

Supporting Information

ZnO Particles Stabilized in Polymeric Matrix for Liquid-Phase Methanol Synthesis

Valentin Yu. Doluda ¹, Olga P. Tkachenko ², Antonina A. Stepacheva ¹, Alexander I. Sidorov ¹, Alexey V. Bykov ¹, Mikhail G. Sulman ^{1,*} and Yury Yu. Kosivtsov ¹

¹ Department of biotechnology, chemistry and standardization, Tver State Technical University, Tver 170026, Russia

² Laboratory of developments and study of polyfunctional catalysts, N.D. Zelinsky Institute of Organic Chemistry of Russian Academy of Science, Moscow 119991, Russia,

* Correspondence: sulmanmikhail@yandex.ru; Tel.: +7(4822)789348

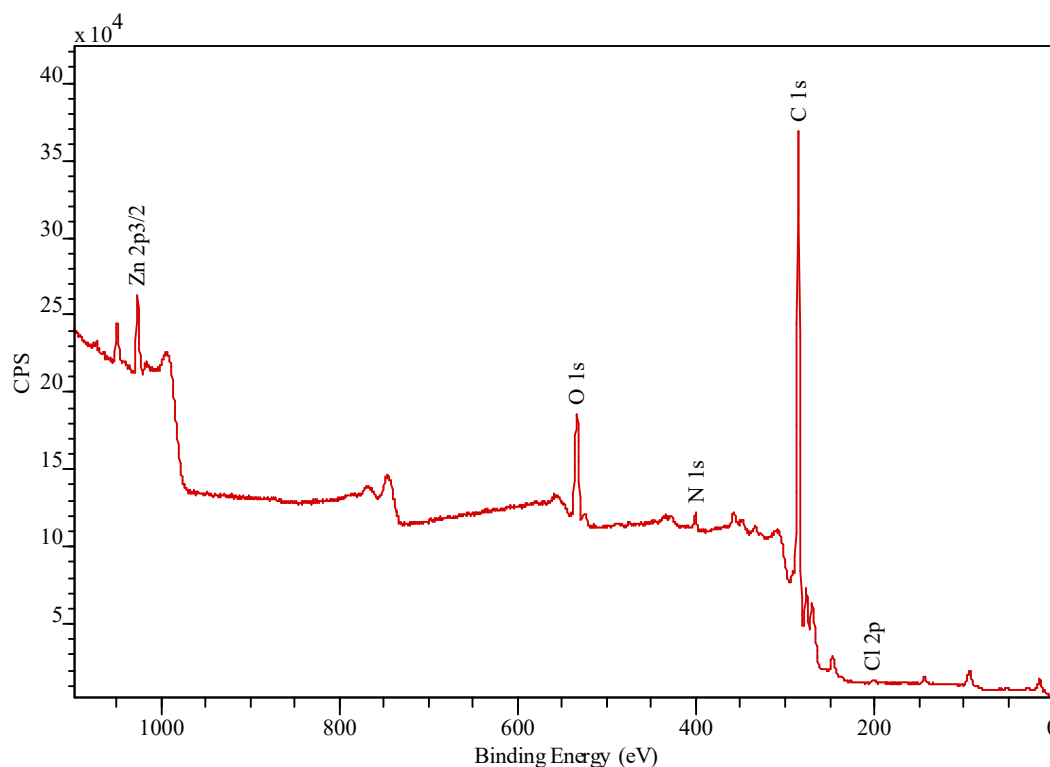


Figure S1. The survey XPS spectra for the initial Zn-HPS.

