

Supplementary Materials: Cucurbit[n]uril (n = 6, 7) Based Carbon-gold Hybrids with Peroxidase-like Activity

Liangfeng Zhang, Yan Zeng, Simin Liu and Feng Liang*

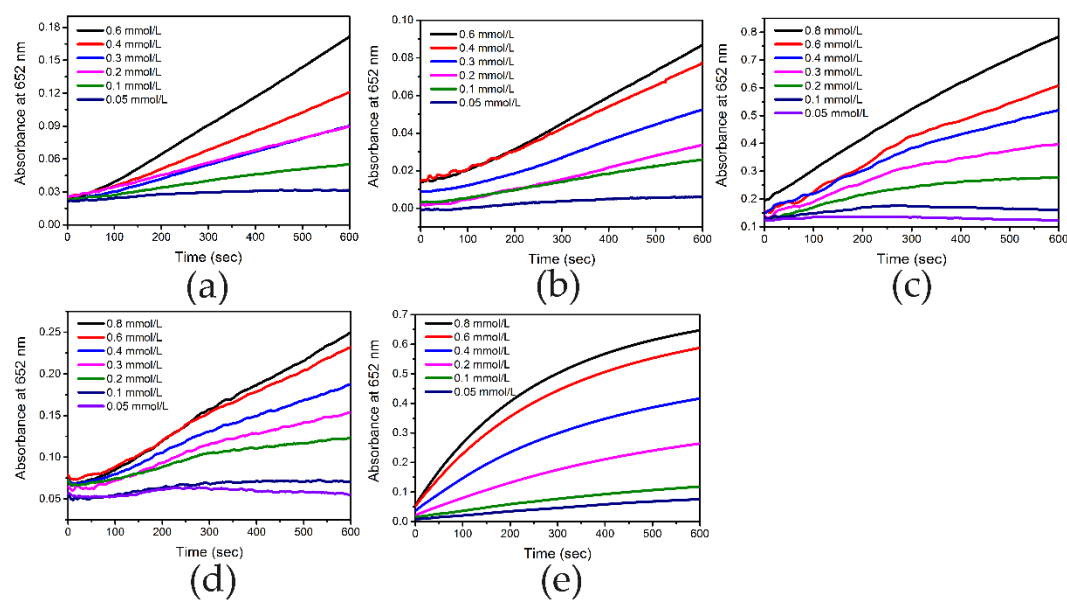


Figure S1. The time-dependent absorbance changes at 652 nm under different TMB concentration (25 mM Na₂HPO₄, pH 4.0) at 35 °C in the presence of fixed H₂O₂ and (a) CCB[6]/AuNPs; (b) CCB[7]/AuNPs; (c) CCB[6]; (d) CCB[7]; (e) HRP.

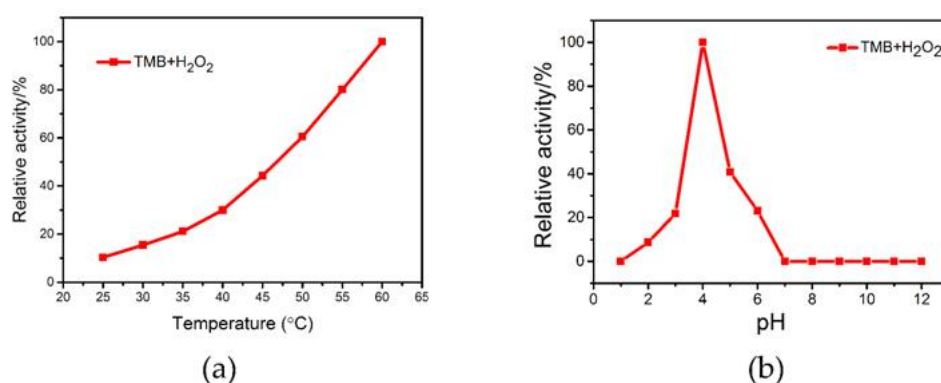


Figure S2. (a) Temperature and (b) pH dependence for TMB and H₂O₂ system in the absence of nanomaterials.

