Supporting Information

Alkynes - Monolayer Protected Ruthenium Nanoparticles

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Figure S1. Thermogravimetric analysis (TGA) of Ru-OC nanoparticles. Heating rate 10 °C/min. Particle sample weight 1.8532 mg.

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Figure S2. UV-visible spectra of the Ru-OC and Ru-PP nanoparticles. Particle concentrations are both 0.1 mg/mL in DCM. The concentration of RuCl₃ is 3 mM in water.



Figure S3. ¹³C NMR spectra of Ru nanoparticles before (Ru-OC) and after ligand exchange reaction (Ru-PP): (A) monomeric 1-octyne ligands; (B) Ru-OC particles; (C) Ru-PP particles; and (D) monomeric 5-phenyl-1-pentyne. The solvents were either CDCl₃ in (A) and (B) or CD_2Cl_2 in (C) and (D). The ligand molecular structures are labeled in the figure.