

Fig. S1 (a) UV-Vis absorption spectra of nanoparticles and (b) optical energy gap (E_g) and photoluminescence spectra (c) of the prepared nanoparticles

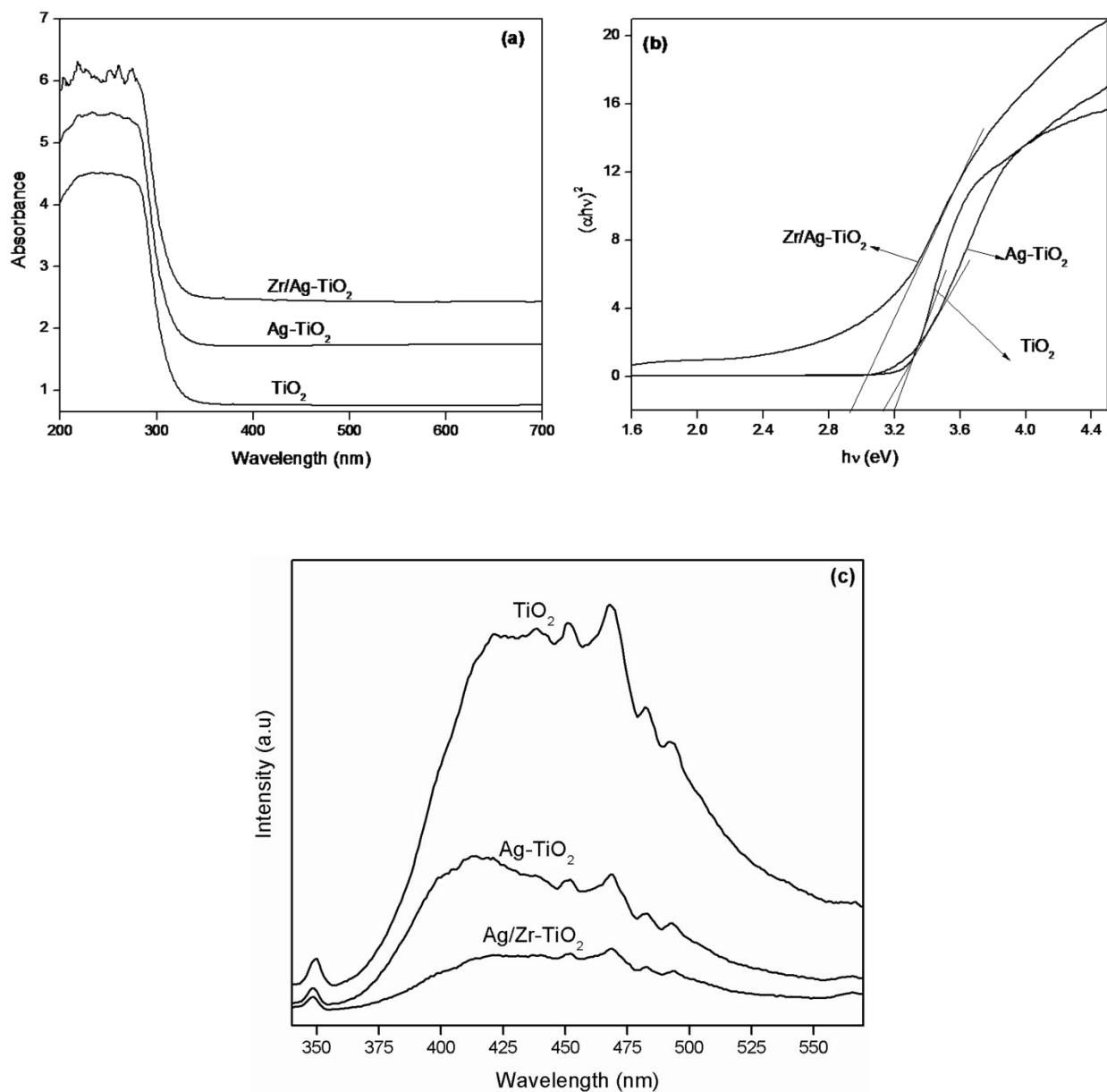


Fig. S2: TEM images of Ag-TiO₂ nanoparticles (a) and (b), selected area electron diffraction pattern of the doped nanoparticles (c), EDAX profile (d) showing the elements present in the doped nanoparticles

