Supplementary Material

Gold Nanoclusters Synthesized within Single-Chain Nanoparticles as Catalytic Nanoreactors in Water

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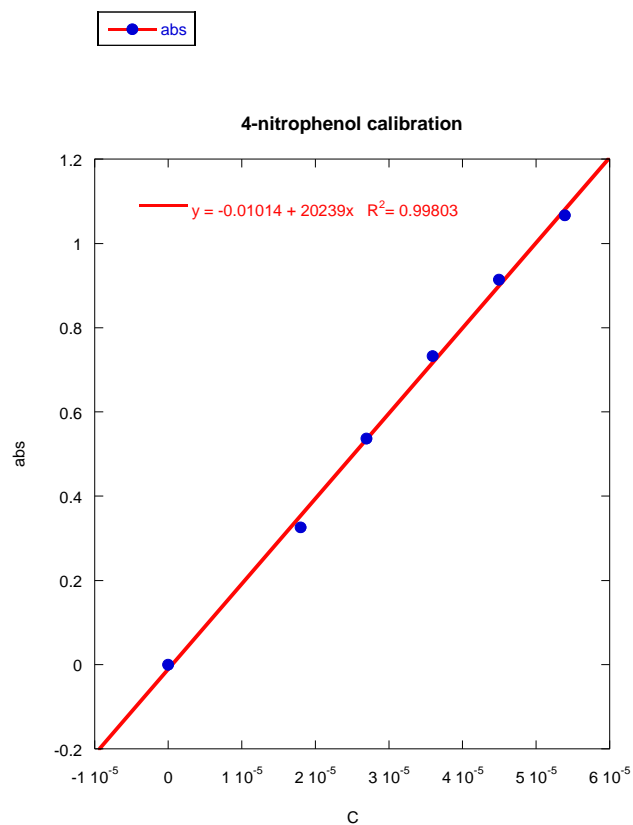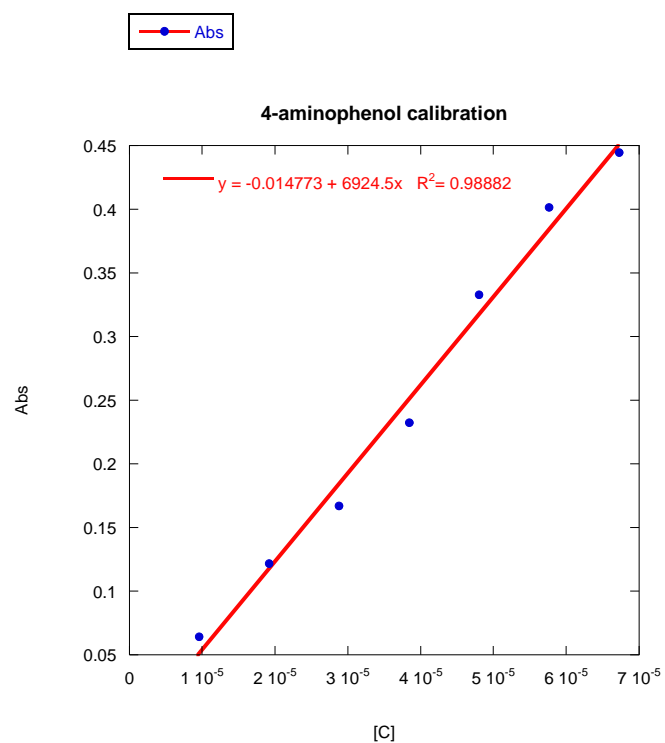* Corresponding author: josetxo.pomposo@ehu.eus

Figure S1. Calibration curve for determination of the UV-Vis molar extinction coefficient of 4-nitrophenol in water at r.t.: ε (λ_{max} = 400 nm) $\approx$ 20239 M^{-1}cm^{-1}. Literature value: ε (λ_{max} = 400 nm) $\approx$ 18900 M^{-1}cm^{-1} (Coiffier A. *et al. J. Mater. Chem.* **2001**, *11*, 2039).

