

**Fig. S1**

**Fig. S1.** EDS of Ce-Ag-ZnO

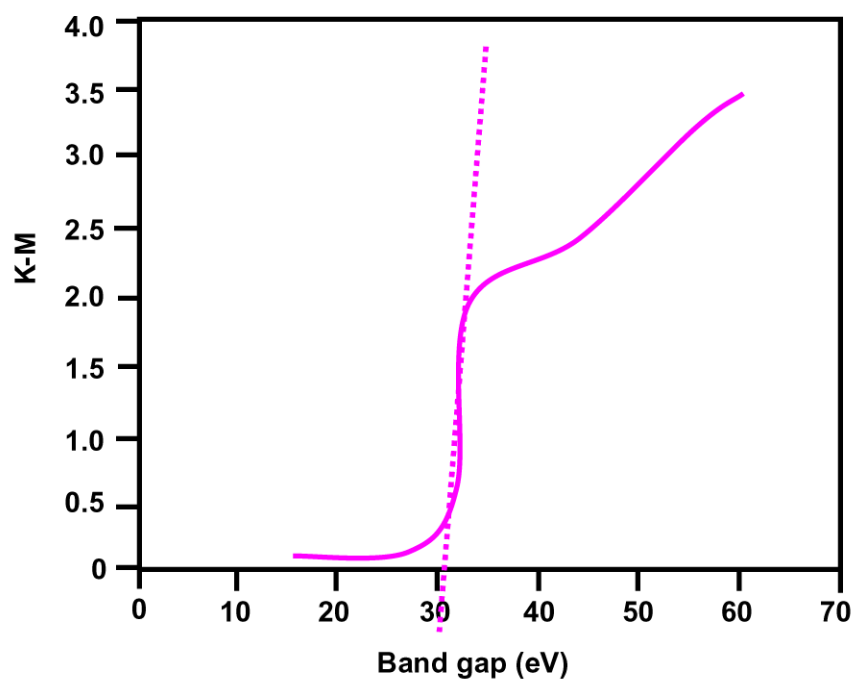


Fig. S2

**Fig. S2.** Plot of transferred Kubelka-Munk versus energy of the light absorbed of the Ce-Ag - ZnO.

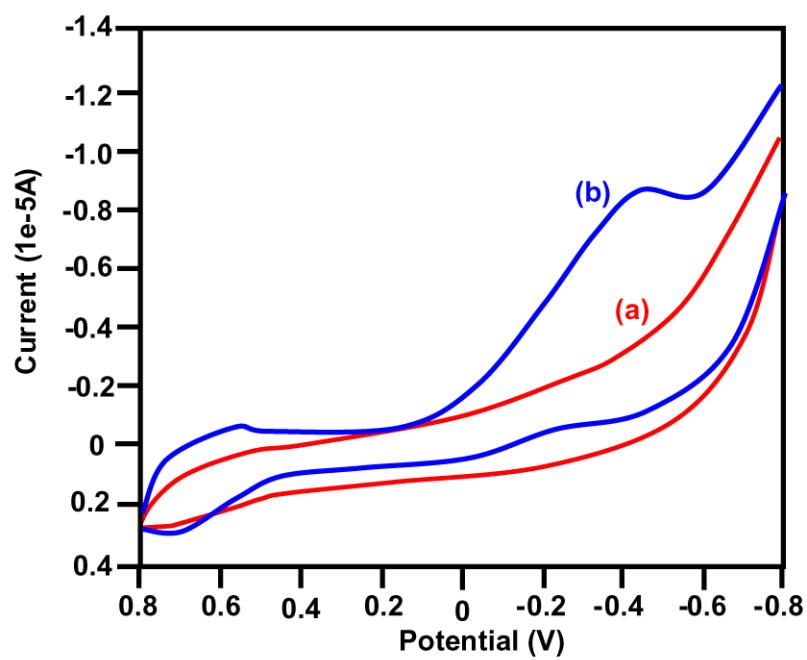


Fig. S3

**Fig. S3.** Cyclic voltammogram of a) bare ZnO and b) Ce-Ag -ZnO