

**S1.** A) Spectra 1-4 correspond to EDX spectra recorded from rice husk during the course of its reaction with the fungus *Fusarium oxysporum* at 0 h, 8 h, 16 h and 24 h respectively. Spectrum 5 corresponds to the as synthesized bioleached silica nanoparticles after reaction of rice husk with the fungus for 24 h while spectrum 6 corresponds to the bioleached silica particles calcined at 400 °C for 2 h. Spectra 5a and 6a in the inset shown in A demonstrate the higher magnification of the spectra shown in spectra 5 and 6 respectively between 0.1 and 0.8 eV, showing the presence of C in uncalcined as-synthesized silica particles. B) EDX spectrum recorded from finely ground rice husk on a copper TEM grid. Inset in the main figure shows the HRTEM image of silica present in rice husk from which the EDX spectrum shown in main figure has been obtained and the electron diffraction obtained from the same region has been shown.