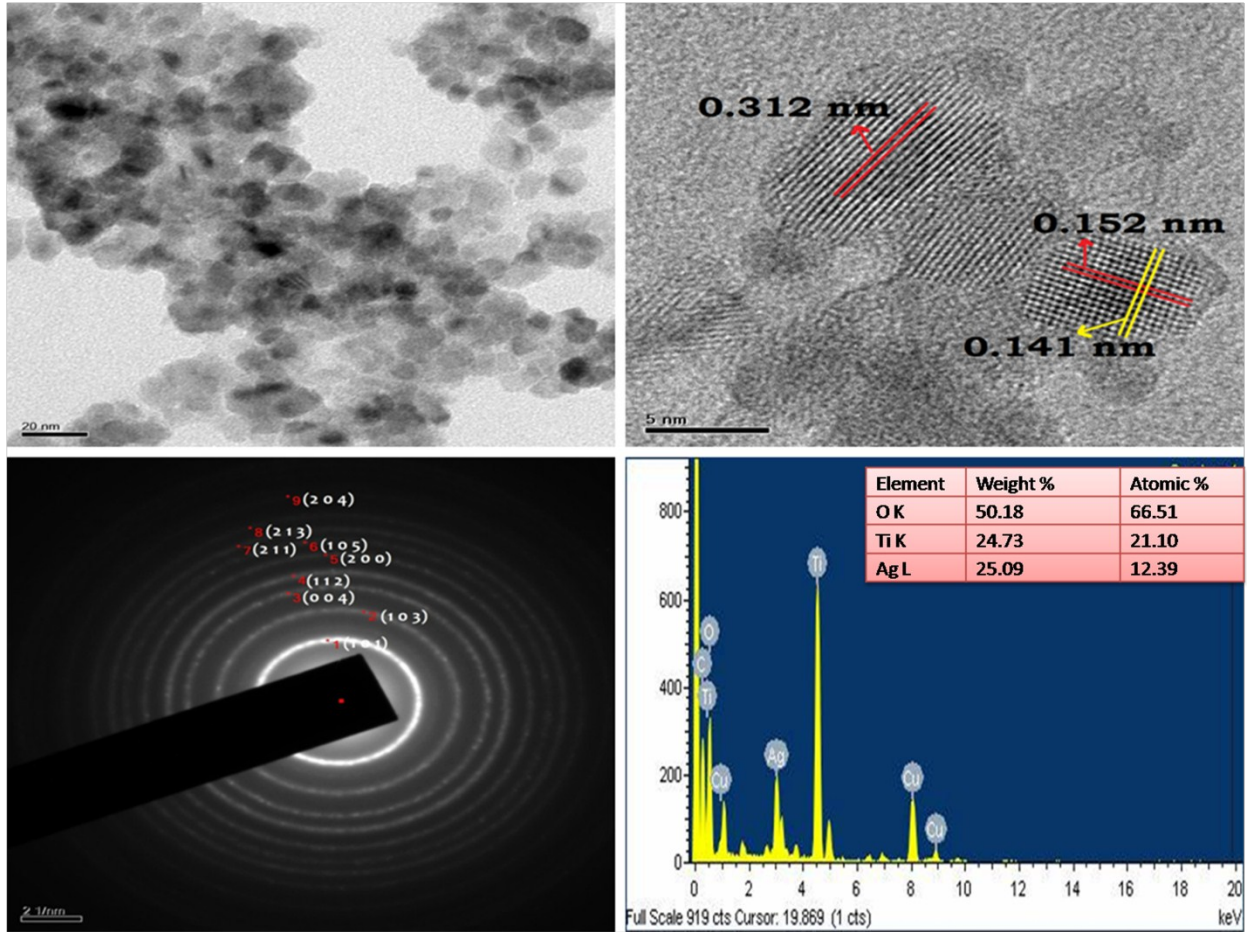
