

Supporting Information for

**Crystallizing Vanadium Pentoxide Nanostructures in the Solid State using Modified  
Block co-Polymer and Chitosan Complexes**

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Fig. S<sub>1</sub>

Photographs showing the color/aspect of the macromolecular precursors Chitosan•(VCl<sub>3</sub>)<sub>y</sub> and PS-b-4-VP•(VCl<sub>3</sub>)<sub>y</sub> in ratio 1:1

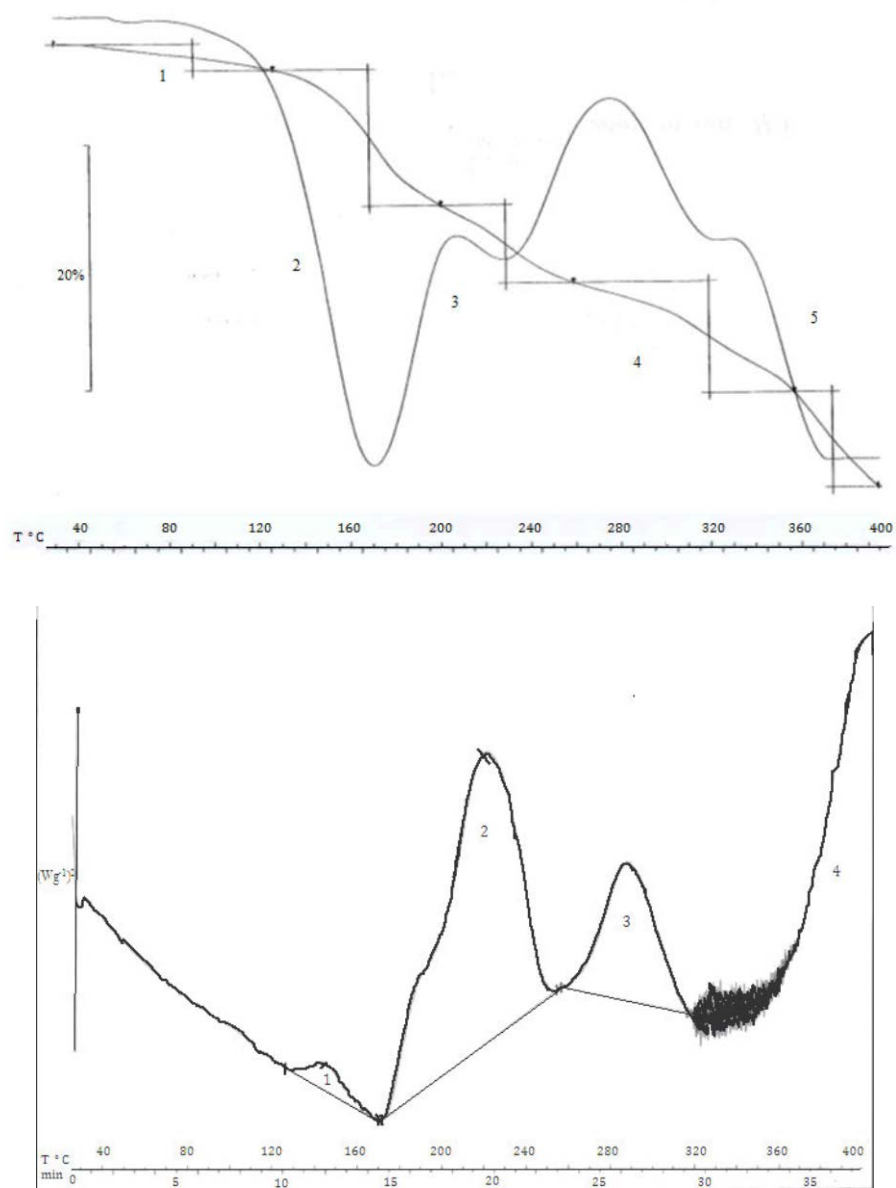


Photograph showing the color/aspect of the pyrolytic products PS-b-4-PVP•(VCl<sub>3</sub>)<sub>y</sub> and Chitosan •(VCl<sub>3</sub>)<sub>y</sub> in ratio 1:5



Fig. S<sub>2</sub> TG and DSC analysis of the precursor PS-b-4-PVP•(VCl<sub>3</sub>)<sub>y</sub> and chitosan•(VCl<sub>3</sub>)<sub>y</sub>

