

## Supporting Information

### Capping ligand effects on the amorphous-to-crystalline transition of CdSe nanoparticles

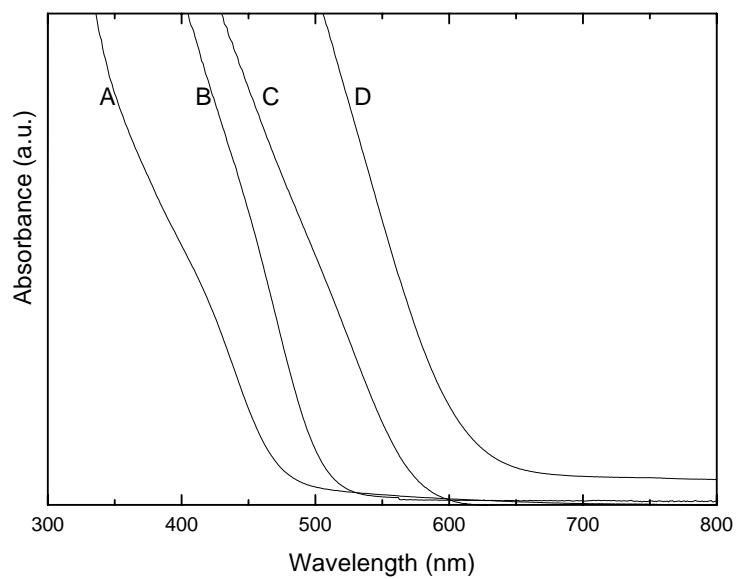
Mauro Epifani,<sup>1</sup> Eva Pellicer,<sup>2</sup> Jordi Arbiol,<sup>2,3</sup> Nicolas Sergent,<sup>4</sup> Thierry Pagnier,<sup>4</sup> Joan R. Morante<sup>2</sup>

<sup>1</sup>Consiglio Nazionale delle Ricerche - Istituto per la Microelettronica ed i Microsistemi (C.N.R.-I.M.M.), via Monteroni, I-73100 Lecce, Italy

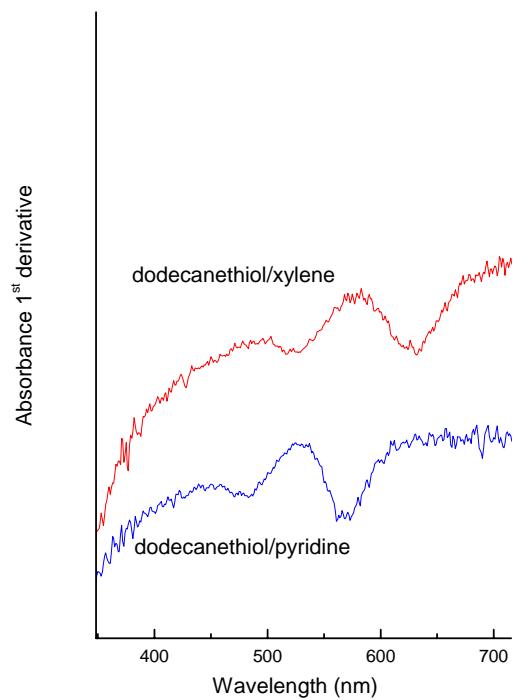
<sup>2</sup>EME/CeRMAE/IN<sup>2</sup>UB, Departament d'Electrònica, Universitat de Barcelona, C. Martí i Franquès 1, 08028 Barcelona, CAT, Spain

<sup>3</sup>TEM-MAT, Serveis Cientificotècnics, Universitat de Barcelona, C. Lluís Solè i Sabaris 1, 08028 Barcelona, CAT, Spain;

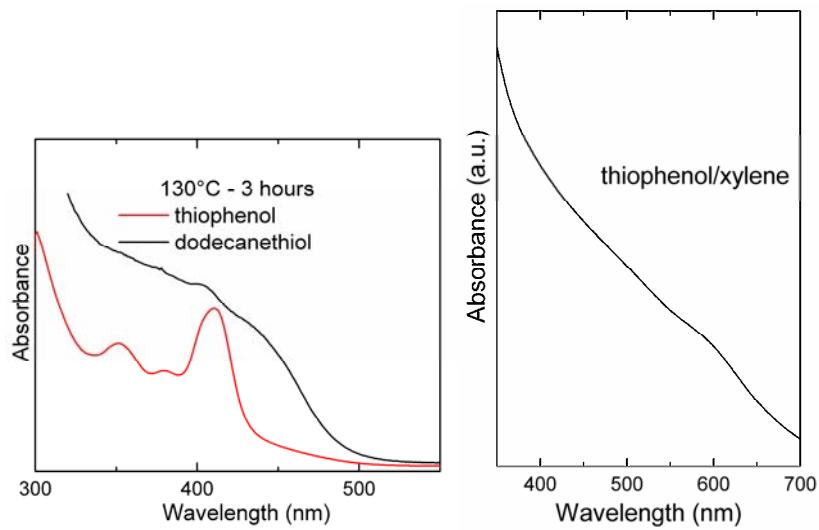
<sup>4</sup>Laboratoire d'Electrochimie et de Physicochimie des Matériaux et Interfaces, ENSEEG BP 75, 38402 Saint Martin d'Hères, France



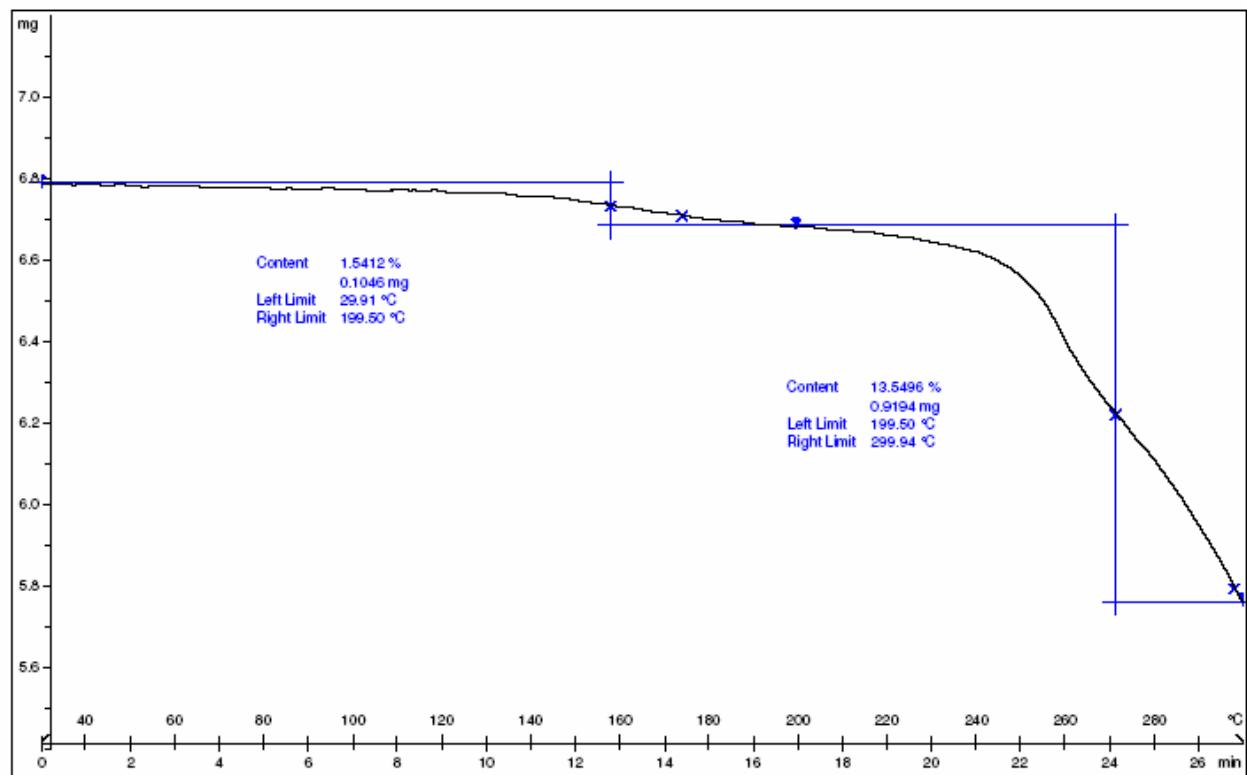
**Figure S1:** optical absorption spectra of the as-prepared, indicated samples.



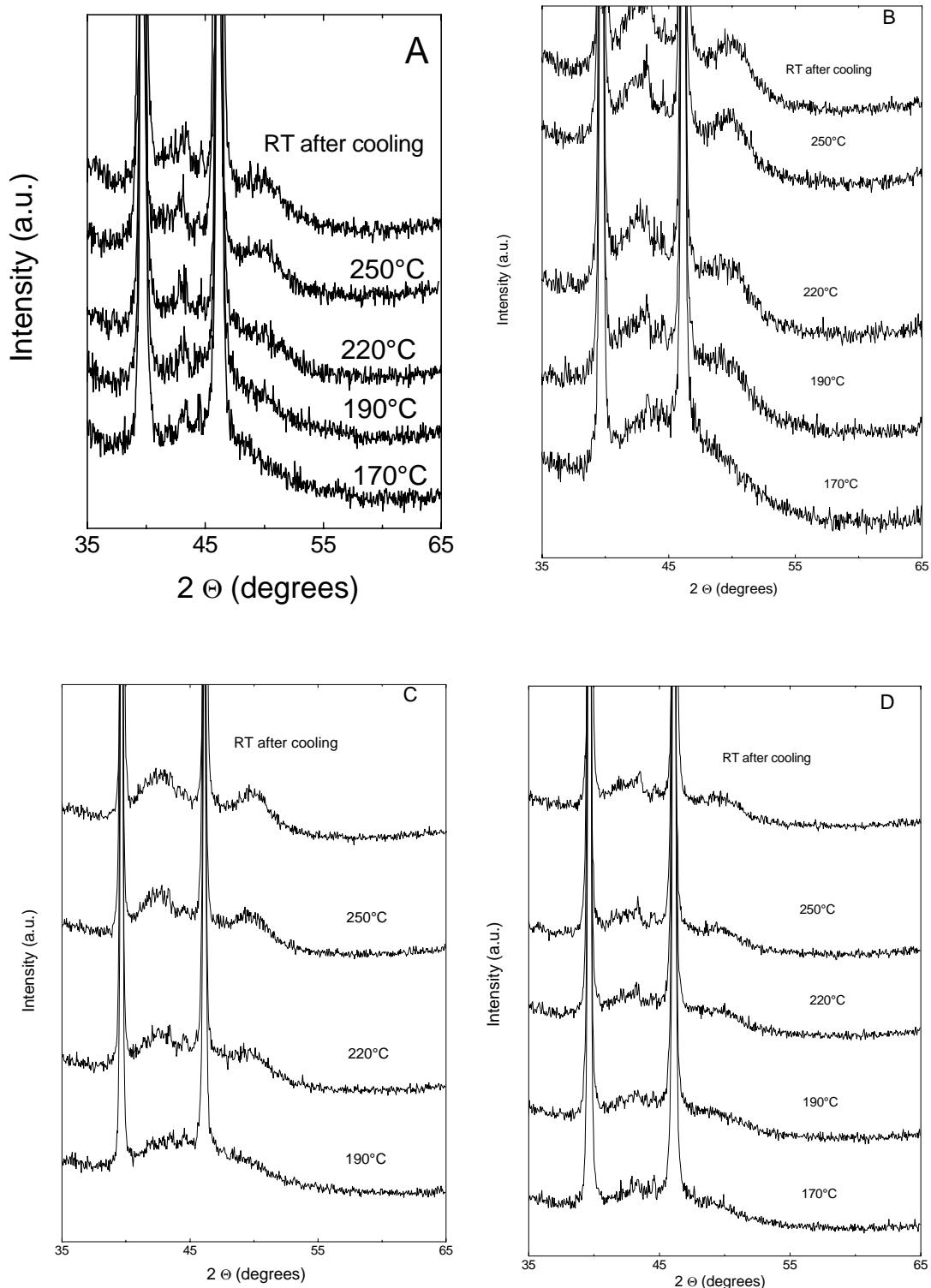
**Figure S2:** 1<sup>st</sup> derivatives of the curves in Figure 3.



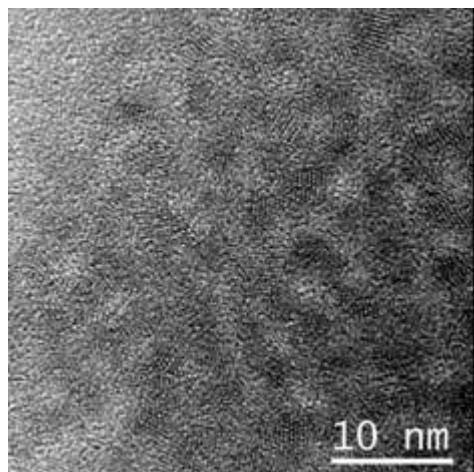
**Figure S3:** Optical absorption curves measured on heated samples in different conditions. Left: sample A, heated in *pyridine* and prepared with the indicated ligands in the starting synthesis. Right: sample C, heated in *xylene* and prepared with thiophenol. In the left figure, sample A was used for the heating experiments in order to enhance the crystallization differences.



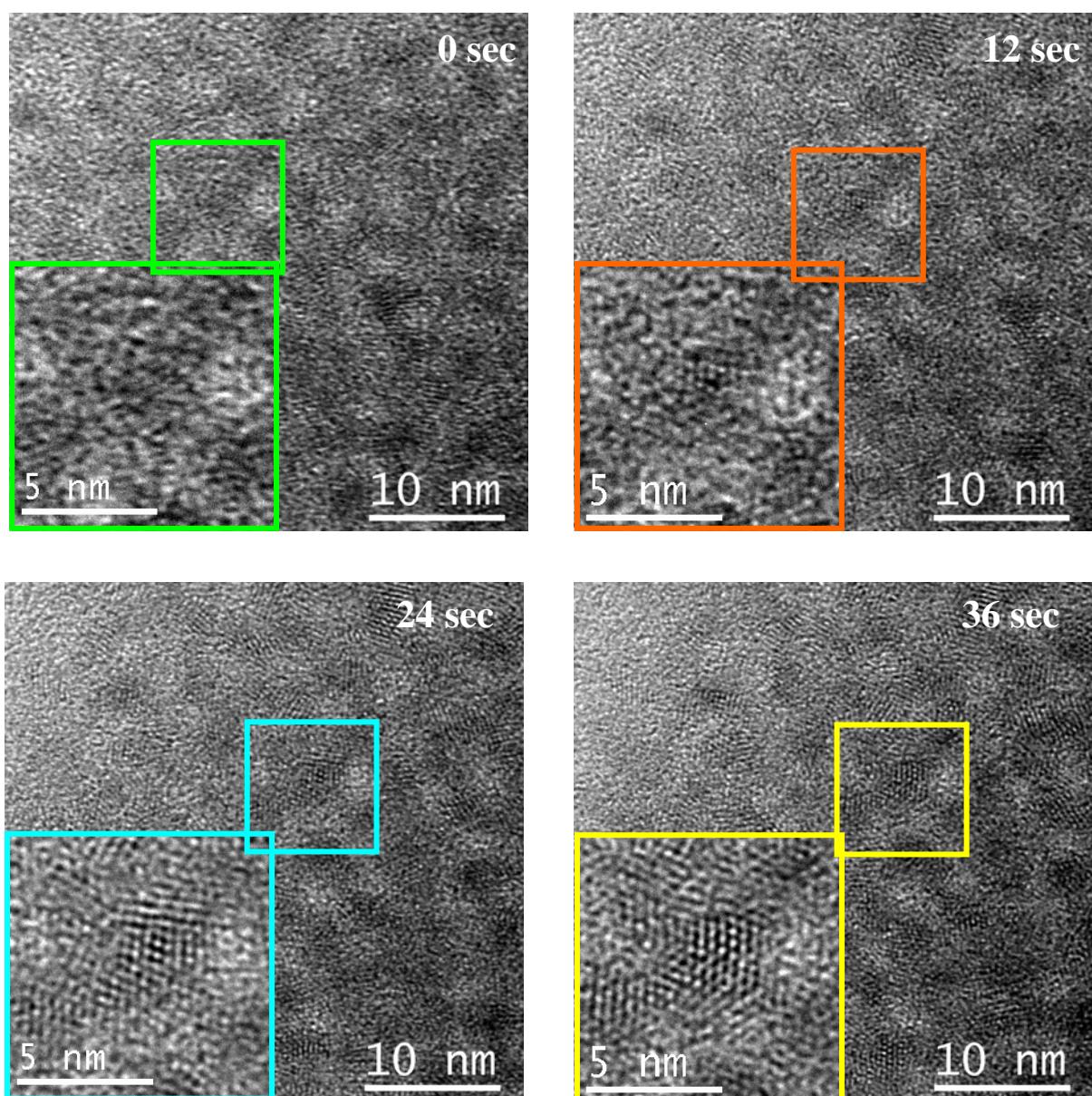
**Figure S4:** thermogravimetric curve measured on as-dried sample C, in flowing nitrogen atmosphere.



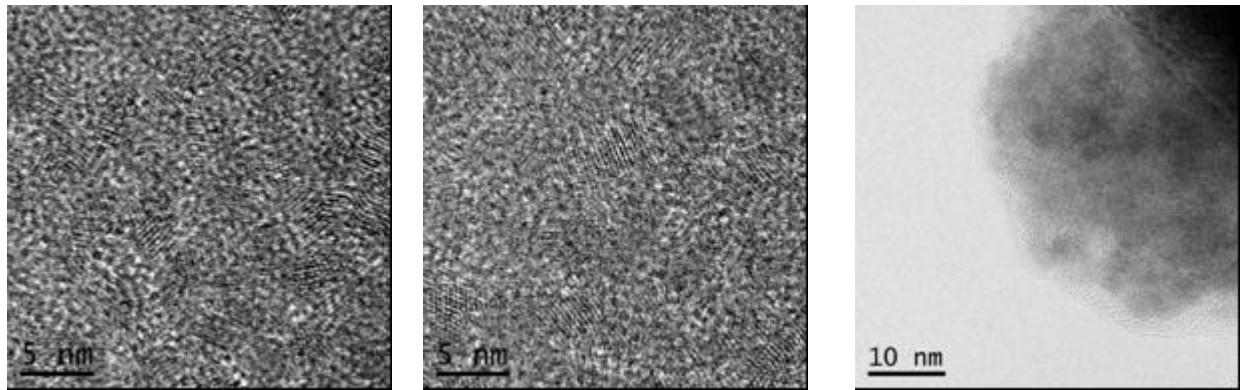
**Figure S5:** Expanded view, for the various samples, around the crystallization temperature of the XRD patterns reported in Figure 8 of the paper.



**Figure S6:** general view of sample A in Figure 9.



**Figure S7:** the same sequence of Figure 9, but with the related general view.



**Figure S8:** TEM image of sample B, C and D, respectively.