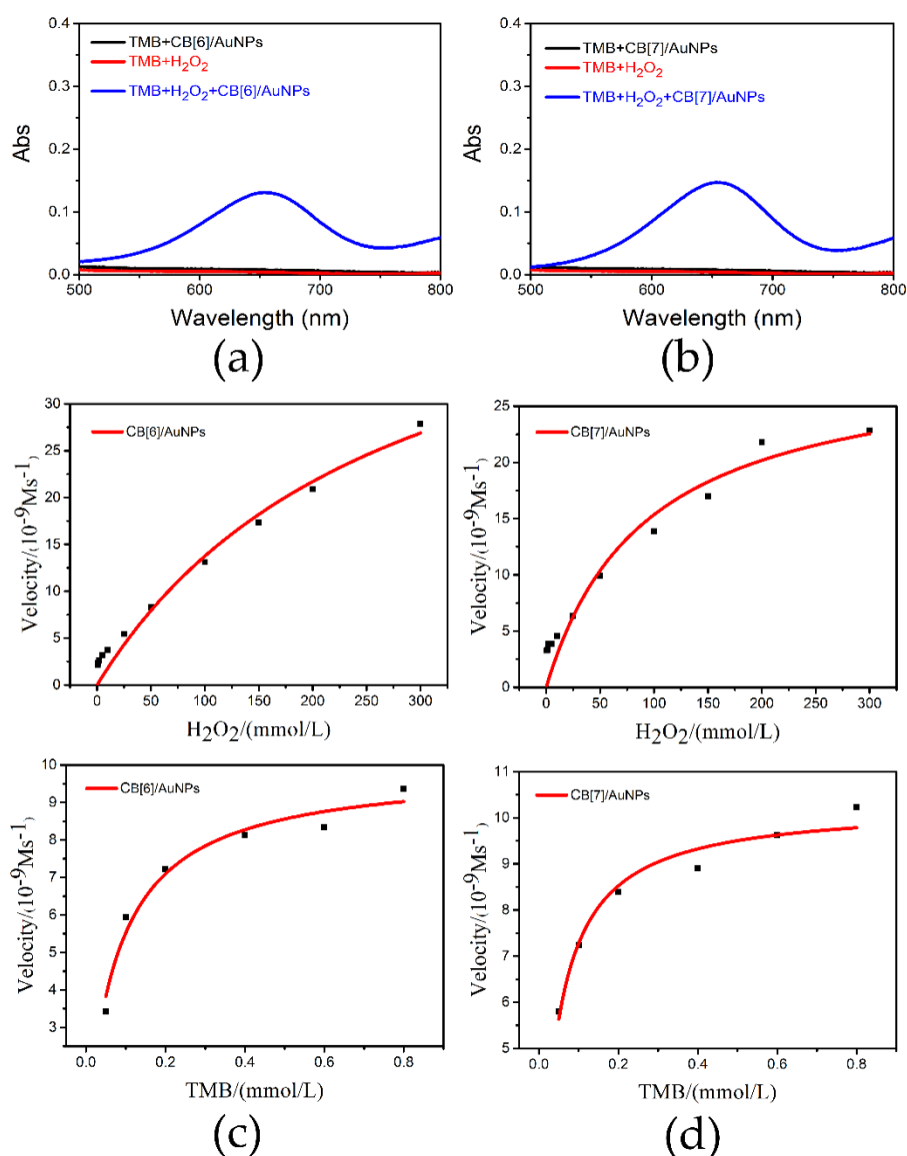


Figure S3. UV-vis spectra of different TMB system with (a) CB[6]/AuNPs and (b)CB[7]/AuNPs, and steady-state kinetic curves of (c) CB[6]/AuNPs and (d)CB[7]/AuNPs.

References:

1. Tao, Y.; Lin, Y.; Huang, Z.; Ren, J.; Qu, X. Incorporating Graphene Oxide and Gold Nanoclusters: A Synergistic Catalyst with Surprisingly High Peroxidase-Like Activity Over a Broad pH Range and Its Application for Cancer Cell Detection. *Adv. Mater.* **2013**, *25*, 2594-2599.
2. Song, Y.; Qu, K.; Zhao, C.; Ren, J.; Qu, X. Graphene Oxide: Intrinsic Peroxidase Catalytic Activity and Its Application to Glucose Detection. *Adv. Mater.* **2010**, *22*, 2206-2210.