Supporting Information for

Room temperature selective oxidation of cyclohexane over Cunanoclusters supported on nanocrystaline Cr₂O₃

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Fig. S1 XRD pattern of $Cr_2O_3^{surf}$



Fig. S2 Cr2p XPS spectra of (A) fresh & (B) spent Cu-4.3-Cr₂O₃ catalyst.



Fig. S3 SEM images of Cu-4.3- $Cr_2O_3^{surf}$



Fig. S 4 SEM image of $Cr-5-Cr_2O_3^{Imp}$



Fig. S 5 Energy diffraction X-ray analysis pattern of Cu-4.3- $Cr_2O_3^{surf}$ catalyst



Fig. S6 Elemental mapping of Cr and Cu in Cu-4.3- $Cr_2O_3^{surf}$ catalyst



Fig. S7 TEM micrograms of Cu-4.3- $Cr_2O_3^{surf}$ catalyst are shown at different resolution



Fig. S8 k^3 -weighted Fourier transform of Cu-K edge EXAFS for the fresh (A) and spent (B) Cu-(4.3)-Cr₂O₃^{surf.} catalyst. Amplitude: solid curves; imaginary part: dotted curves; observed data: thick curves; fitting data: thin curves.