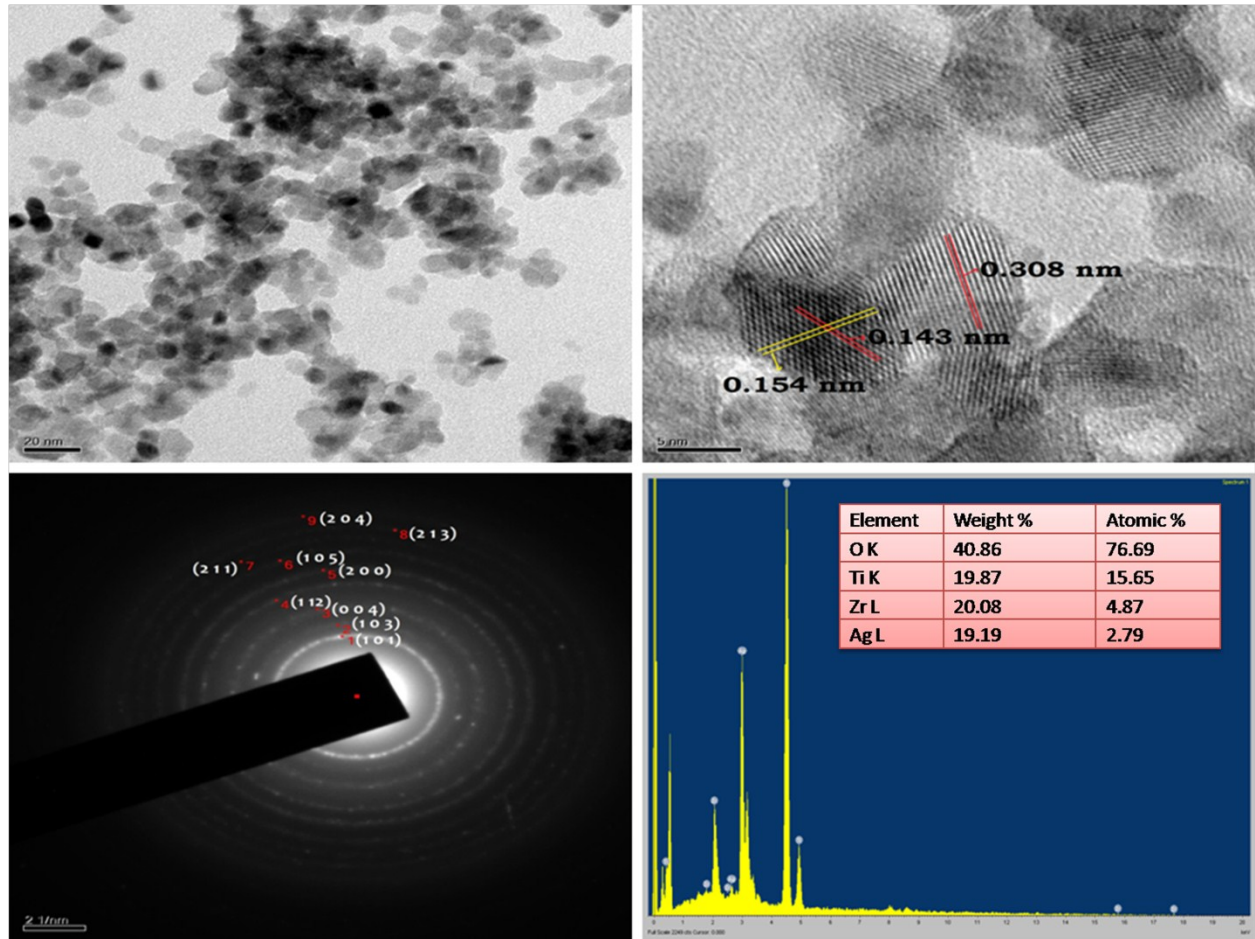
