Supporting information

Water-based synthesis of ultrasmall nanoparticles of platinum group metal oxides (1.8 nm)

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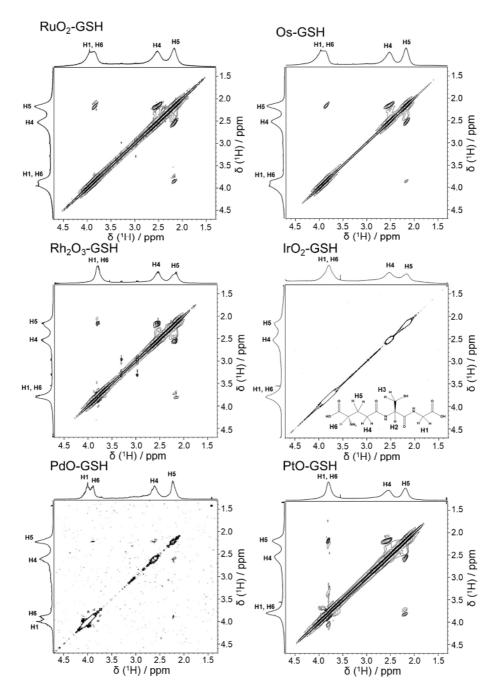


Figure S1: ¹H-¹H-COSY NMR spectra of glutathione-coated metal oxide nanoparticles. Note that the spectrum was recorded with suppression of the water signal. The ¹H-¹H-COSY NMR shows the correlation signals of the spin-spin coupling for ¹H cores separated by three bonds (³J coupling).

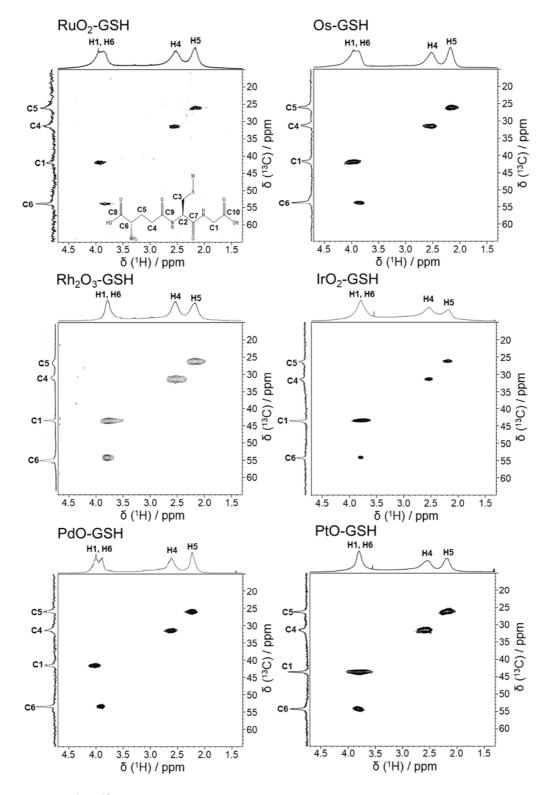


Figure S2: ¹H-¹³C-HSQC NMR spectra of glutathione-coated metal oxide nanoparticles show correlations between covalently bound carbon and hydrogen atoms.

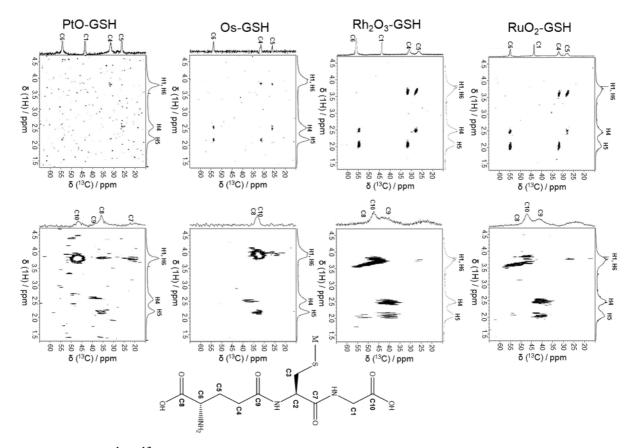


Figure S3: ¹H-¹³C-HMBC NMR spectra of glutathione-coated metal oxide nanoparticles. Aliphatic region (**left**) and correlation of the CH-protons to the carbonyl groups (**right**). The HMBC NMR spectra show correlations between protons and carbons separated by 1 to 3 bonds. The spectra for iridium and palladium did not show any kind of correlation.