Electronic Supplementary Material (ESI) for RSC Advances.

Anomalous catalytic and antibacterial activity confirmed by molecular docking analysis of silver and polyacrylic acid doped CeO_2 nanostructures

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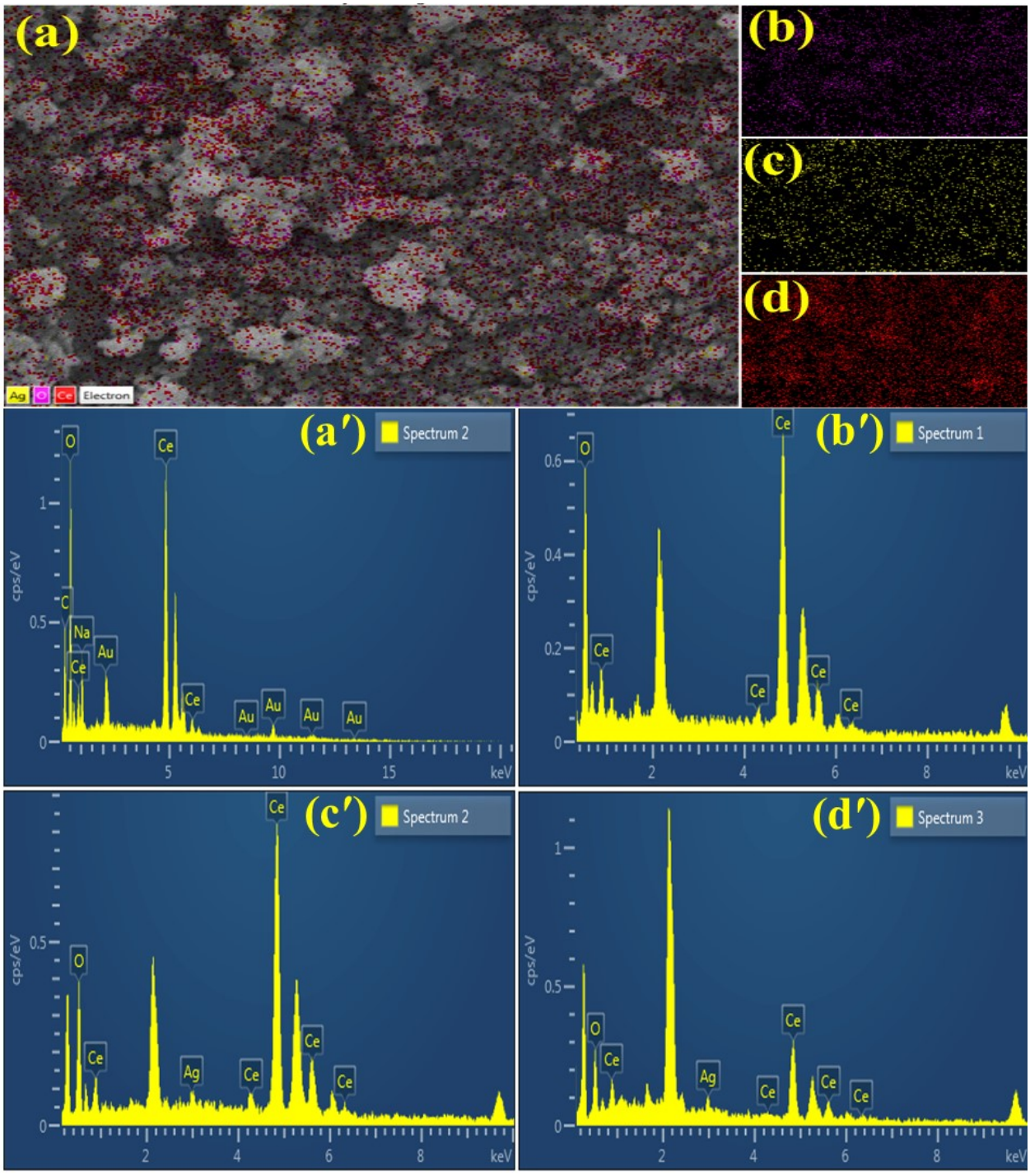

Figure S1: (a-d) Mapping of (0.03) Ag/PAA doped CeO_2 and (a′-d′) EDS spectra of pure and (0.01, 0.03) Ag/PAA doped CeO_2