Figure S2. Calibration curve for determination of the UV-Vis molar extinction coefficient of 4-aminophenol in water at r.t.: ε (λ_{max} = 300 nm) $\approx$ 6925 M^{-1}cm^{-1}.
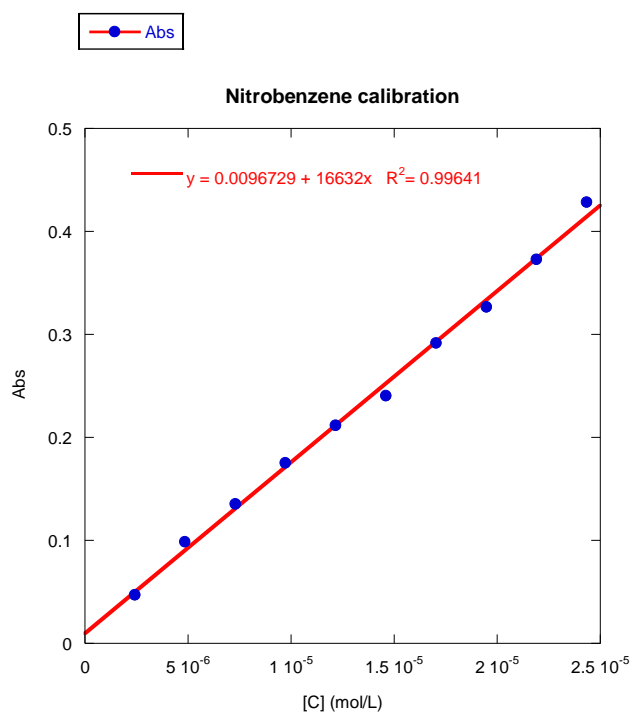
Figure S3. Calibration curve for determination of the UV-Vis molar extinction coefficient of nitrobenzene in water at r.t.: ε (λ_{max} = 265 nm) $\approx$ 16632 $M^{-1}cm^{-1}$.
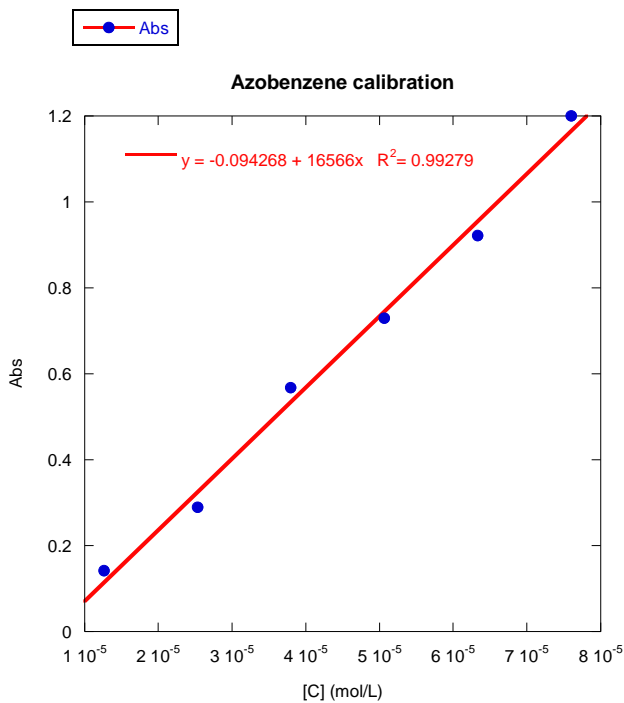

Figure S4. Calibration curve for determination of the UV-Vis molar extinction coefficient of azobenzene in water at r.t.: ε (λ_{max} = 230 nm) $\approx$ 16566 $M^{-1}cm^{-1}$.
