

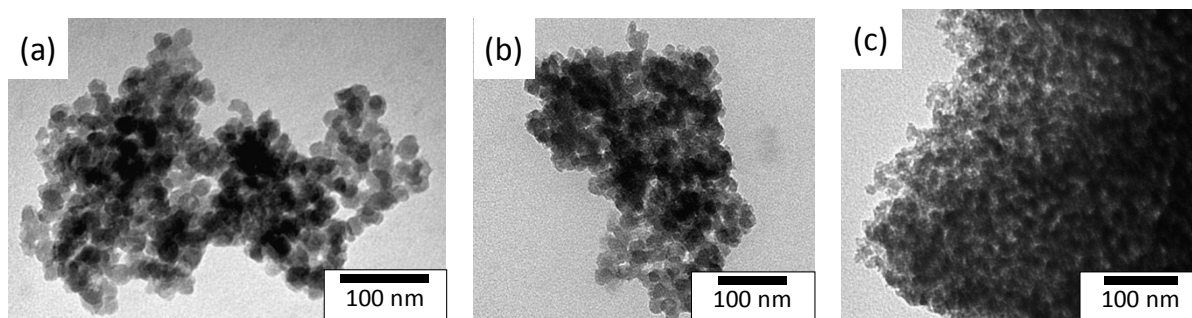
Supporting information

Bi-functional heterogeneous catalysts for carbon dioxide conversion: enhanced performances at low temperature