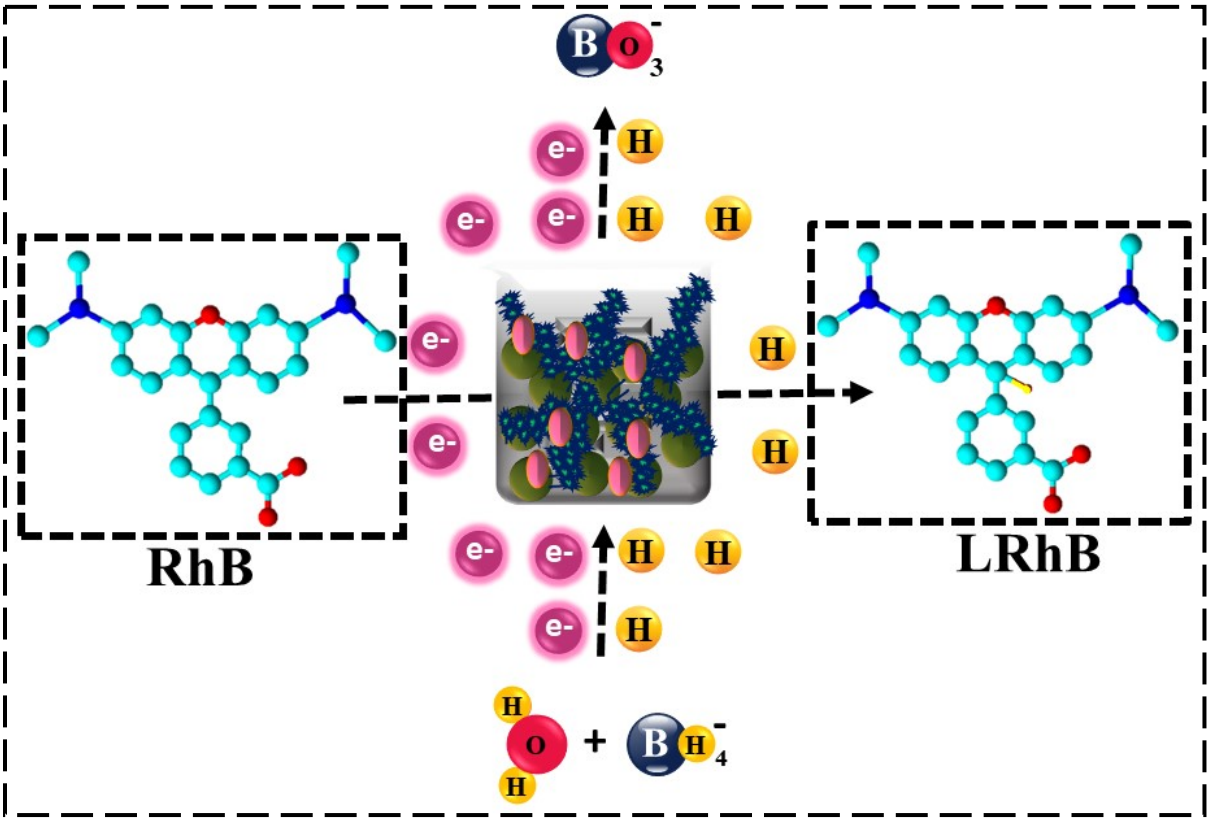

Figure S2: Catalysis mechanism of Ag/PAA doped CeO_2

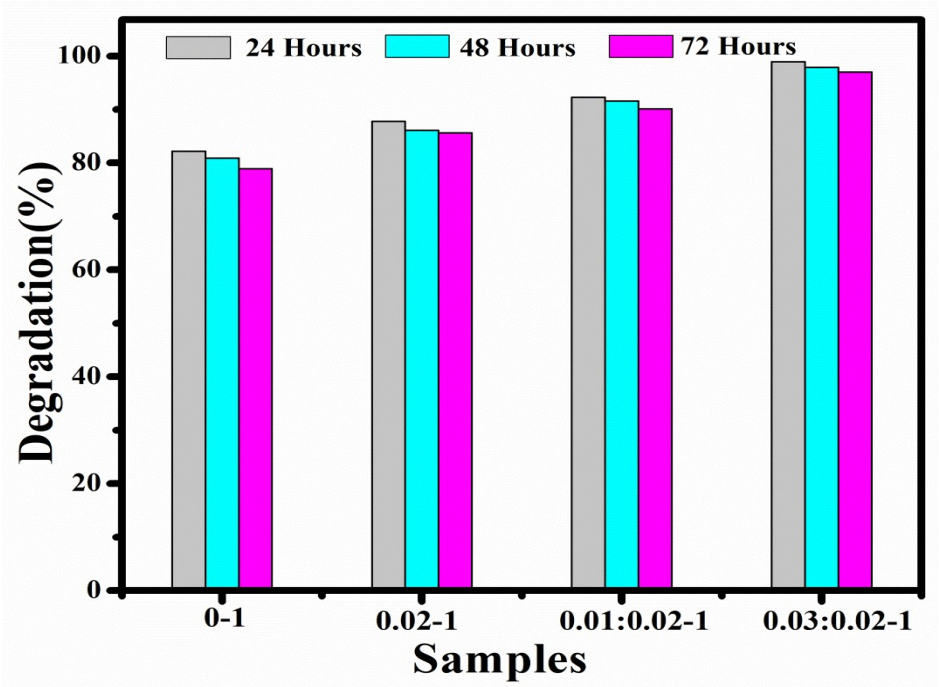

Figure S3: Stability tests of CeO_2 and (0.01, 0.02) Ag/PAA doped CeO_2 in acidic medium