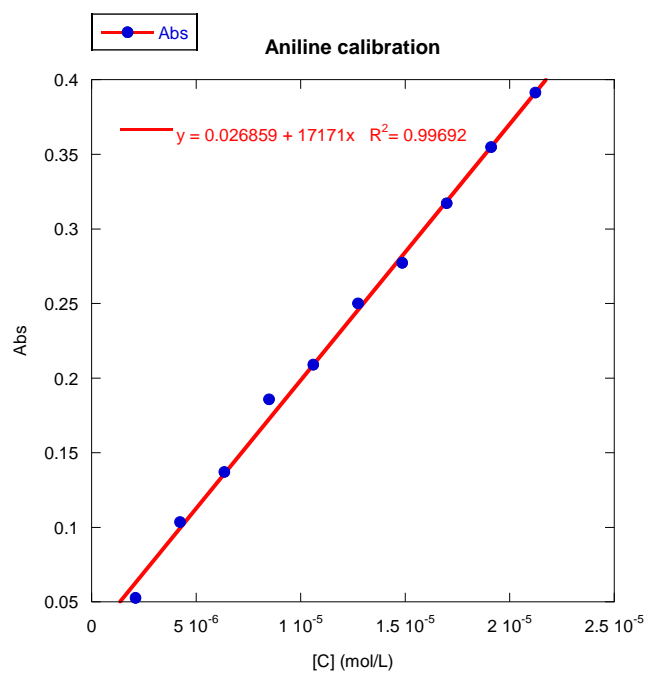
Figure S5. Calibration curve for determination of the UV-Vis molar extinction coefficient of aniline in water at r.t.: ε (λ_{max} = 230 nm) $\approx$ 20239 M^{-1}cm^{-1}.
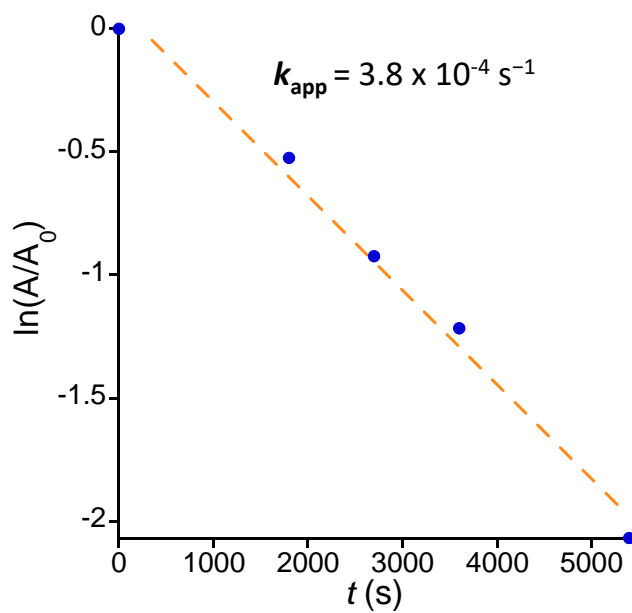

Figure S6. Apparent kinetic constant (k_{app}) of the reduction of nitrobenzene to aniline catalyzed by Au-NCs/SCNPs.
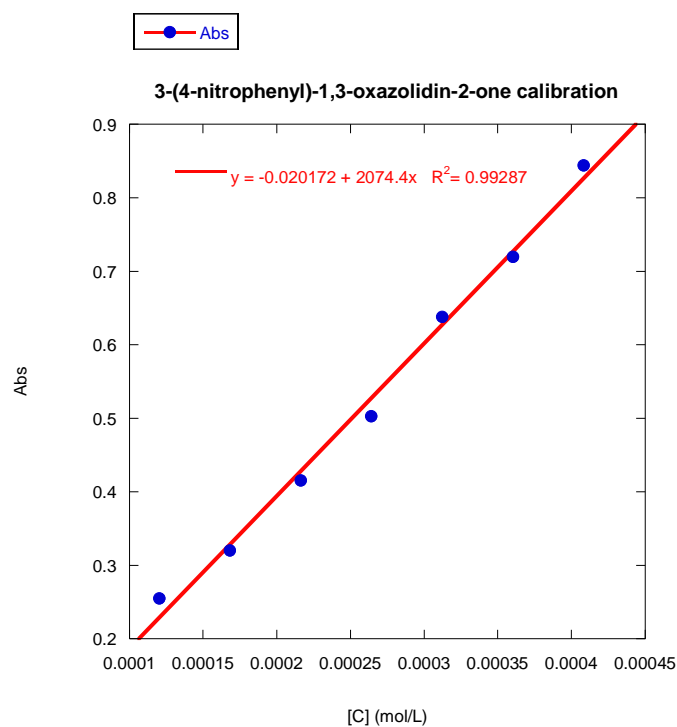
Figure S7. Calibration curve for determination of the UV-Vis molar extinction coefficient of 3-(4-nitrophenyl)-1,3-oxazolidin-2-one in water at r.t.: ε (λ_{max} = 320 nm) ≈ 2074 $M^{-1}cm^{-1}$.
