

Supporting Information

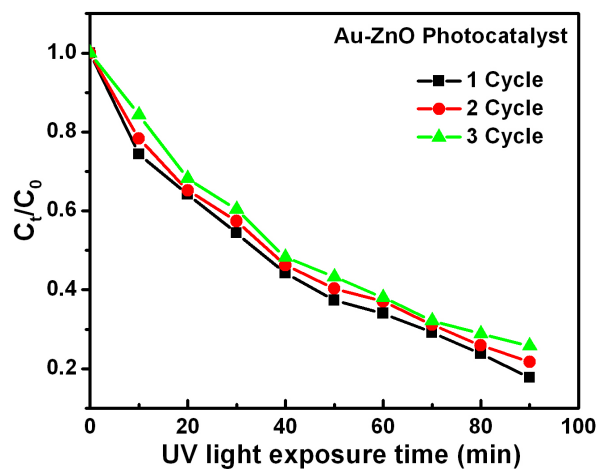


Figure S1: Time profile of the change in concentration of RhB aqueous solution for the three cycles in the presence of Au-ZnO photocatalyst.

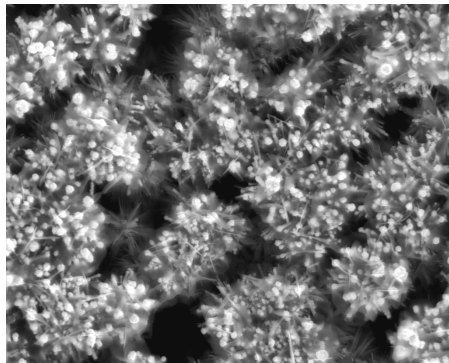


Figure S2. A typical SEM image of Au-ZnO photocatalyst after three cycle of operation

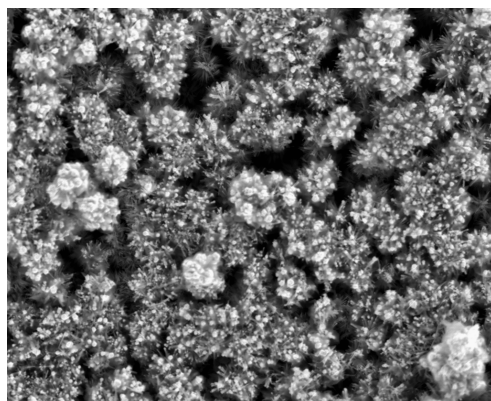


Figure S3: A typical SEM image of the Au-ZnO hybrid nanostructure after 50 cycles operation.

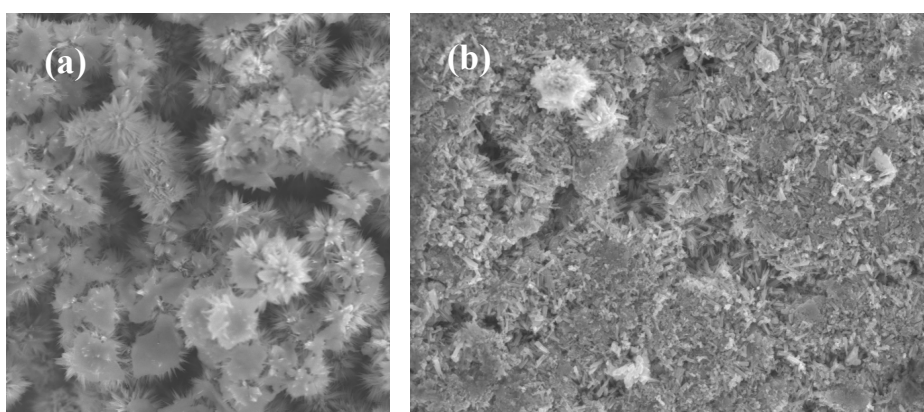


Figure S3: A typical SEM image of the pure ZnO structure after (a) 20 cycles (b) 50 cycles operation.