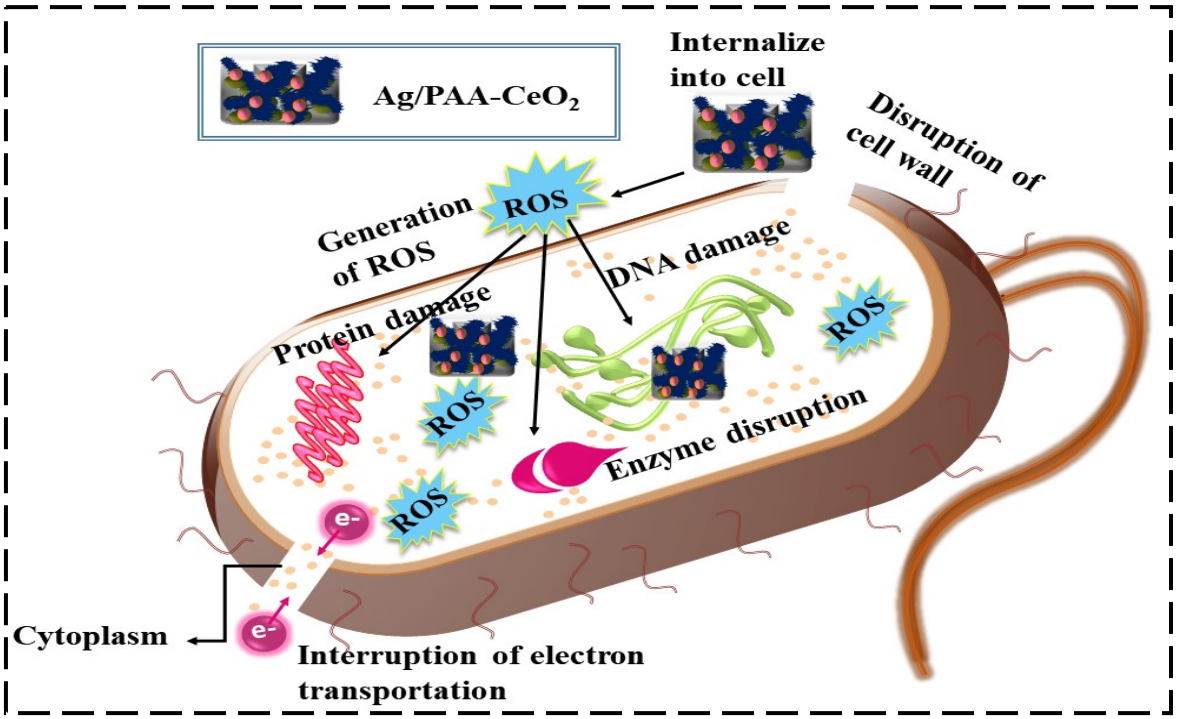

Figure S4: Antibacterial activity of Ag/PAA doped CeO_2

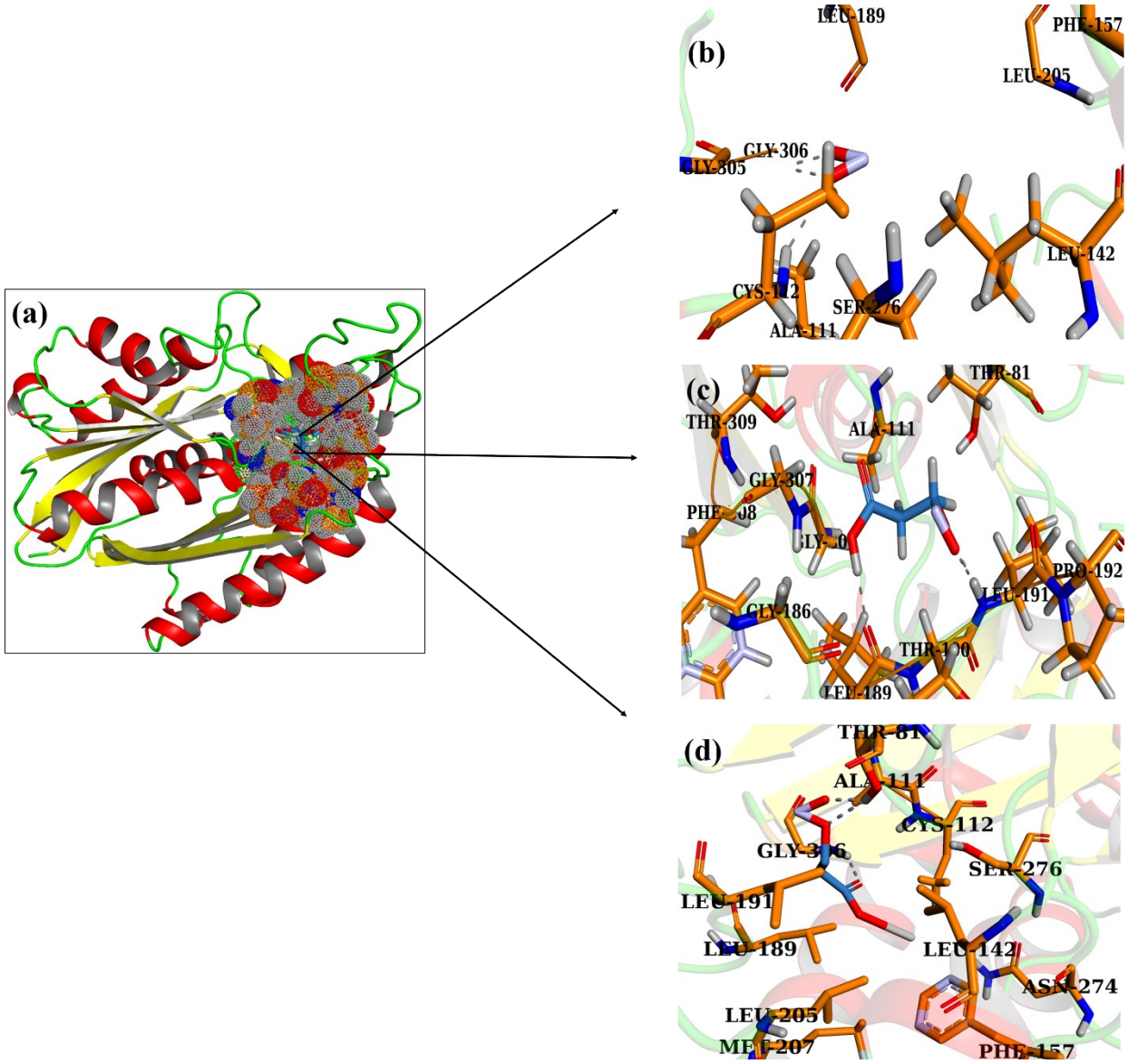

Figure S5: 3D representation of superimposed ligands inside the active site (a) and binding interaction of NSs inside the active site of $FabH_{E.\ coli}$ (b) CeO_2, (c) PAA-CeO_2, and (d) Ag/ PAA-CeO_2.