**PS-b-4-PVP•(VCl<sub>3</sub>)<sub>y</sub>**



# Chitosan•(VCl<sub>3</sub>)<sub>y</sub>

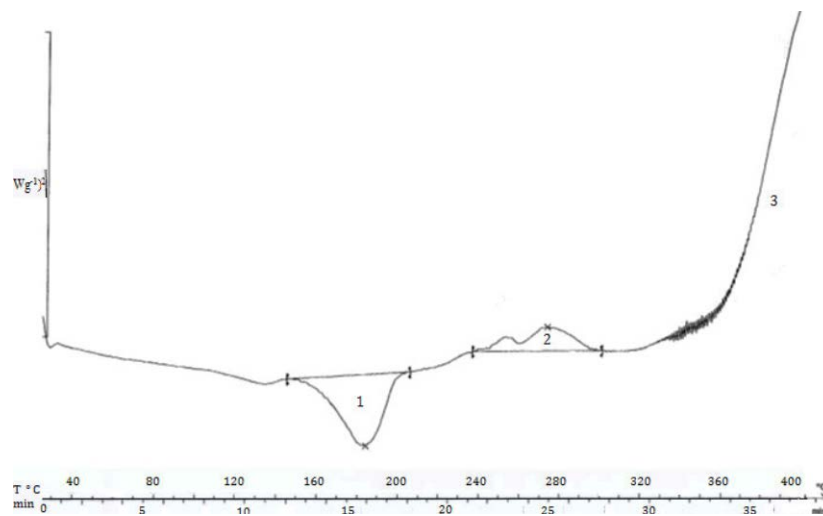
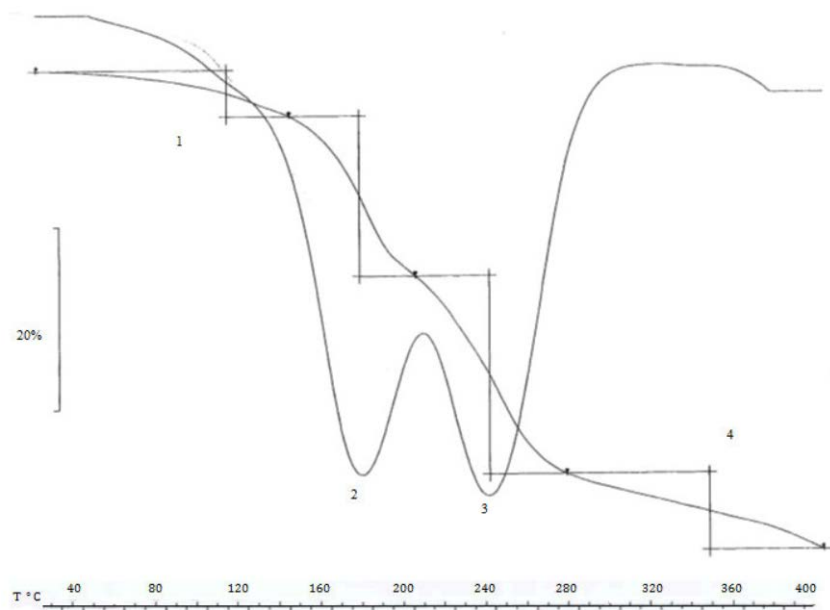
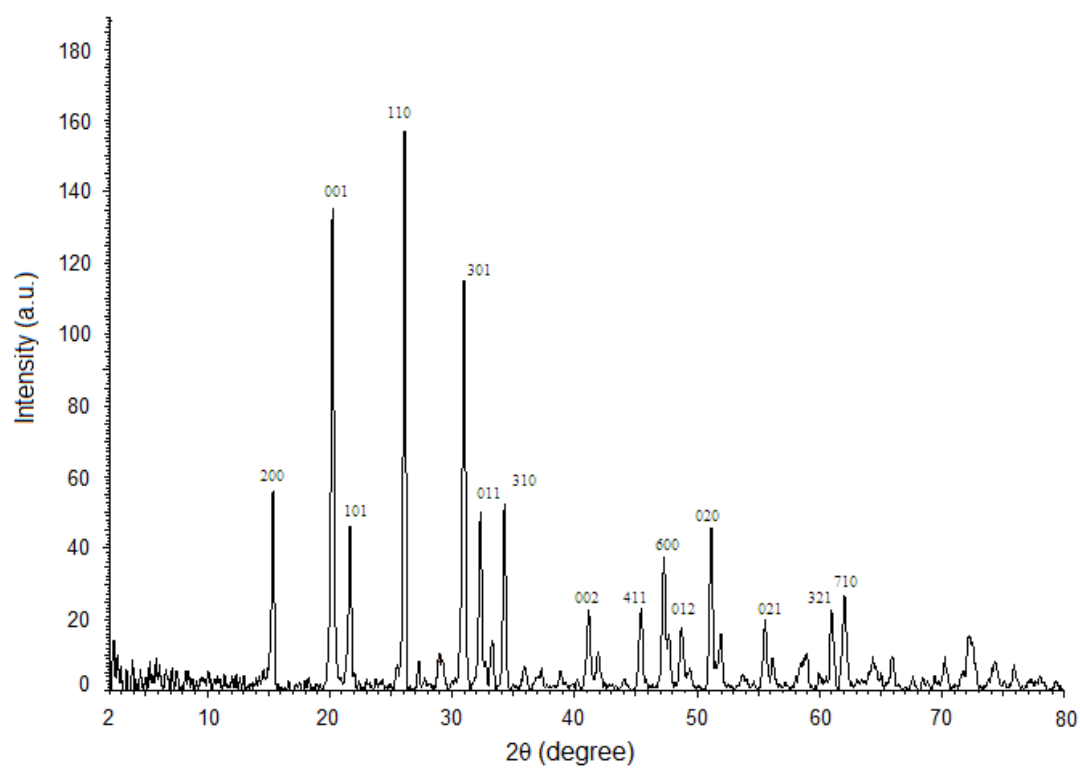