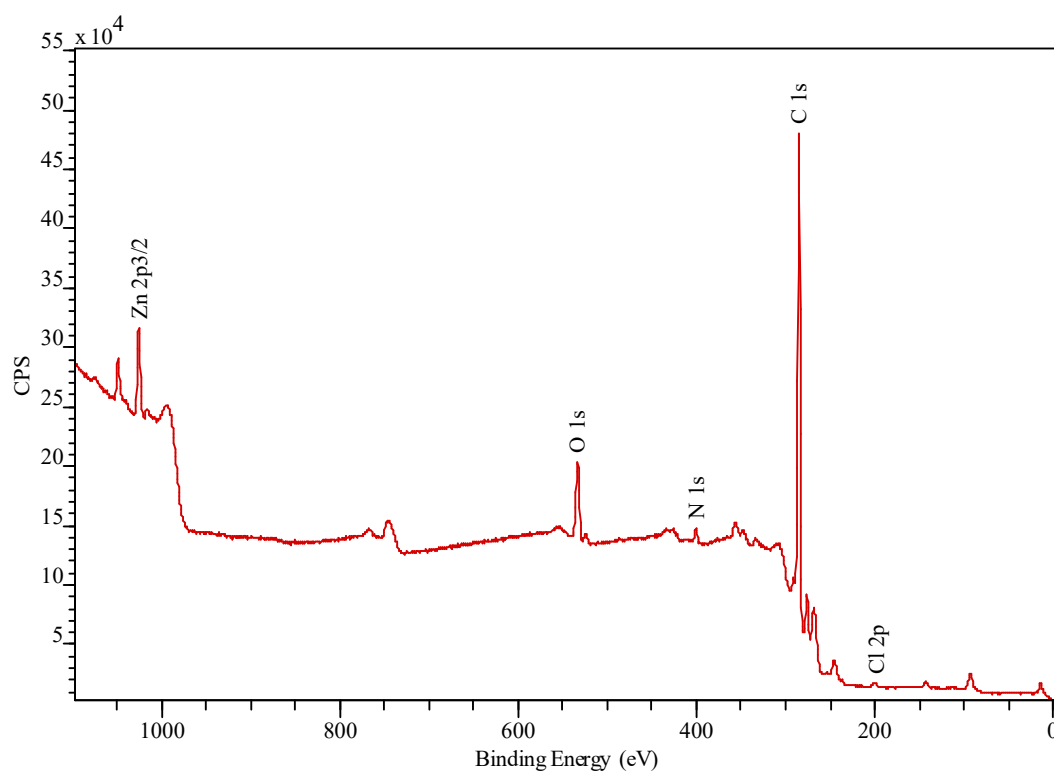


Figure S2. The survey XPS spectra for the Zn-HPS treated with hydrogen.