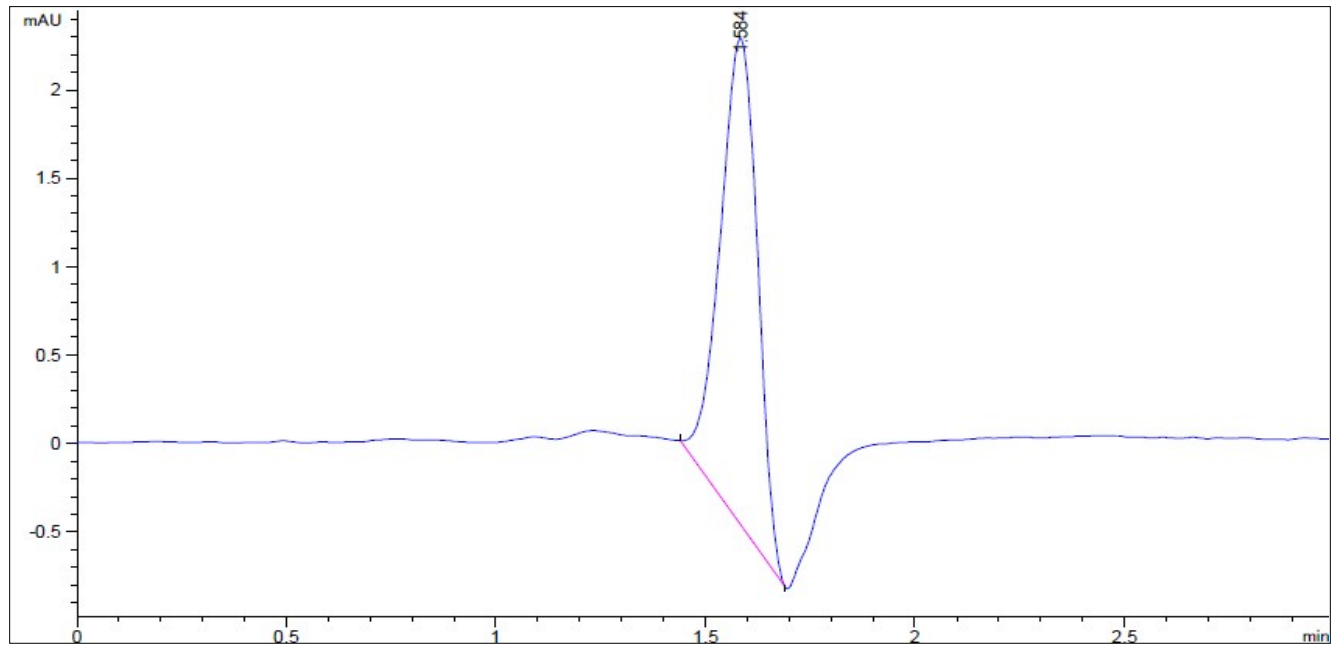


