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Supplementary Information for

In Situ Infrared CO Detection Using Silver Loaded EMT Zeolite Films

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The PDF file includes:

Fig. S1 ,S2 and TOC

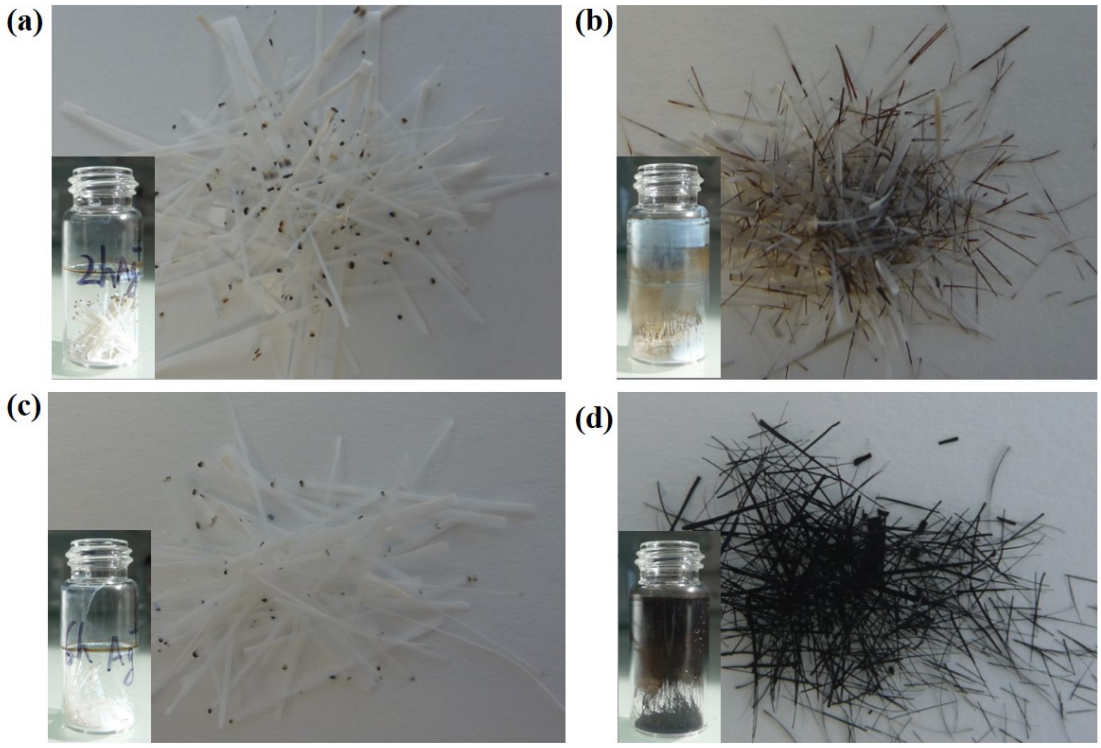

Fig. S1 After 2h and 6h ion exchange of the silver ions, EMT/Ag composite nanocrystals were reduced. To prove the great colloidal stability of the EMT/Ag composite nanocrystals, we put the colloidal solution (before and after reduction) into an oven, and then the zeolites became aligned wires during the water evaporation process, indicating that the zeolites nanocrystals have always been in a colloidal state and slowly aligned as wires with evaporation. For 2h and 6h ion exchanged EMT/Ag composite nanocrystals, the reduced samples(b)(d) are darker than that of unreduced samples(a)(c). Note that in unreduced wires, black dots can be seen at both ends of the wires which should attributed to reduced silver materials, because only silver ions at both ends of the wires can come into contact with air and be reduced when water evaporates.

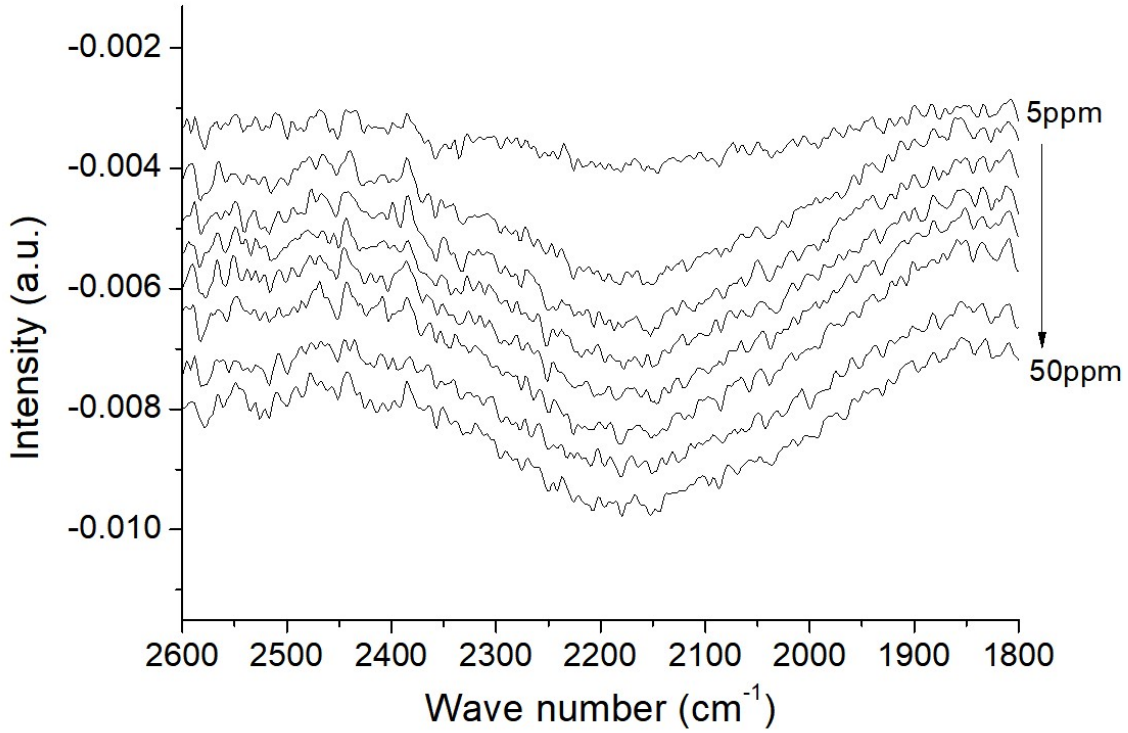

Fig. S2 No CO2 signal was detected in a silver-EMT zeolite film without the Nalco binder