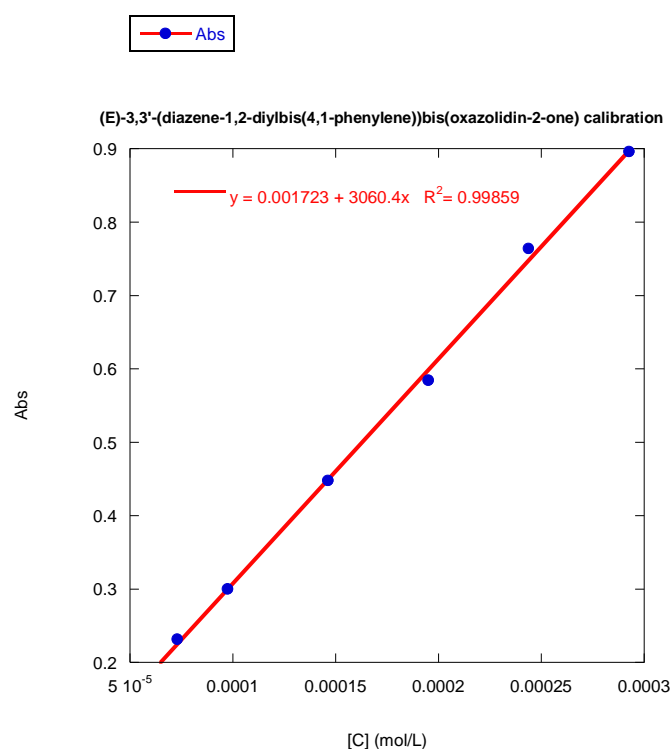

Figure S8. Calibration curve for determination of the UV-Vis molar extinction coefficient of (Z)-3,3'-(diazene-1,2-diylbis(4,1-phenylene))bis(oxazolidin-2-one) in water at r.t.: ε (λ_{max} = 360 nm) ≈ 3060 $M^{-1}cm^{-1}$.
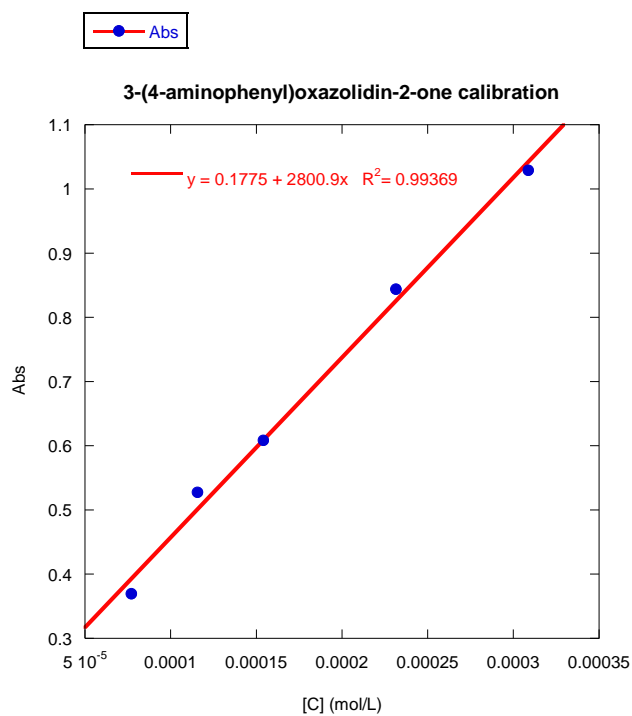
Figure S9. Calibration curve for determination of the UV-Vis molar extinction coefficient of 3-(4-aminophenyl)-1,3-oxazolidin-2-one in water at r.t.: ε (λ_{max} = 250 nm) $\approx$ 2801 M^{-1}cm^{-1}.
