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Supporting Information



Figure S 1 TEM images of CN-meso



Figure S 2 XRD analysis (left frame) and TG analysis (right frame) of CN-meso



Figure S 3 FTIR of CN-meso (left) and Raman Spectra of CN-meso (right)



Figure S 4 High-resolution C1s XPS spectra (left) and high-resolution O1s XPS spectra of CN-meso.

Table S 1 Su	rface area and	nore volume	values of s	vnthesized	materials
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Material	Surface area (m2/g)	Pore volume (cm3/g)
CN-meso	834	3.3
CN-meso/Ni	789	3.1
CN-meso/Co	801	2.9
CN-meso/Cu	762	3.2
Cn-meso/Fe	720	3.0



Figure S 5 Dark-field TEM images of CN-meso/Ni (left) and CN-meso/Fe(right)



Figure S 6 High-resolution XPS of spent catalysts (a) CN-meso/Co; (b) CN-meso/Cu; (c) CN-meso/Ni



Figure S 7 Conversion of benzyl alcohol with the addition of sodium azide (25 eq.) as a scavenger



Figure S 8 N₂ physisorption isotherm of CN-meso/Cu (left) and TEM image of CN-meso/Cu after 5 cycles