

1 **CuO/Cryptomelane catalyst for preferential oxidation of CO in**  
2 **the presence of H<sub>2</sub>: deactivation and regeneration.**

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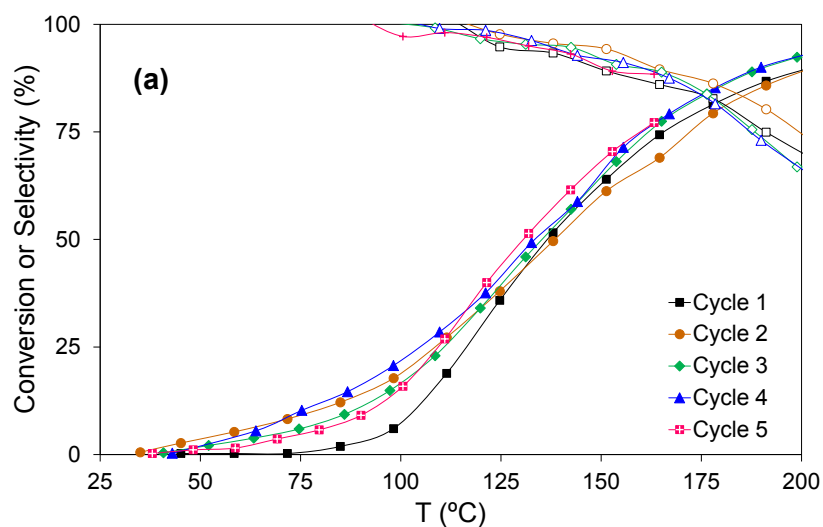
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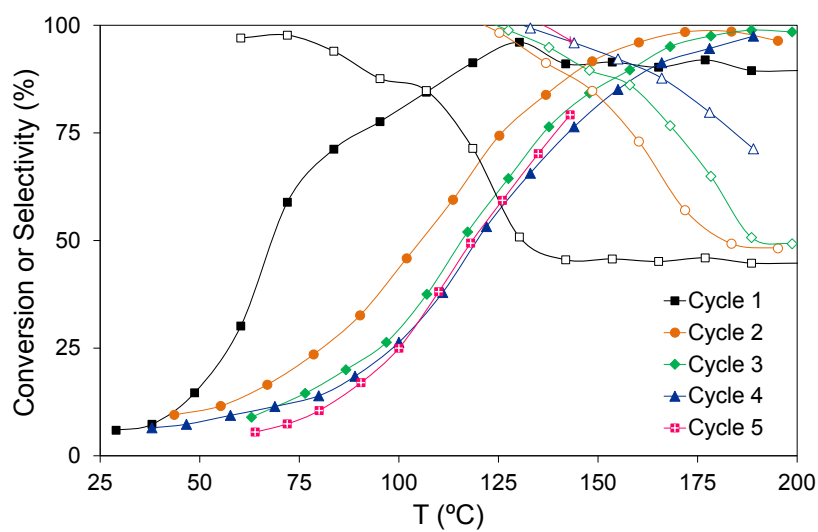
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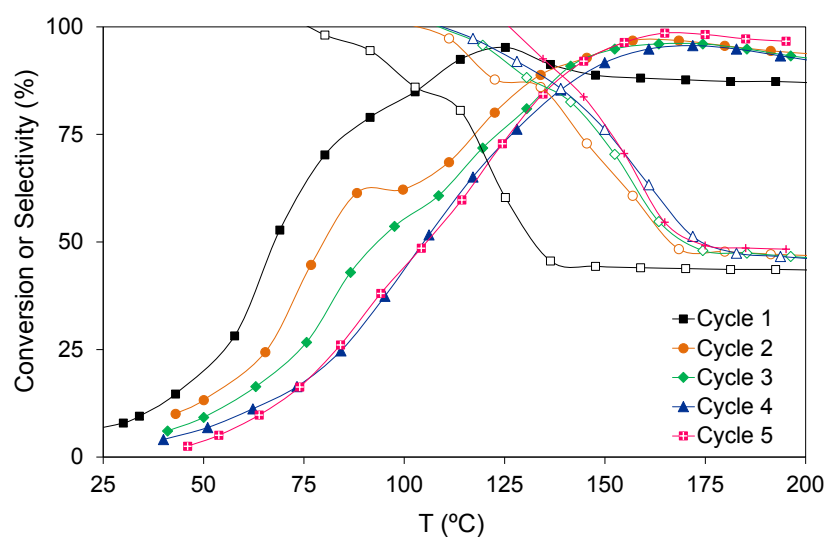
**SUPPLEMENTARY MATERIAL**