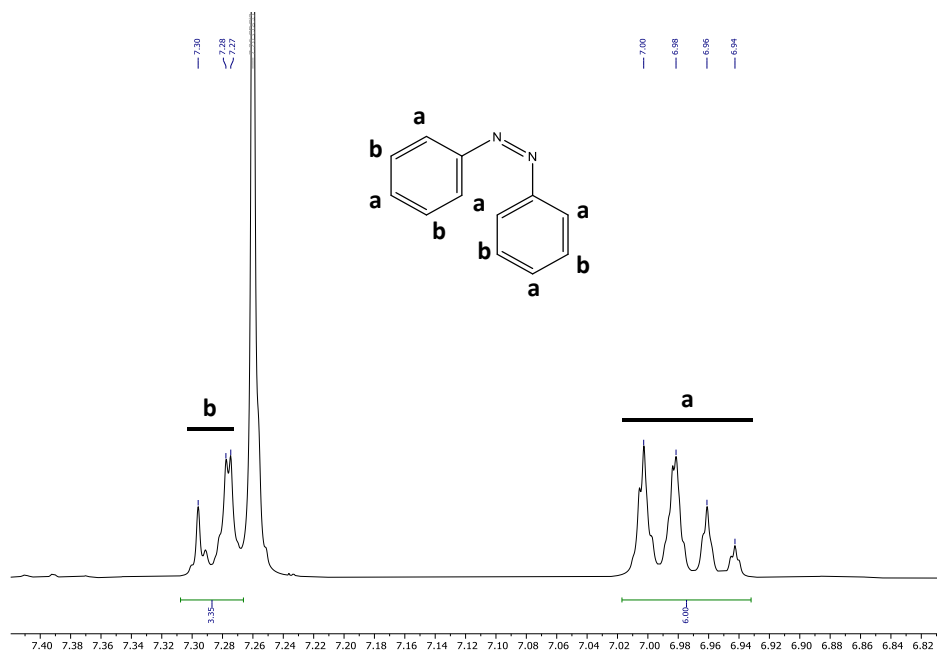

Figure S10. ^{1}H MNR spectrum after isolation *via* preparative TCL of the *cis*-azobenzene intermediate species.
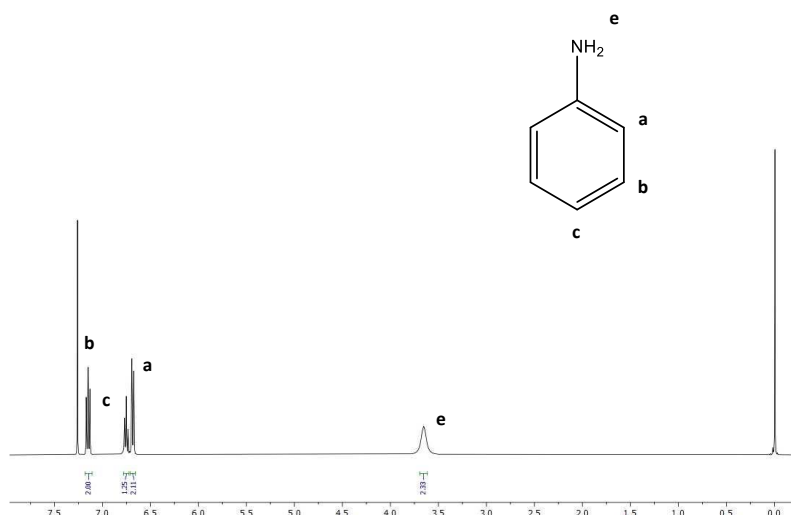
Figure S11. [1]H MNR spectrum after isolation *via* preparative TCL of the aniline product.