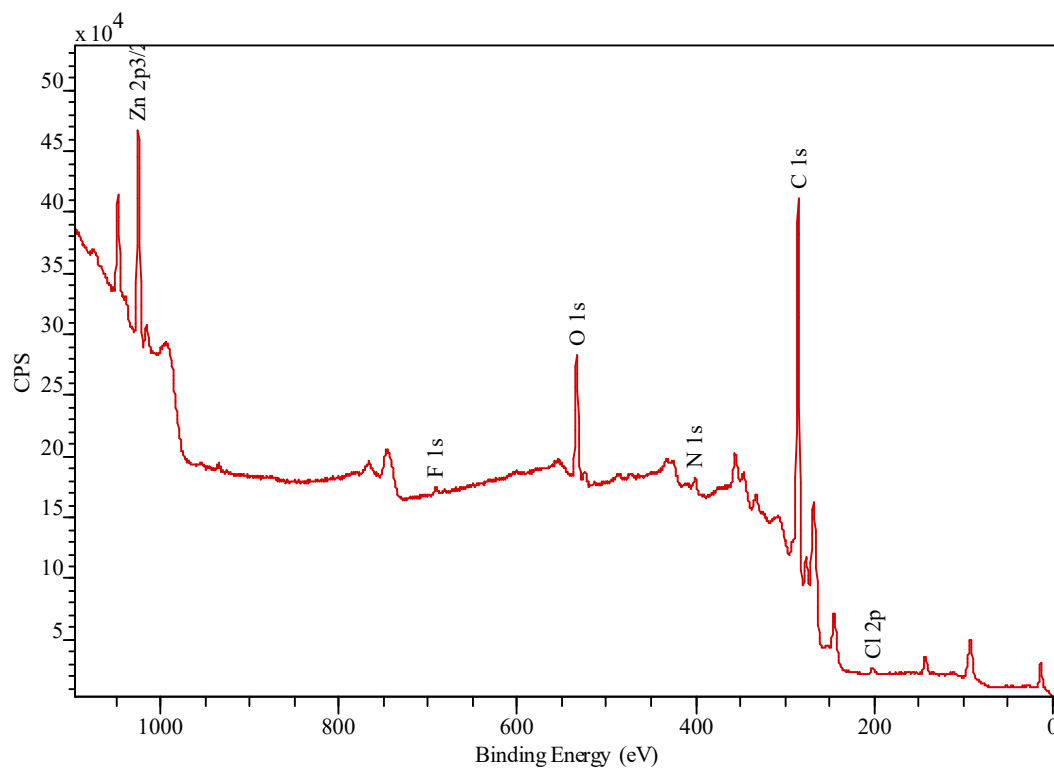


Figure S3. The survey XPS spectra for the Zn-HPS after catalysis.

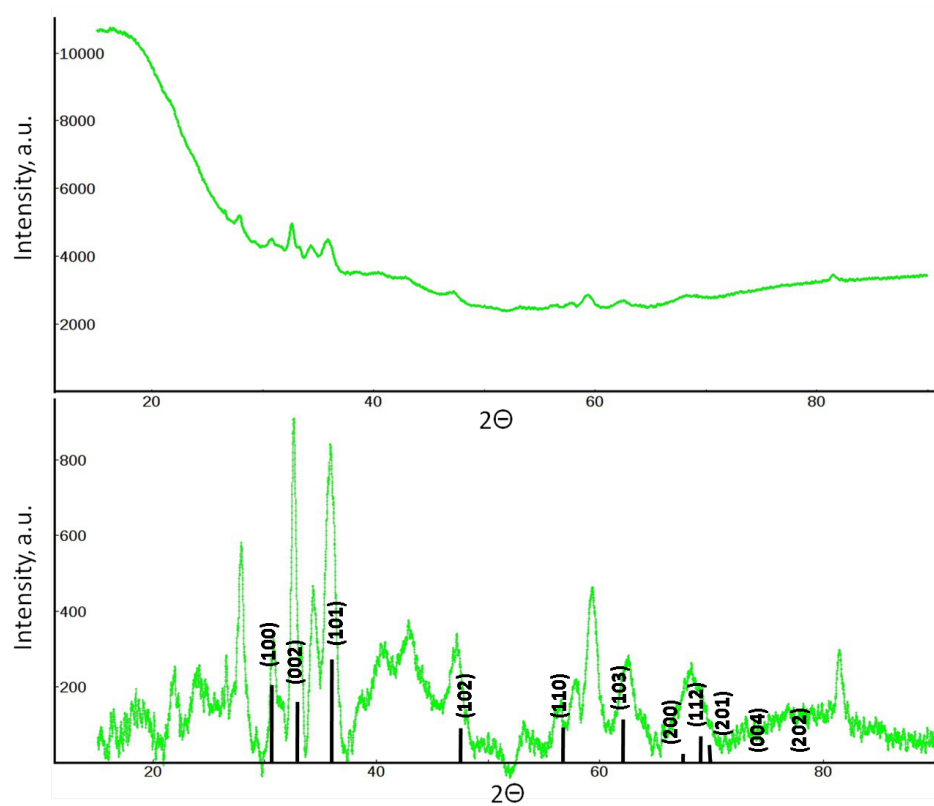


Figure S4. XRD pattern for the Zn-HPS.

