nm, Diameter: 11.6 ± 1.3 nm) or $\text{Fe}(\text{NO}_3)_3$ (c, Length: 39.1 ± 5.3 nm, Diameter: 11.0 ± 1.4 nm) at room temperature for 30 mins.

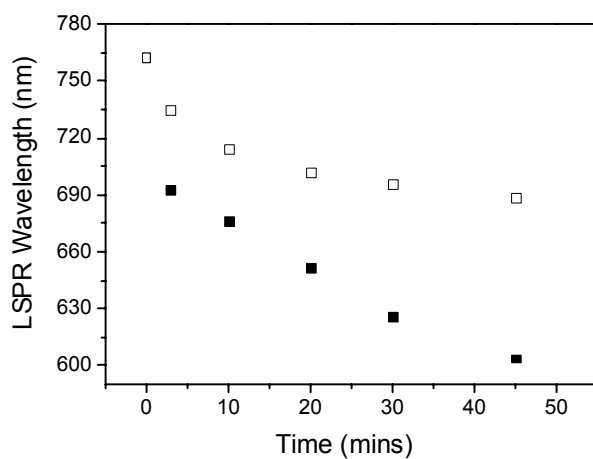


Fig. S2 The UV-Vis absorption spectra of the gold nanorods etched in the presence of 55 mM FeCl_3 and 2 mM CTAB at different temperatures. 5°C (hollow squares), 35°C (solid squares).