Fig. S3: TEM images of Zr/Ag co-doped TiO₂ nanoparticles (a) and (b), selected area electron diffraction pattern of the doped nanoparticles (c), EDAX profile (d) showing the elements present in the doped nanoparticles



(a)



(b)

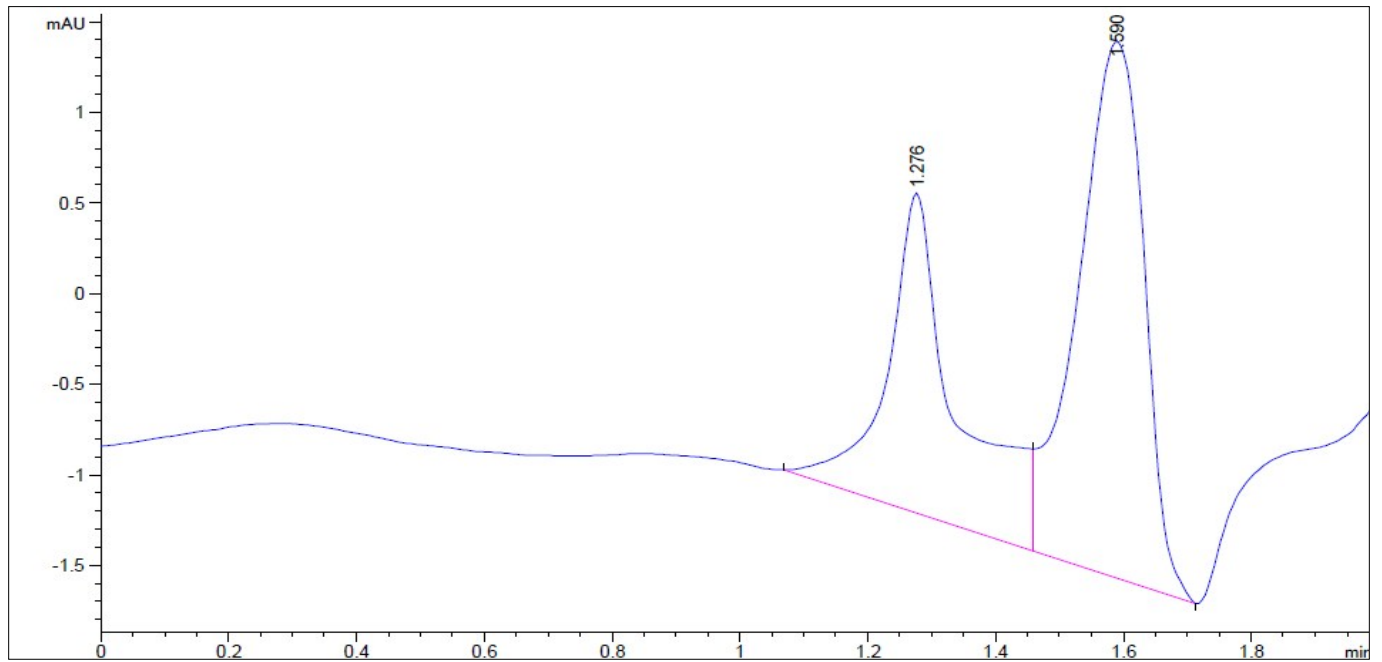
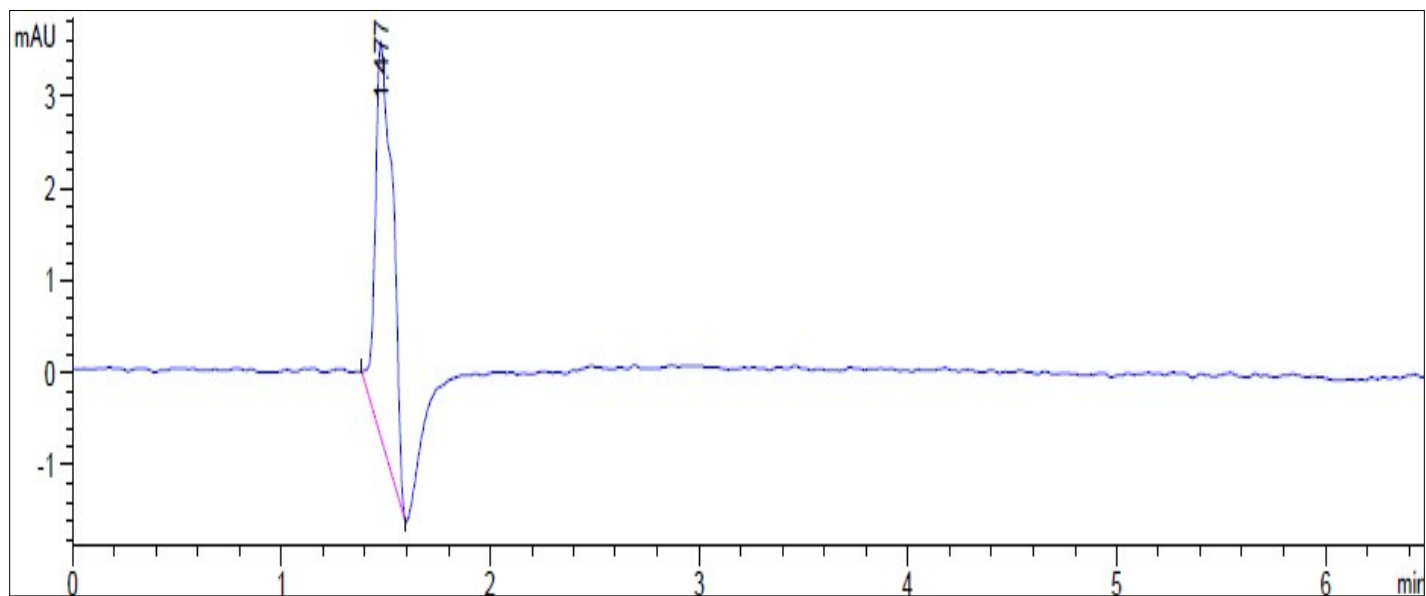


Fig. S4: HPLC chromatogram of EE2 extracted at 0 h (a) and degraded metabolites extracted at 5 h (b).