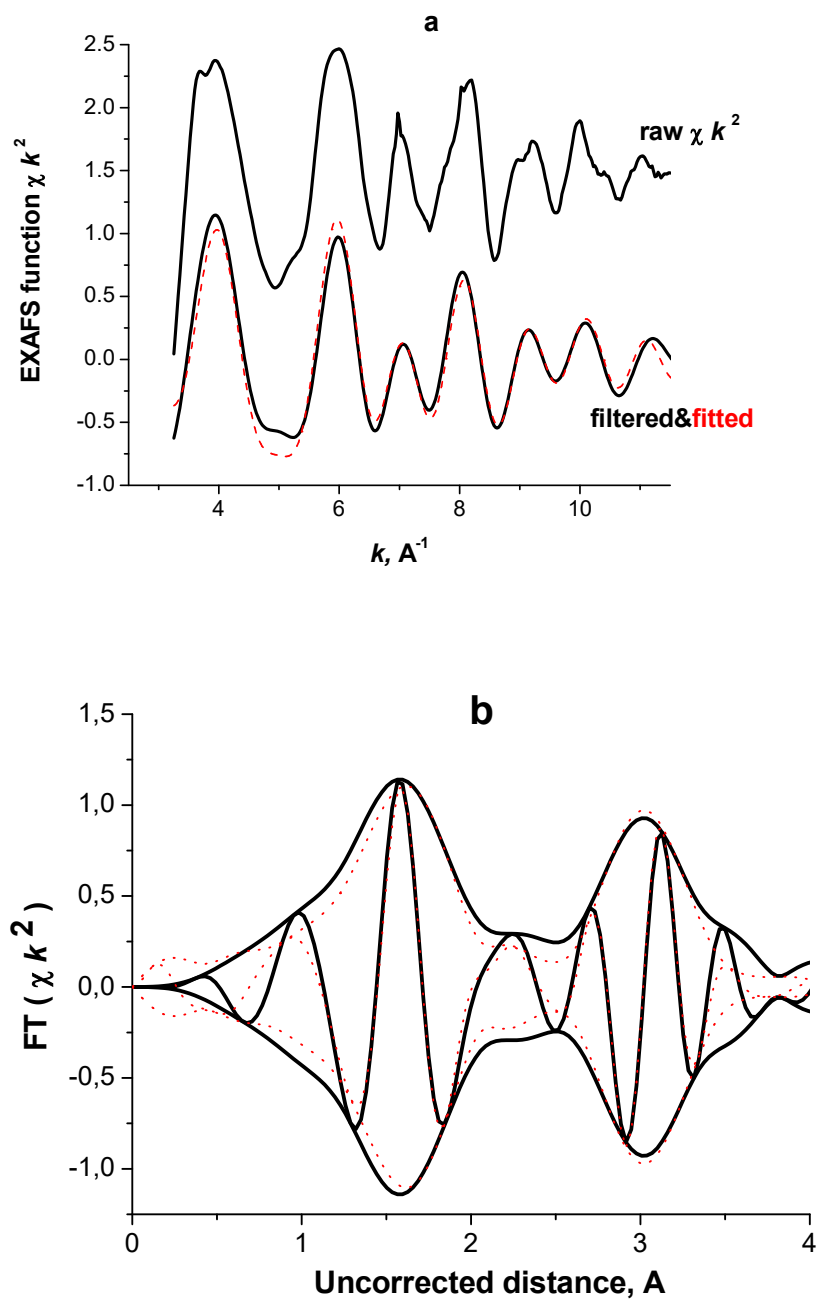


Figure S5. Model fits of Zn K EXAFS of ZnO-HPS initial samples in k-space (a) and r-space (b).