Fig. S<sub>3</sub>

XRD pattern of pyrolytic product from: PS-*co*-4-PVP-VCl<sub>3</sub> and chitosan-VCl<sub>3</sub> 1-1 precursors.

**PS-*b*-4-PVP•(VCl<sub>3</sub>)<sub>y</sub>**



# Chitosan•(VCl<sub>3</sub>)<sub>y</sub>

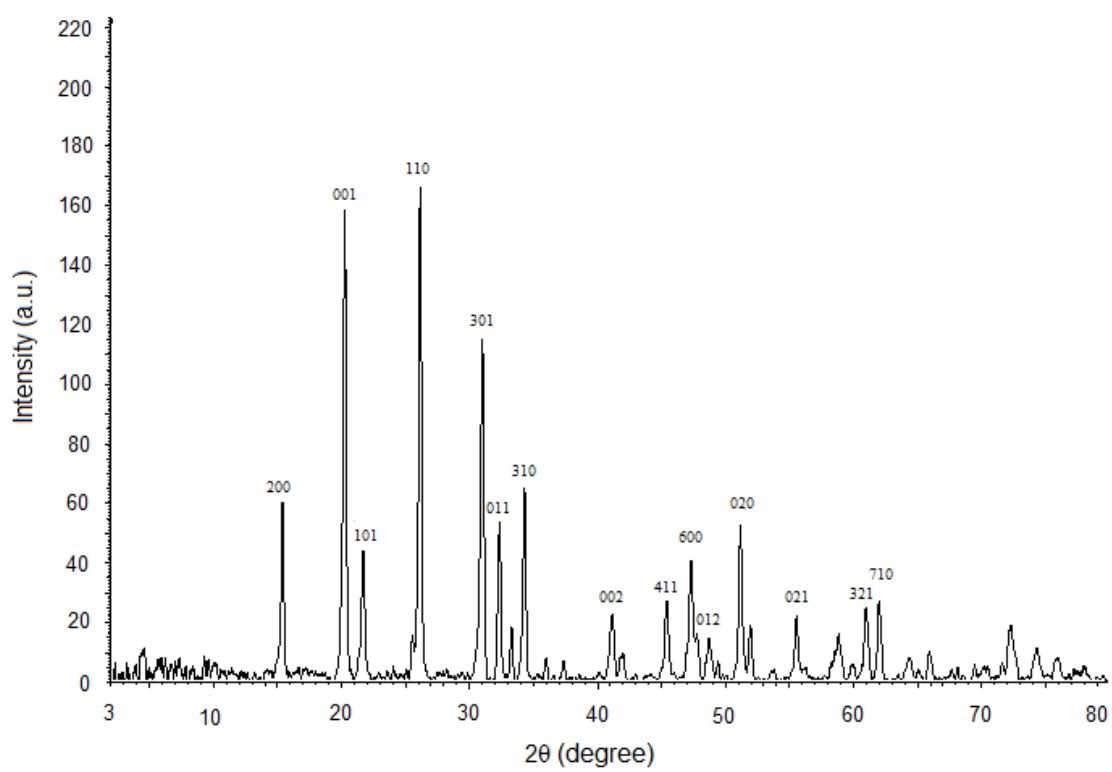


Fig S4 Photoluminescence of the pyrolytic product from the macromolecular precursors PS-co-4-PVP-VCl<sub>3</sub> and chitosan-VCl<sub>3</sub> 1:1 showing the emission at 731 nm when exciting at 364 and 362 nm.

