Electronic Supplementary Material (ESI) for RSC Advances.

Electronic Supplementary Information

Reduced graphene oxide supported Ag-loaded Fe-doped TiO_2 for methylene blue degradation mechanism and its electrochemical properties

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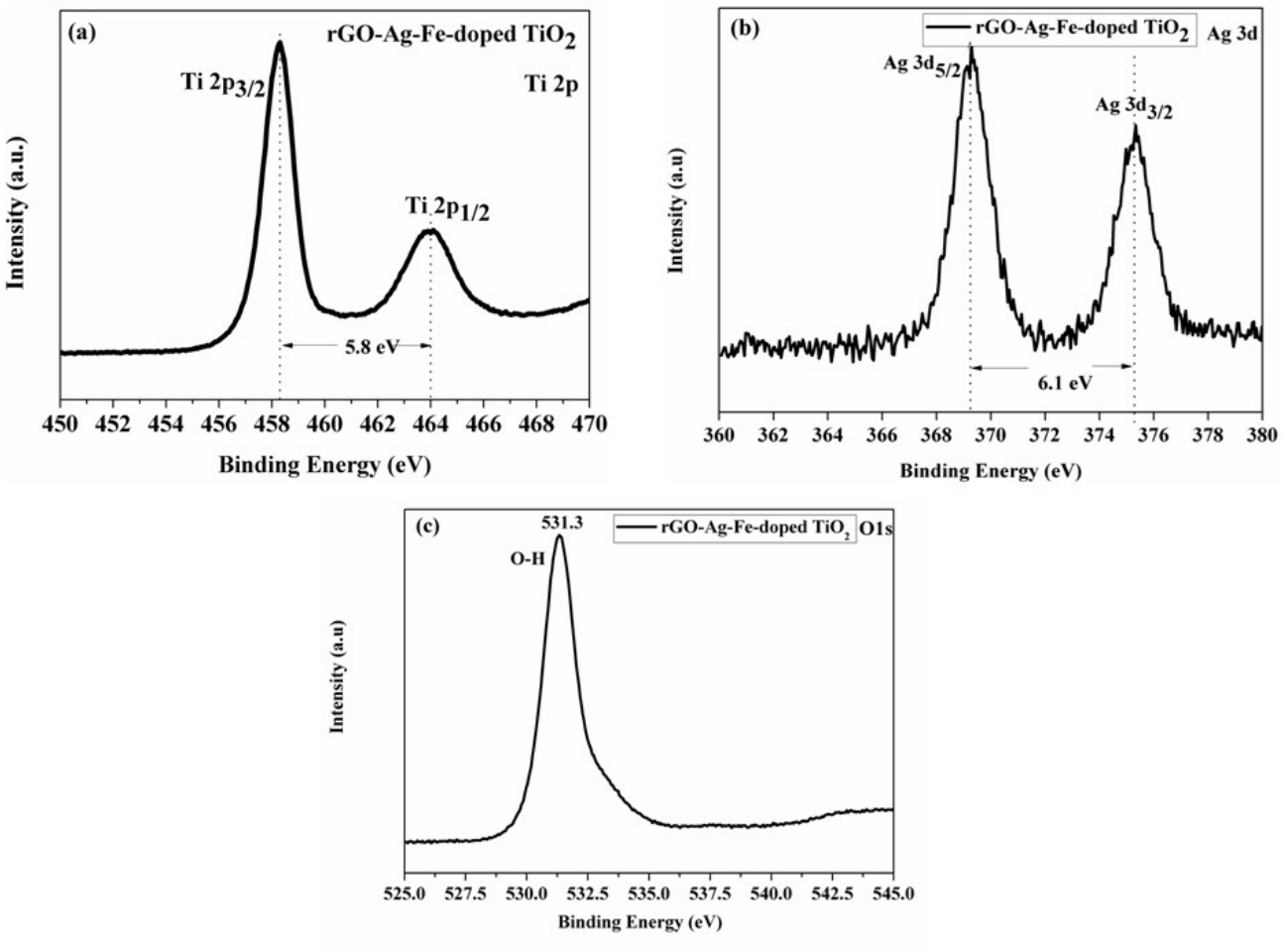

Figure S1. (a) Ti 2p, (b) Ag 3d, and (c) O 1s spectrum for rGO/Ag/Fe-doped TiO_2.