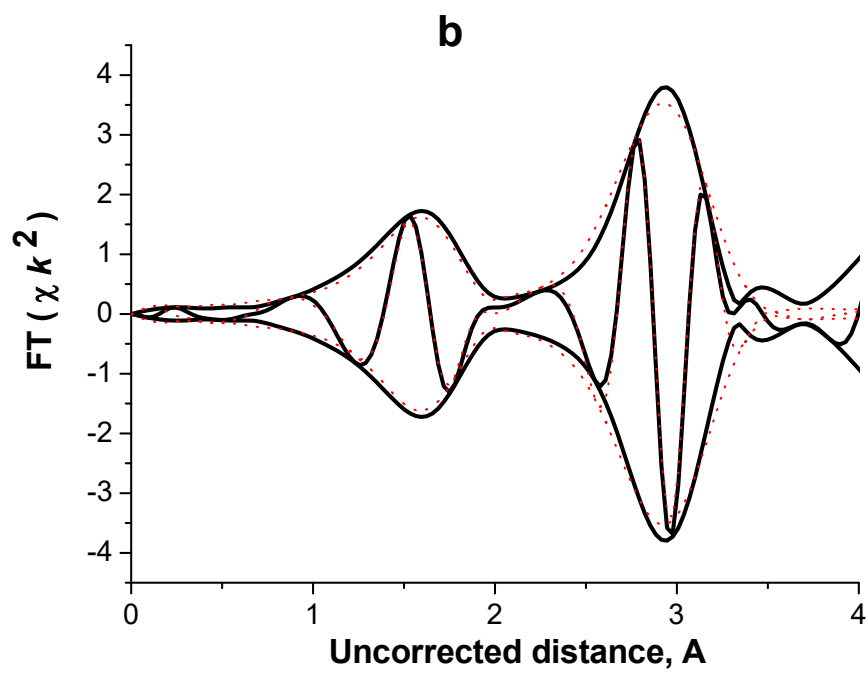
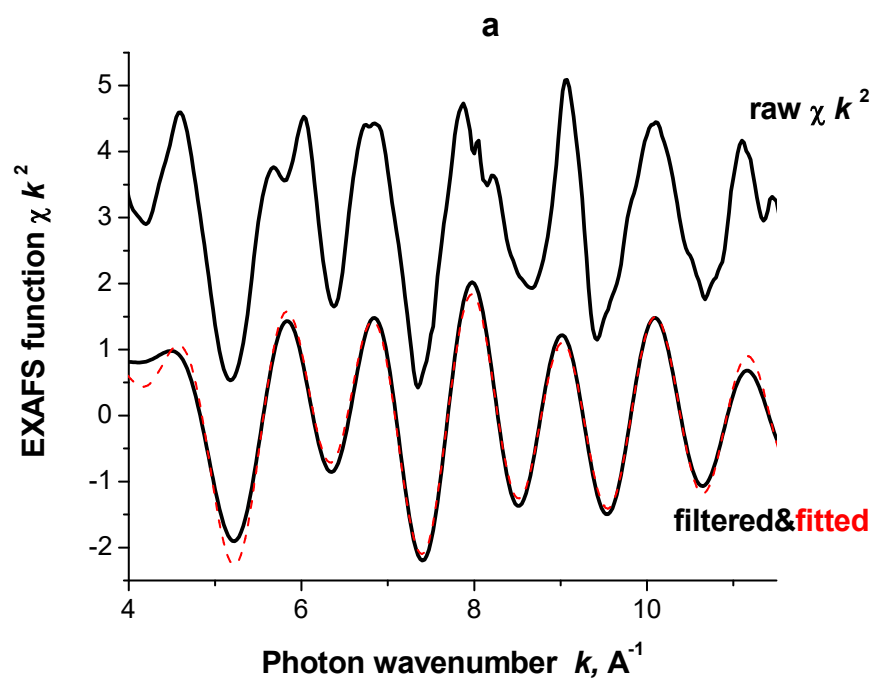


Figure S6. Model fits of Zn K EXAFS of ZnO-HPS treated samples in k-space (a) and r-space (b).