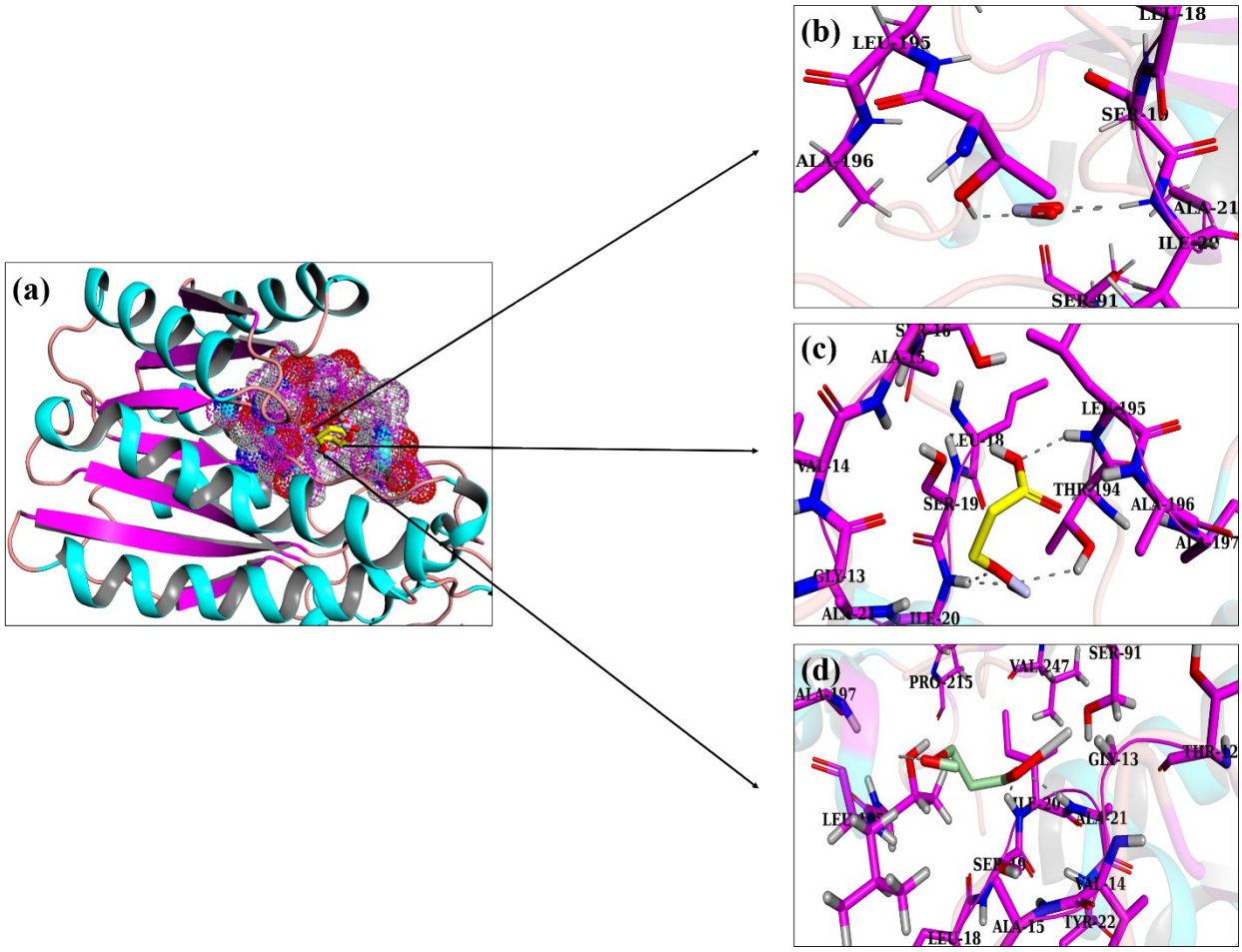

Figure S6: 3D representation of superimposed ligands inside the active site (a) and binding interaction of NSs inside the active site of FabI$_{E.\ coli}$ (b) CeO_2, (c) PAA-CeO_2, and (d) Ag/ PAA-CeO_2.