Supporting Information

Carboxyfullerene decorated titanium dioxide nanomaterials for reactive oxygen species scavenging activities

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Optical Spectra

Figure S1 displays the UV-vis diffuse reflectance spectra of TiO$_2$ and their composites. It can be seen that all of TiO$_2$ nanomaterials contained C$_{70}$-COOH increase the light absorbance in the visible light region. In addition, the absorbance effects are higher and higher with the addition amounts of C$_{70}$-COOH in 1% to 10% (w/w). Furthermore, a qualitative red shift to higher wavelength is observed in the edge of both P25 composites and TNR composites due to the electron interactions between TiO$_2$ and C$_{70}$-COOH [1].

Figure S1. UV-vis diffuse reflectance spectra of (a) P25 and P25/C$_{70}$-COOH composites (b) TNR and TNR/C$_{70}$-COOH composites.

Reference: