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NaY(MoO₄)₂-based nanoparticles: Synthesis, Luminescence and

Photocatalytic properties

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Supplementary information



Figure S1. TEM micrographs of the samples obtained as in Figure 1 but using different

solvents.



Figure S2. TEM micrographs of the samples obtained as in Figure 1 but using a) 0.04M Na₂MoO₄, b) 0.1M Na₂MoO₄.



Figure S3. TEM micrographs (left) and corresponding size histograms (right) corresponding to the Eu-doped NaY(MoO₄)₂ samples having different Eu content.



Figure S4. TEM micrographs (left) and corresponding size histograms (right) corresponding to the Tb-doped NaY(MoO₄)₂ samples having different Tb content.



Figure S5. TEM micrographs (left) and corresponding size histograms (right) corresponding to the Dy-doped NaY(MoO₄)₂ samples having different Dy content.



Figure S6. XRD patterns corresponding to the Ln-doped NaY(MoO₄)₂ samples having different Ln content.



Figure S7. Elemental distribution maps obtained by EDS for the Ln-doped NaY(MoO₄)₂ nanoparticles.



Figure S8. SEM micrographs of the undoped and Ln(5%)-doped NaY(MoO₄)₂ samples calcined at 400°C for 1 h.



Figure S9. XRD patterns of the undoped and Ln(5%)-doped NaY(MoO₄)₂ samples calcined at 400°C for 1 h.



Figure S10. Nitrogen adsorption-desorption isotherms at -196 °C (upper panel) and evolution of BET surface area (lower panel) for undoped and selected $NaY(MoO_4)_2$ doped samples calcined at 400 °C for 1 h.