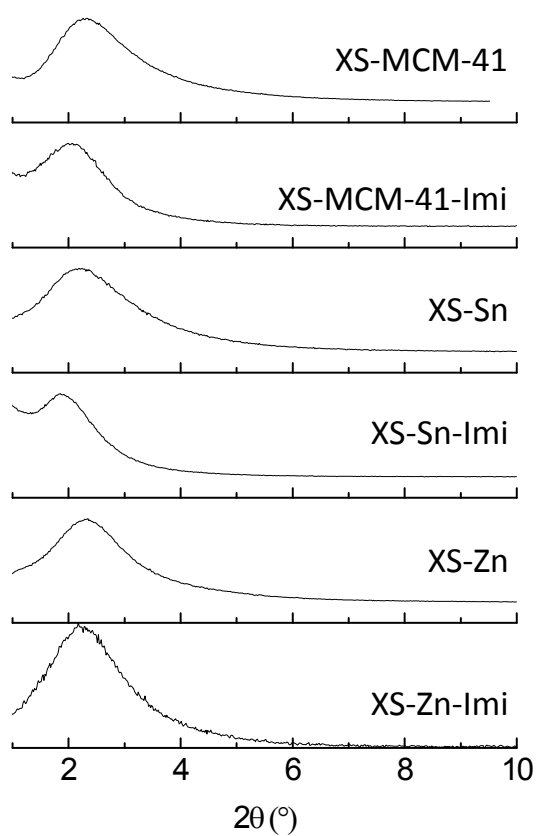
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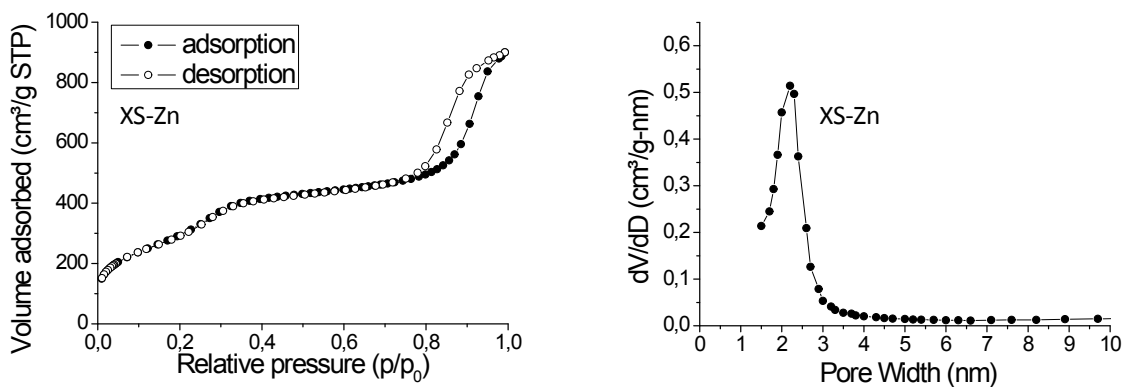
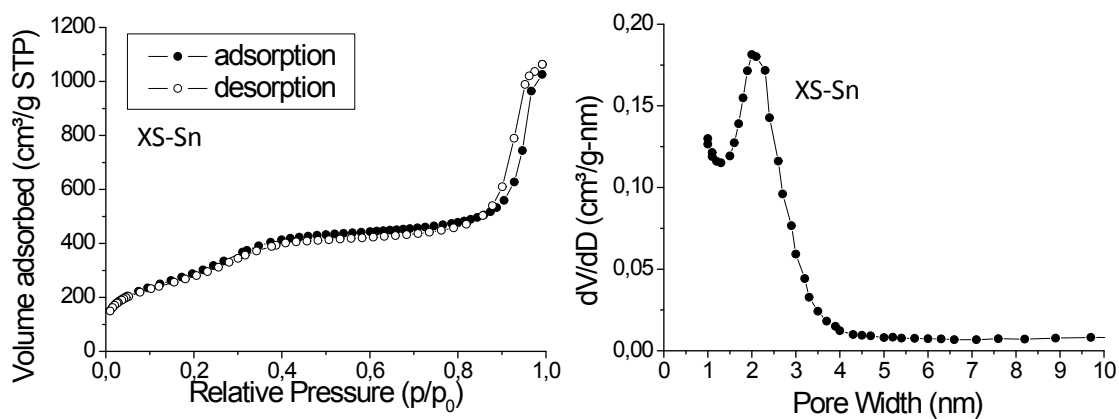
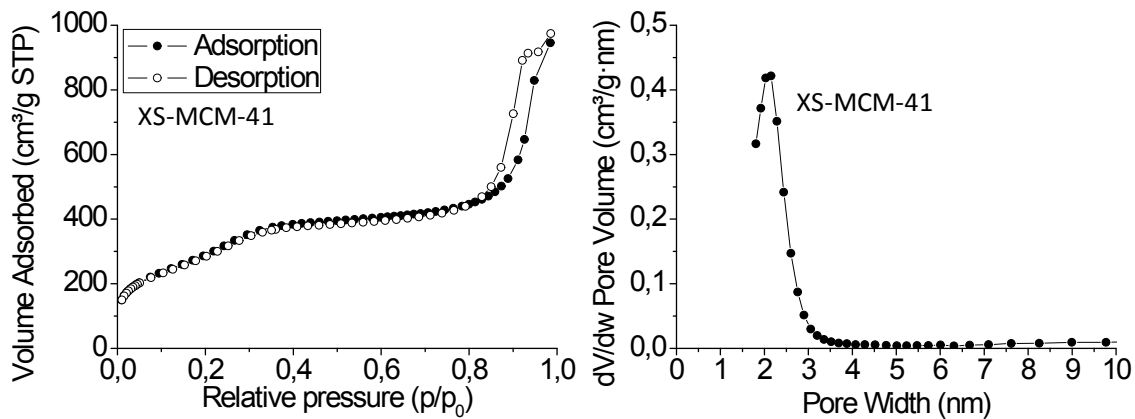
1. TEM images of XS-MCM-41 (a), XS-Sn (b) and XS-Zn (c) **S1**
2. Small angle XRD pattern XS-MCM-41, XS-MCM-41-Imi, XS-Sn, XS-Sn-Imi, XS-Zn and XS-Zn-Imi **S2**
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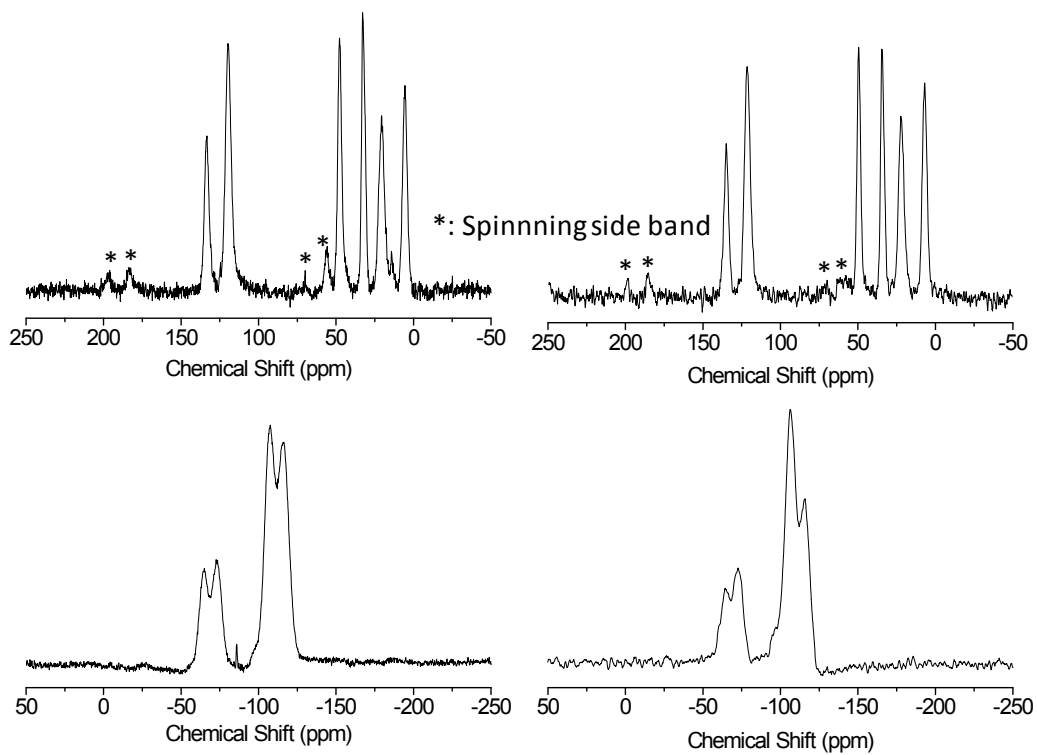
S1 : TEM images of XS-MCM-41 (a), XS-Sn (b) and XS-Zn (c)