(a)



(b)

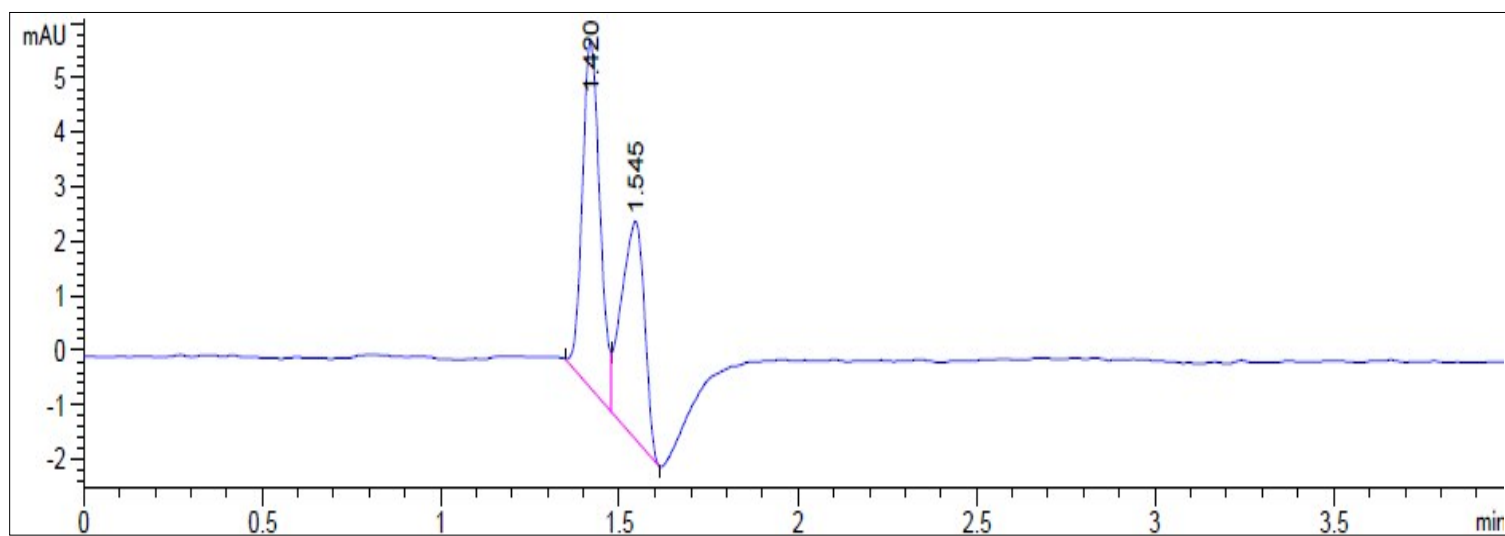
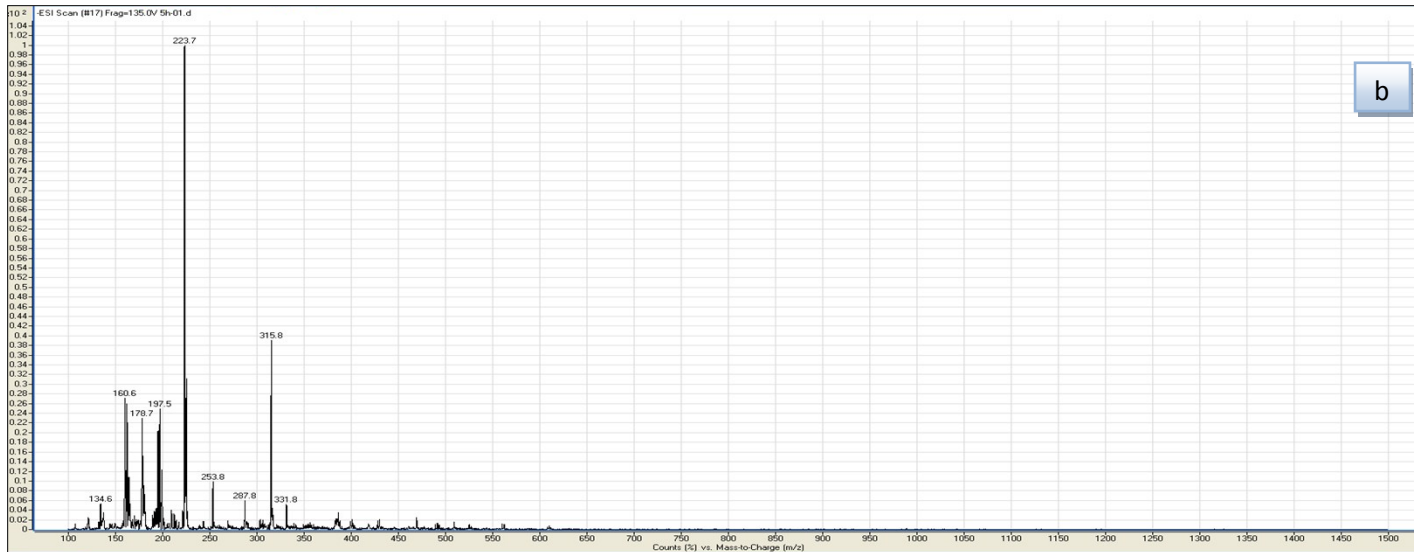