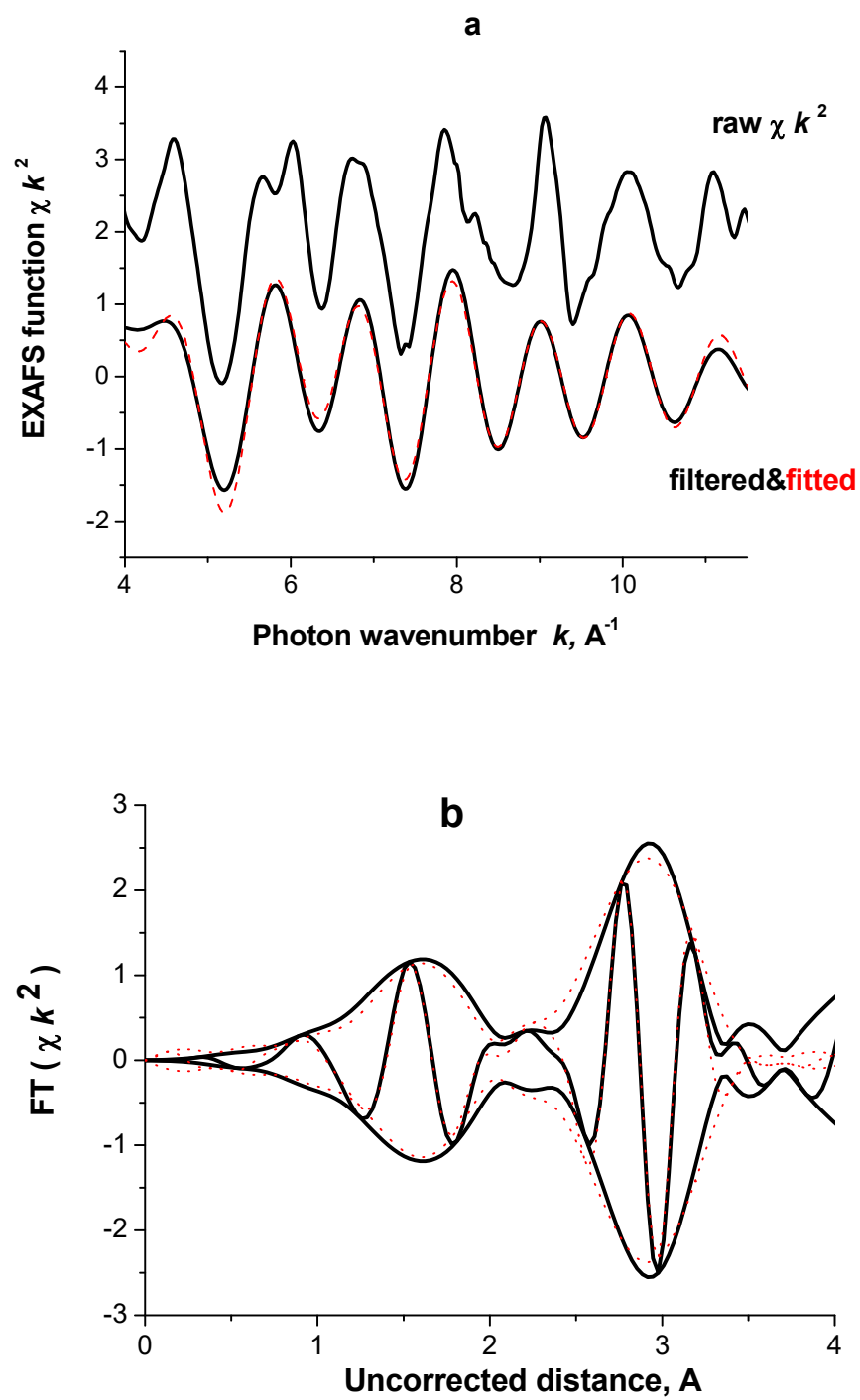


Figure S7. Model fits of Zn K EXAFS spectrum of ZnO-HPS after catalysis sample in k-space (a) and r-space (b).