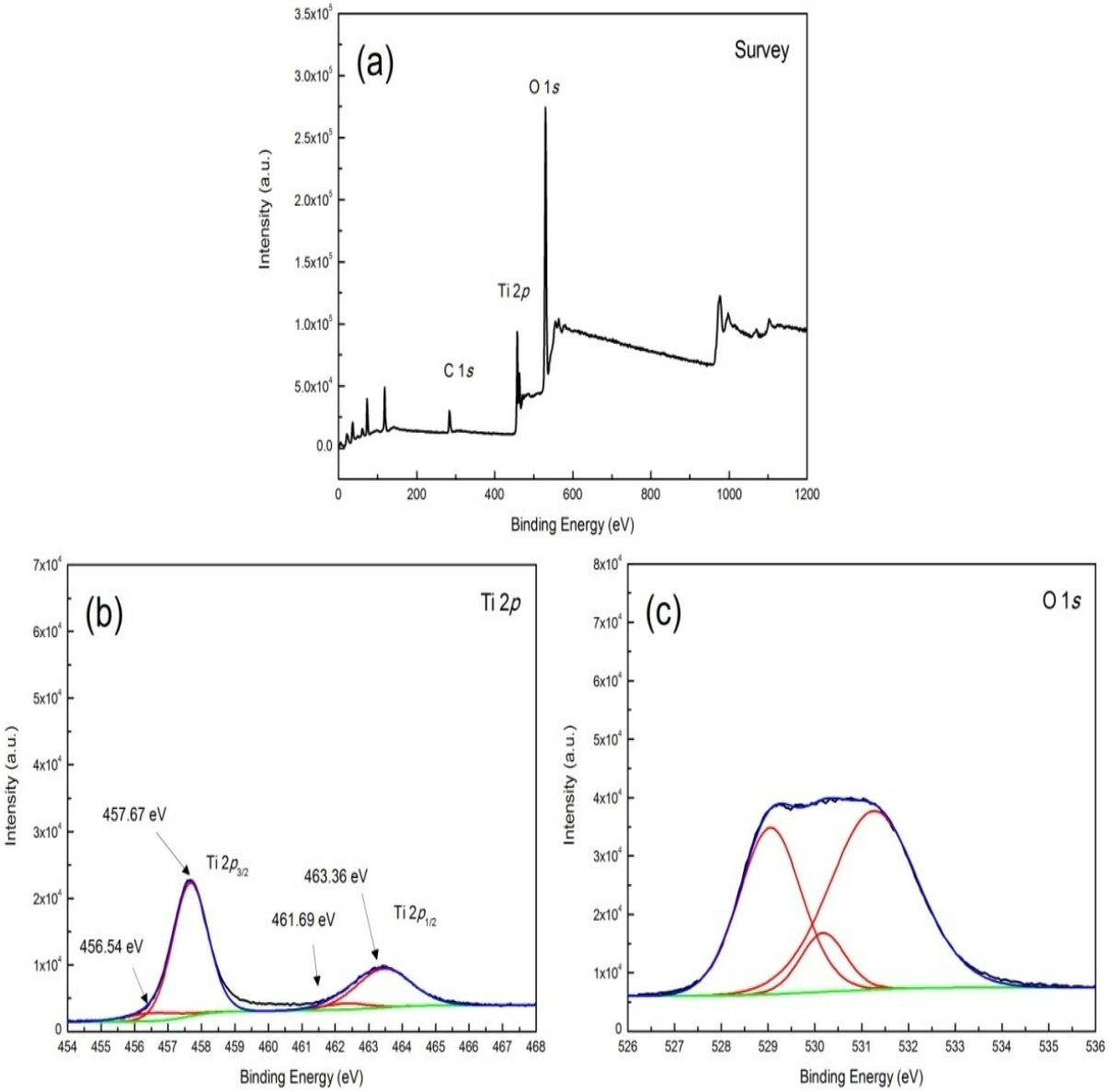

Figure S2. XPS spectra of TiO_2

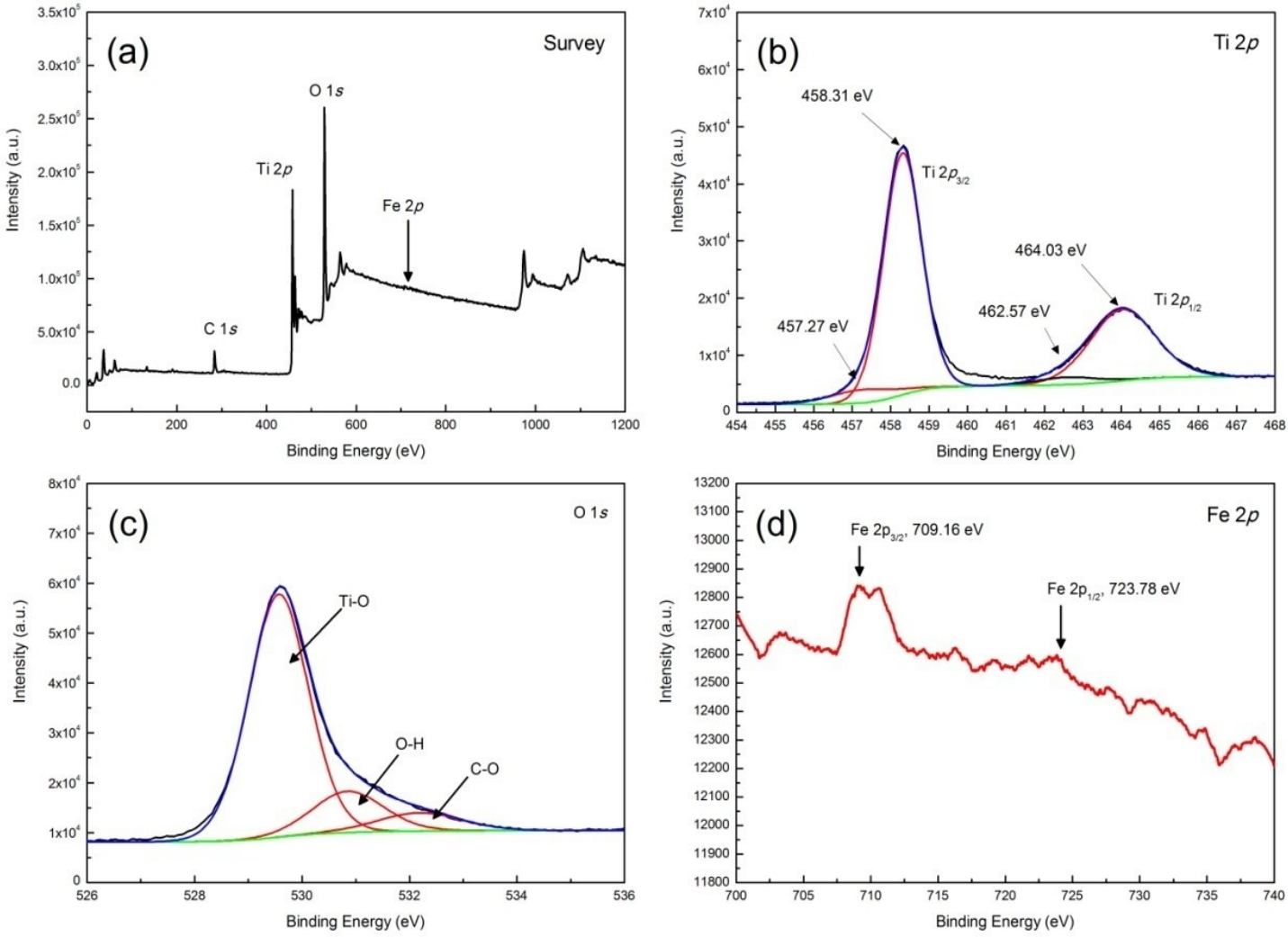

Figure S3. XPS spectra of Fe-doped TiO_2

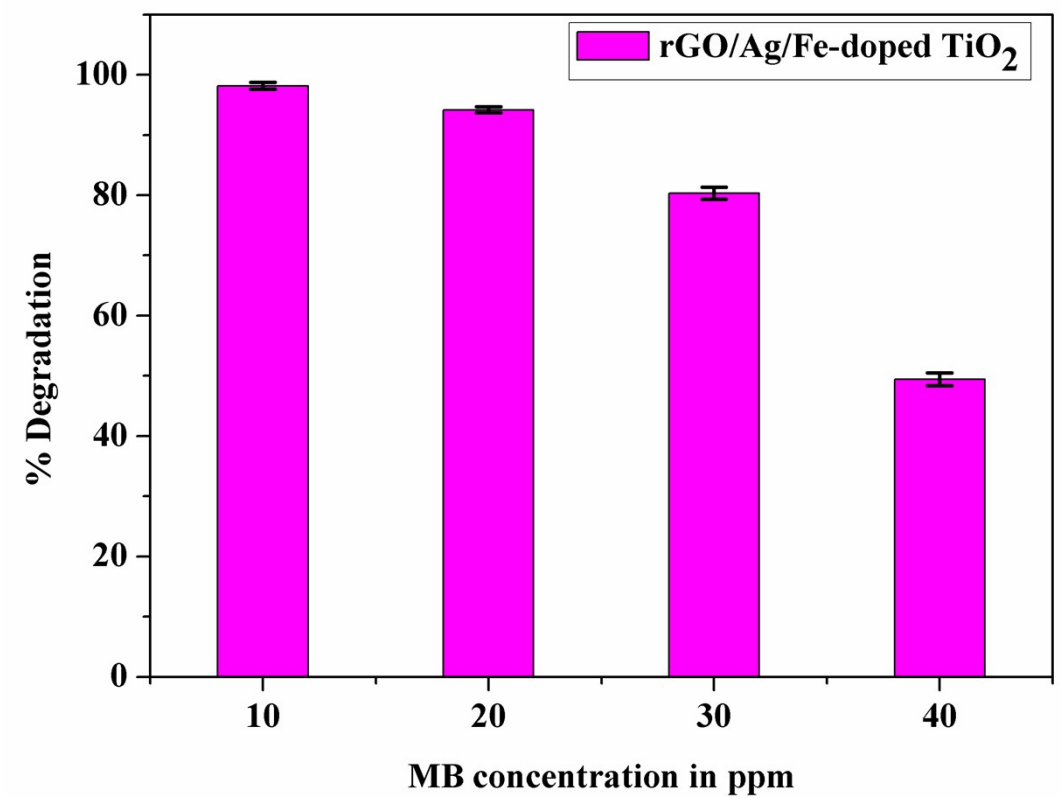

Figure S4. Effect of different MB concentration on rGO/Ag/Fe-doped TiO_2 (10 mg). Error bars represent standard deviations of three-times measurements

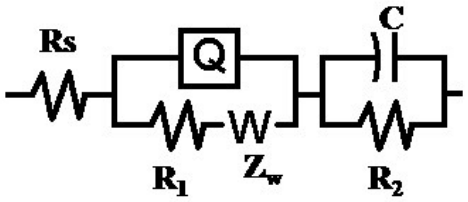

Figure S5: Equivalent circuit of EIS

Rs: Solution resistance

Q: Constant phase element Q=C (capacitor)

Z_W: Warburg constant

R_1,R_2: Charge transfer resistance

Table S1: Current density values in dark and light irradiation

Photocatalysts	Current density (mA cm^{-2}) In dark	Current density (mA cm^{-2}) In light
Fe-doped TiO_2	0.102	0.176
rGO/Fe-doped TiO_2	0.473	0.755
rGO/Ag/Fe-doped TiO_2	0.571	1.39