Fig. S5: HPLC chromatogram of AB-52 extracted at 0 h (a) and degraded metabolites extracted at 5 h (b).



b

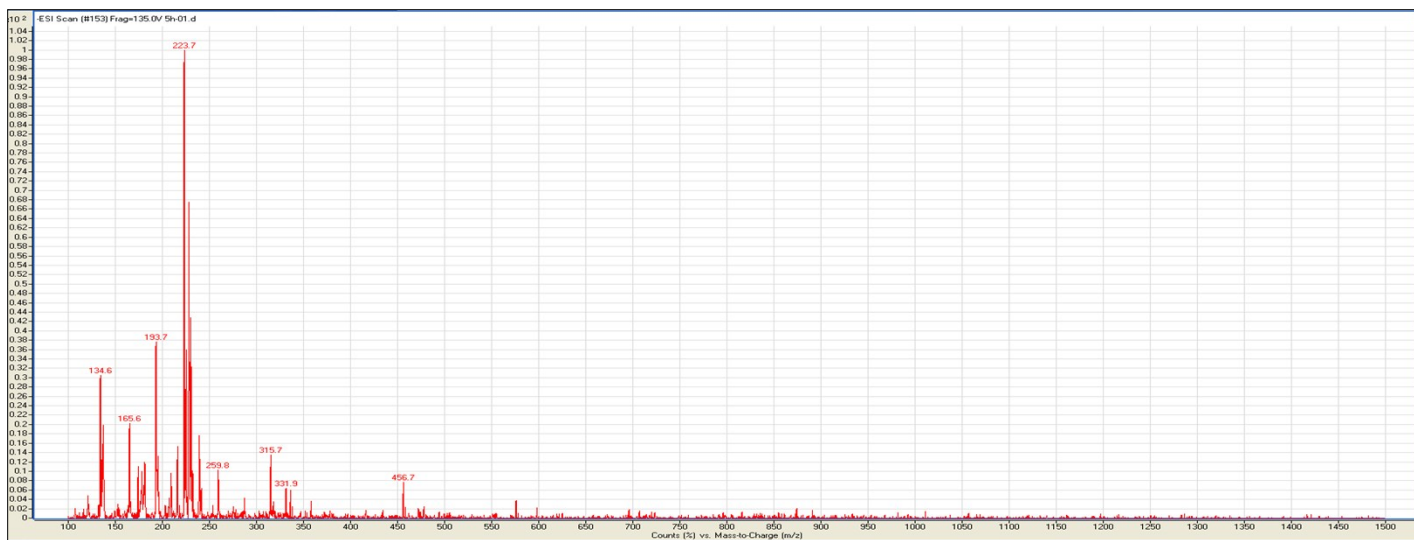
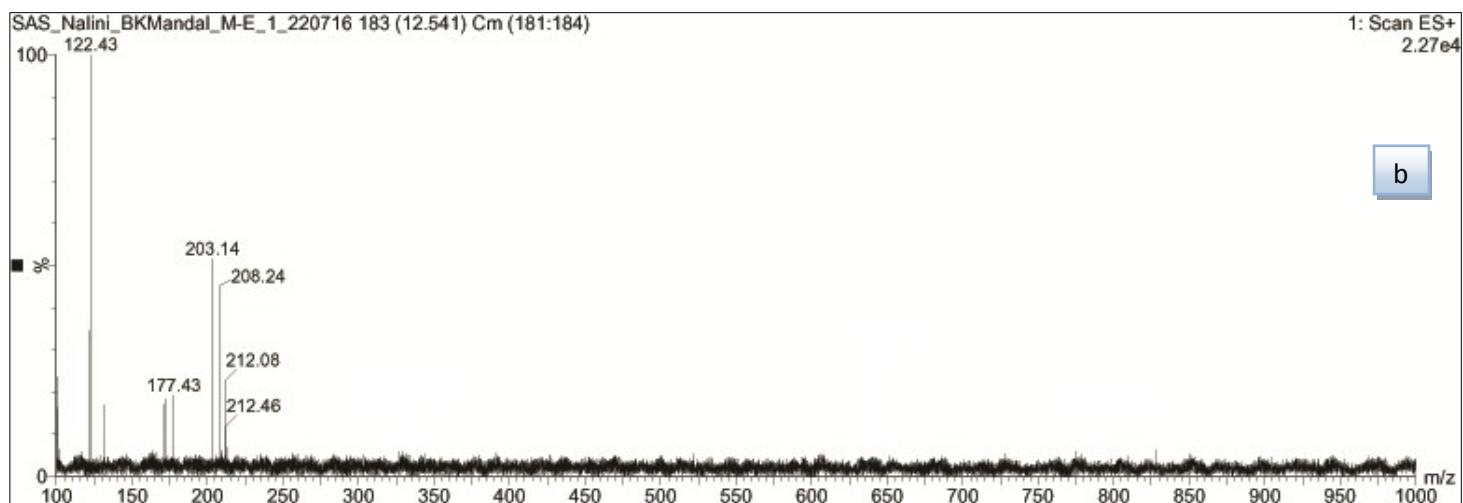