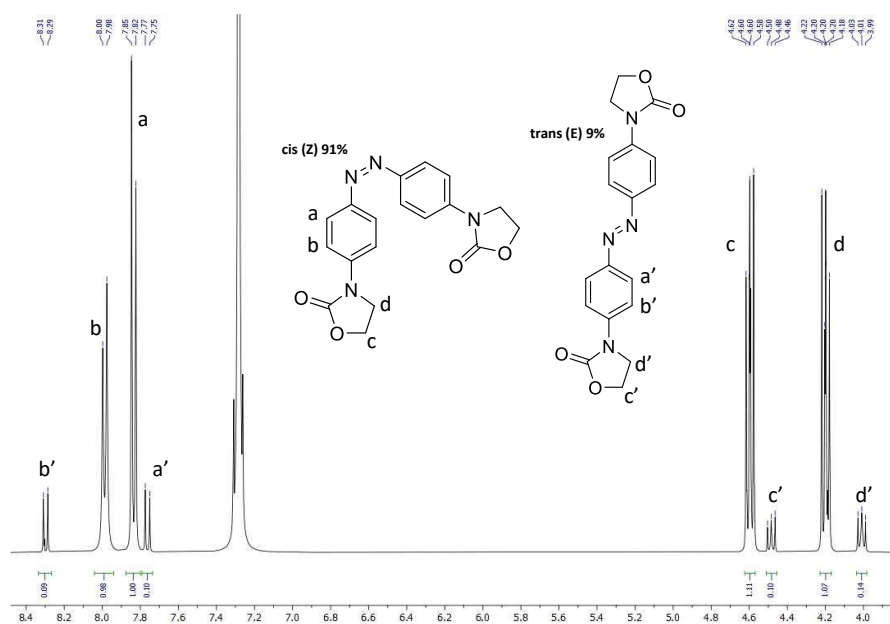

Figure S12. [1]H MNR spectrum after isolation *via* preparative TCL of the (Z)-3,3'-(diazene-1,2-diylbis(4,1-phenylene))bis(oxazolidin-2-one) intermediate species.
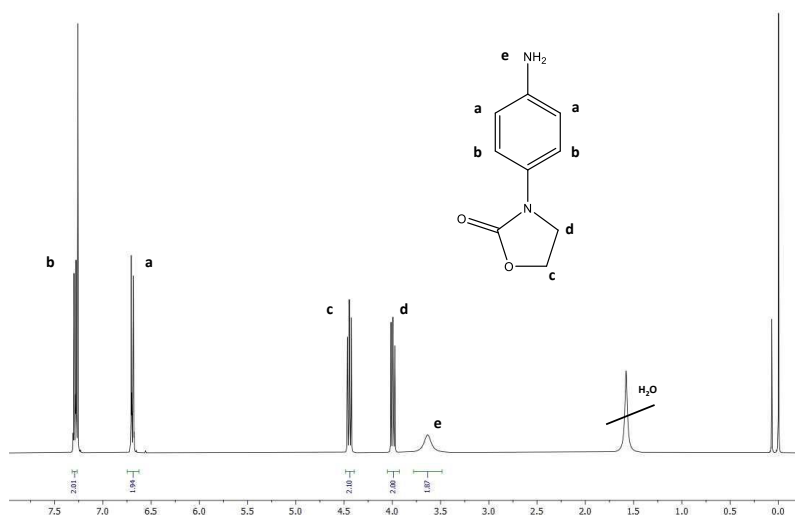
Figure S13. [1]H MNR spectrum after isolation *via* preparative TCL of the 3-(4-aminophenyl)-1,3-oxazolidin-2-one product.