

Supplementary information

Extreme Biomimetics: Formation of Zirconium Dioxide Nanophase Using Chitinous Scaffolds under Hydrothermal Conditions

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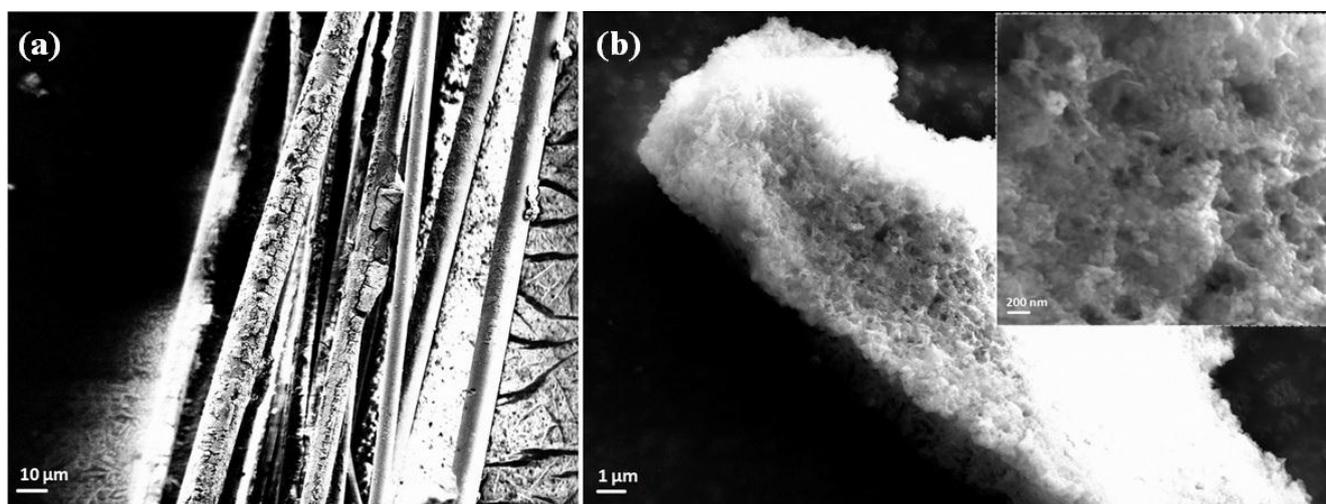
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20 **Fig. S1** SEM microscopy images of zirconium oxide nanocrystals obtained under hydrothermal conditions using quartz microfibers (a, b). The nanomorphology of the obtained crystals (insertion) is similar to that of zirconia nanoparticles on the surface of chitinous fibers, however they can be easily removed from the glass surface by touch (b) as well as by simple washing in distillate water, or ethanol.

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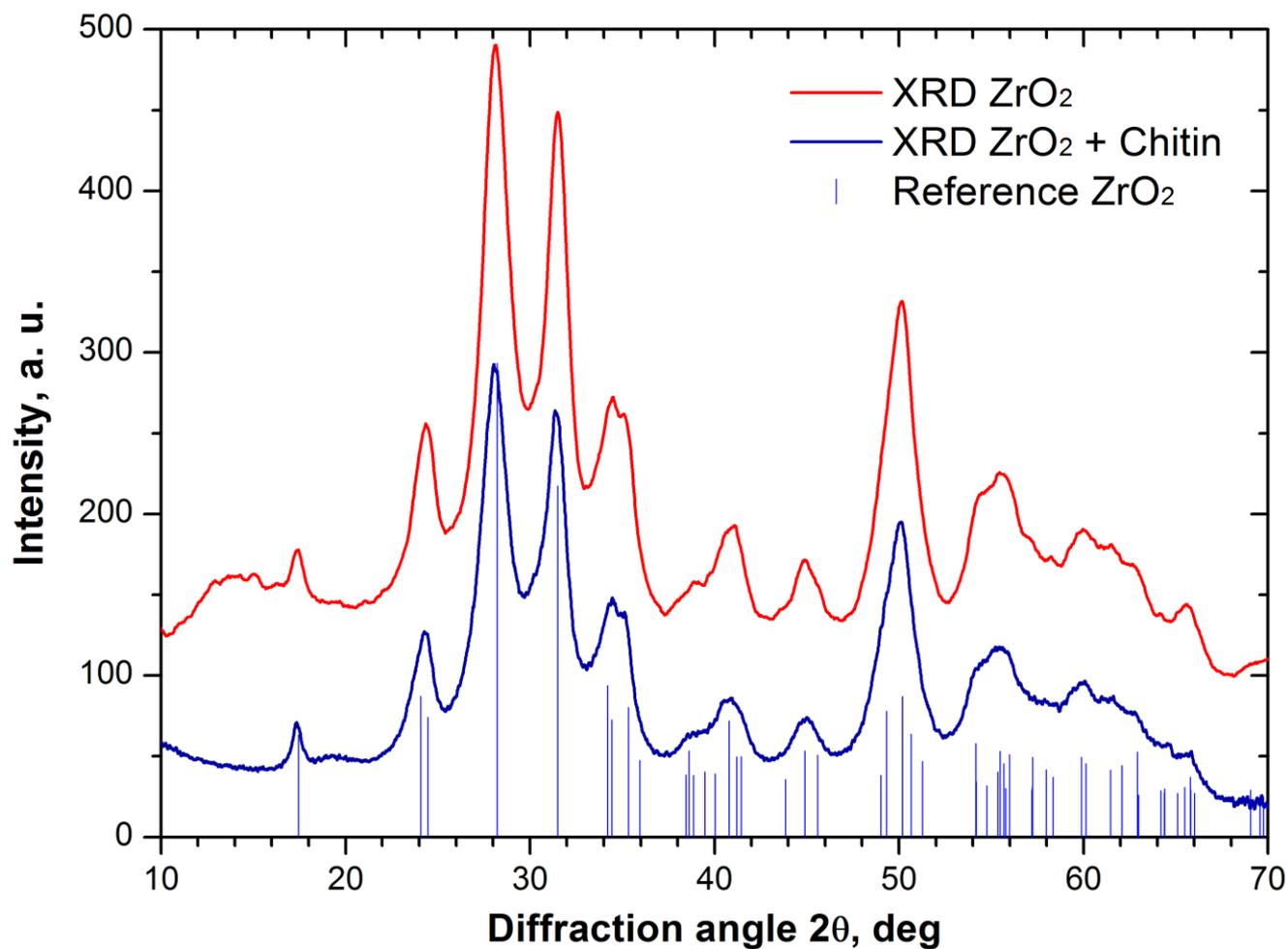


Fig. S3 XRD spectra of chitin-ZrO₂ composite (blue line) and zirconia prepared without the presence of organic template (red line) are very similar.

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