Supporting information for

Polyoxomolybdate-stabilized Cu₂O nanoparticles as an efficient catalyst for the azide-alkyne cycloaddition

Mojtaba Amini, Hadi Naslhajian, S. Morteza F. Farnia, Hee Kyoung Kang, Sanjeev Gautam, and Keun Hwa Chae

1. Methods

Methods

TEM measurements were carried out on pristine and irradiated samples at 200 kV using FEI, Tecnai F20 G² TEM.Scanning electron microscopy (SEM) is performed on a Nano-SEM machine (Nova 200, FEI, The Netherlands), which has an image resolution of 1.0 nm. The morphologies and sizes of the products were further observed by scanning electron microscopy (SEM, FEI XL-30 FEG, resolution < 2 nm) with energy-dispersive x-ray spectroscopy (EDX) for percentage composition. FT-IR spectrum was obtained by using a Unicam Matson 1000 FT-IR spectrophotometer using KBr disks at room temperature.

2. Further details for all experiments including characterizations by XRD, EDX and XPS.

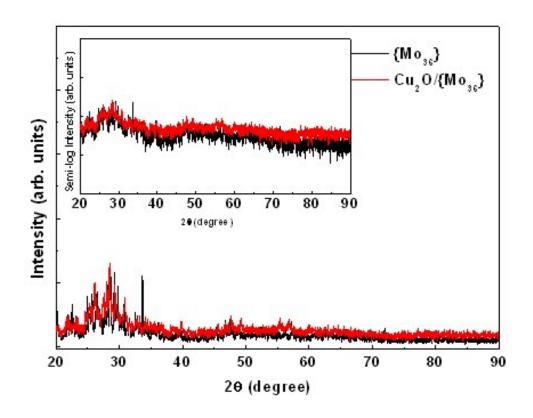
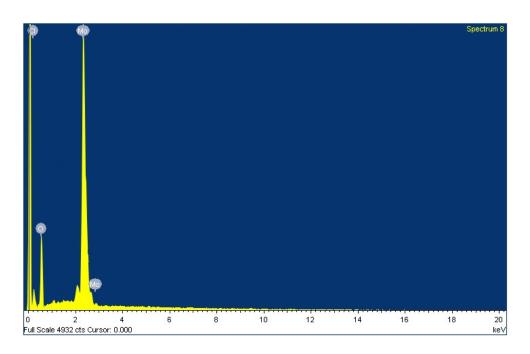


Fig. S1 XRD patterns of $\{Mo_{36}\}$ and $Cu_2O@\{Mo_{36}\}$



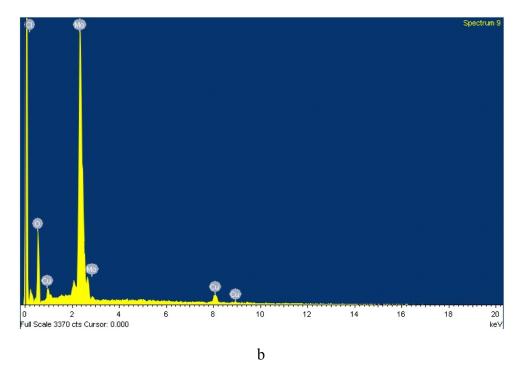


Fig. S2 EDX analysis of a) $\{Mo_{36}\}$ and b) $Cu_2O@\{Mo_{36}\}$

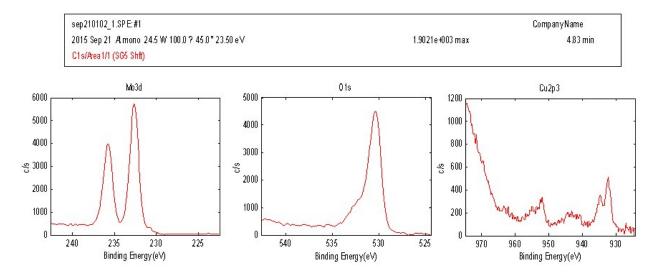


Fig. S3 XPS analysis of Cu₂O@{Mo₃₆}