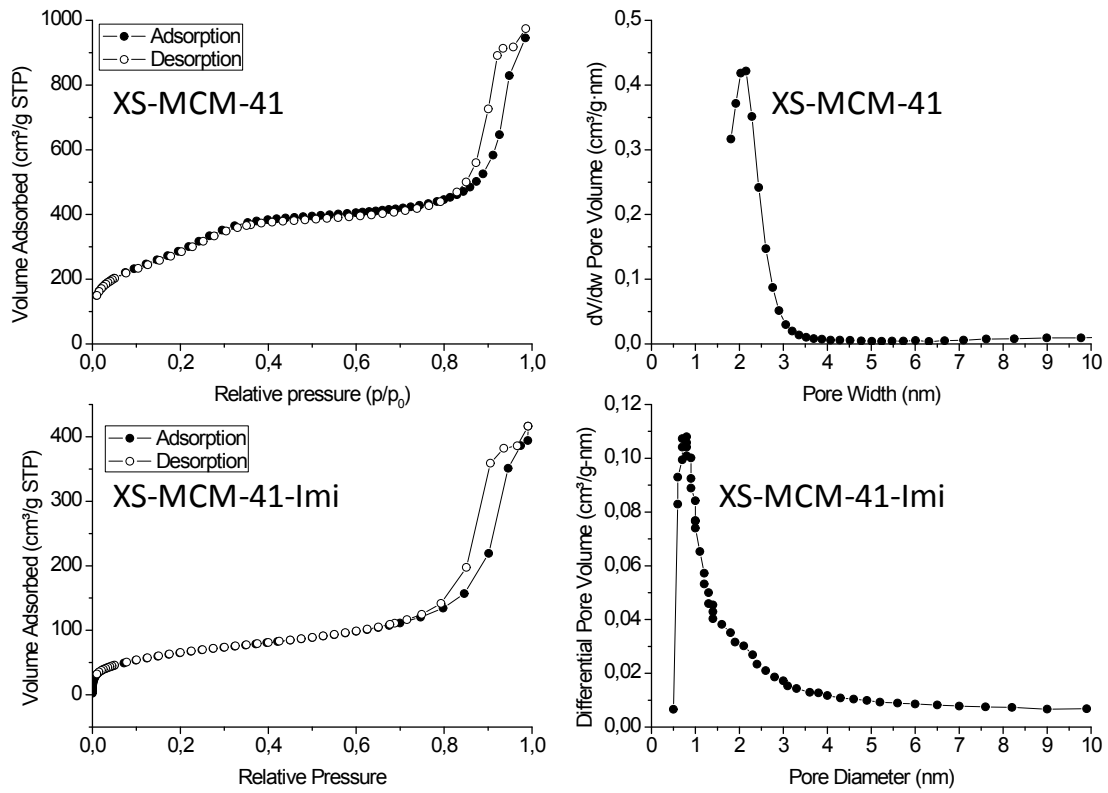
S2 Small angle XRD pattern of XS-MCM-41, XS-MCM-41-Imi, XS-Sn, XS-Sn-Imi, XS-Zn and XS-Zn-Imi



S3 N₂ adsorption-desorption isotherm of XS-MCM-41, XS-Sn and XS-Zn and the corresponding pore size distribution determined via BJH method.



S4 ^{13}C -CPMAS-NMR of XS-MCM-41-Imi (up-left) and XS-Zn-Imi (up-right) and ^{29}Si -CPMAS-NMR of XS-MCM-41-Imi (down-left) and XS-Zn-Imi (down-right)



S5 N₂ adsorption-desorption isotherm of XS-MCM-41 (up-left) and XS-MCM-41-Imi (down-left) and pore size distribution determined via BJH method of XS-MCM-41 (up-right) plus pore size distribution determined via HK method of XS-MCM-41-Imi (down-right)