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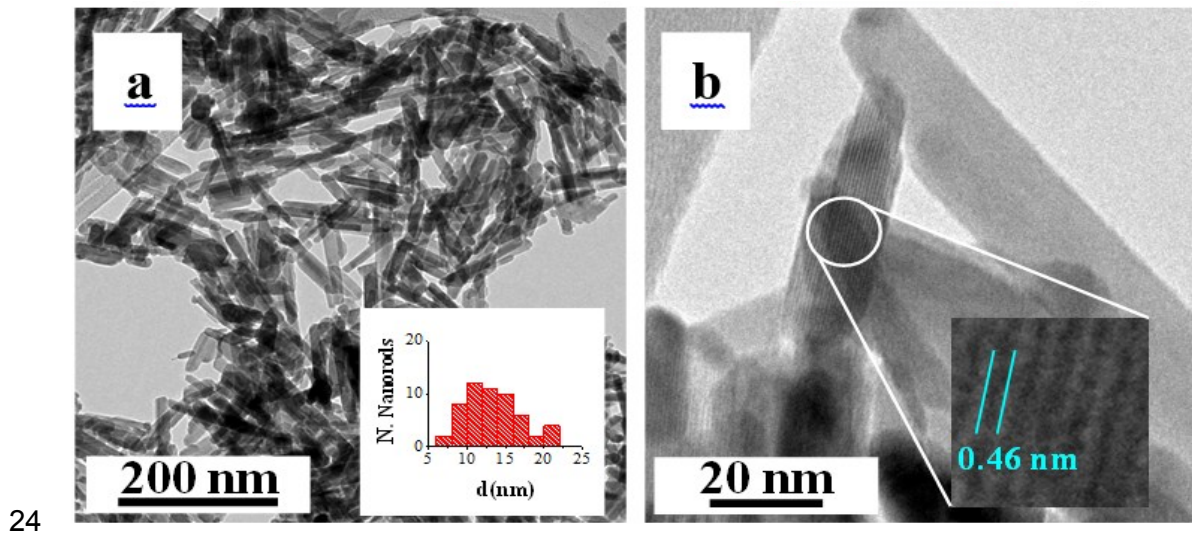


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18 **Figure 1.** CO conversion (solid symbols) and CO selectivity (hollow symbols) obtained  
 19 in CO-PROX experiments performed with: (a) Cryptomelane reoxidized at 200°C after  
 20 each cycle, (b) CuO/Cryptomelane reoxidized at 200°C after each cycle and (c)  
 21 CuO/Cryptomelane reoxidized at 400°C after each cycle. Reaction conditions: 150 mg of  
 22 catalyst, 2% CO, 2% O<sub>2</sub>, 30 % H<sub>2</sub>, balance He, 100 mL/min. 2°C/min.



25 **Figure 2.** TEM micrographs of fresh CuO/Cryptomelane: a) Needle-like nanorods  
26 morphology of the cryptomelane support in the CuO/Cryptomelane sample with the  
27 histogram corresponding to the nanorods diameters distribution; b) Magnification of a  
28 cryptomelane nanorod with the periodic lattice fringes of 0.46 nm. TEM images were  
29 obtained in a JOEL (JEM-2010) microscope.

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