Fig. S6: LCMS fragmentation pattern of AB-52 degraded metabolites extracted at 3 h (a) & 5 h (b).



b

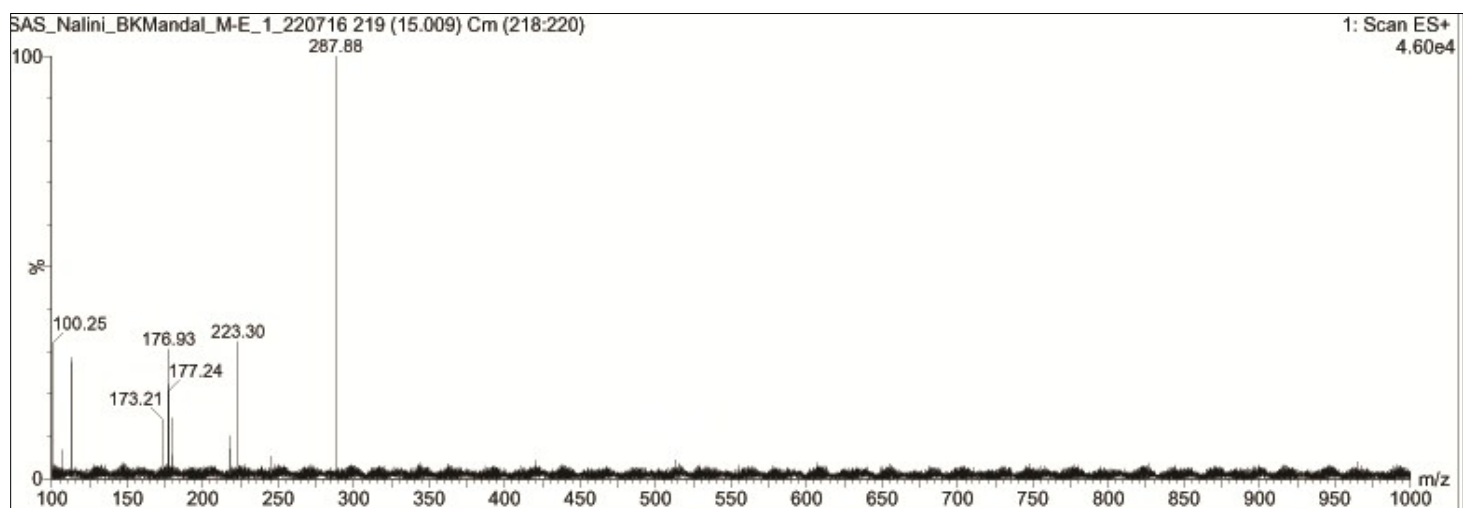


Fig. S7: LCMS fragmentation pattern of EE2 degraded metabolites extracted at 3 h (a) & 5 h (b).