Electronic Supplementary Material (ESI) for New Journal of Chemistry.

Supporting Information

One-step modified method for high efficient Au-PANI@TiO_2 visible-light photocatalyst

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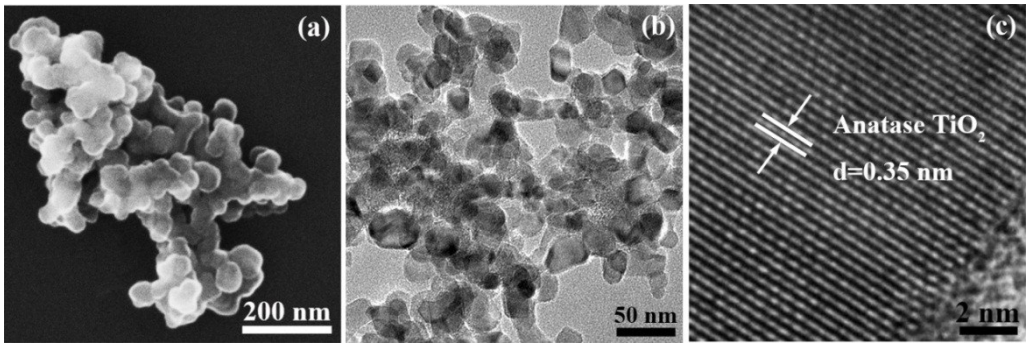

Figure S1. Morphology images of P25 NPs: (a) SEM image, (b) TEM image, (c) HRTEM image.

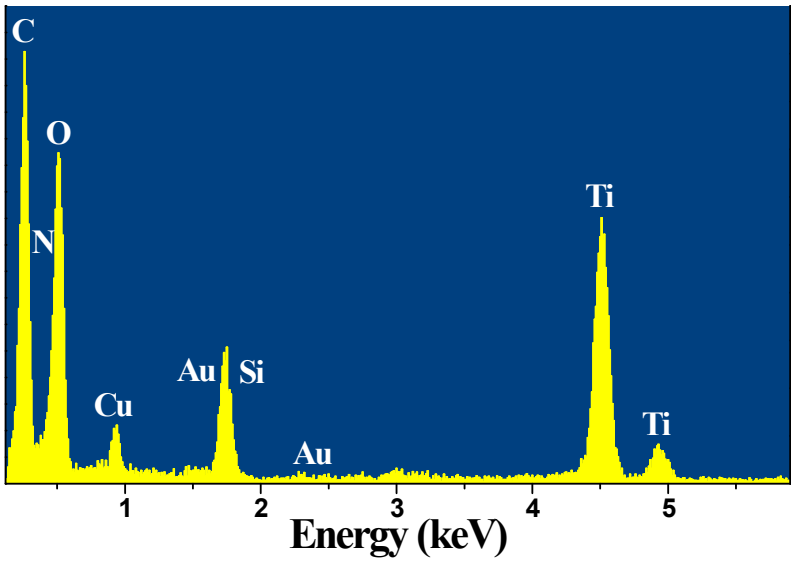

Figure S2. EDX of Au-PANI@TiO_2 (80:1)

Table S1. EDX elemental composition of Au-PANI@TiO_2 (80:1) NPs.

Element	Ti(K)	N(K)	Au(L)	O(K)	C(K)
Weight %	22.4	3.77	0.02	23.35	50.46
Atomic %	7.31	4.2	0.02	22.81	65.66

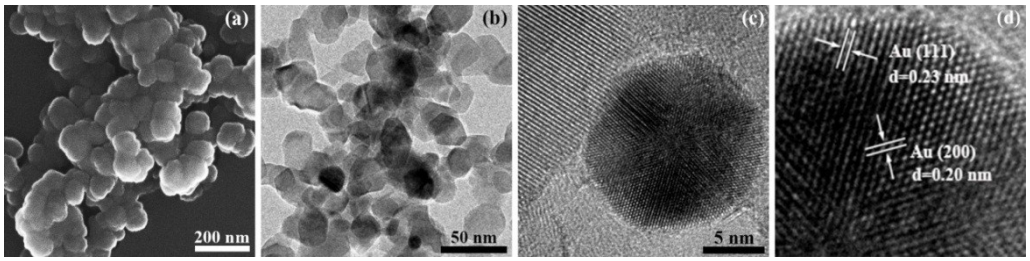

Figure S3. Morphology images of Au@TiO_2 NPs: (a) SEM image, (b) TEM image, (c) and (d) HRTEM images.

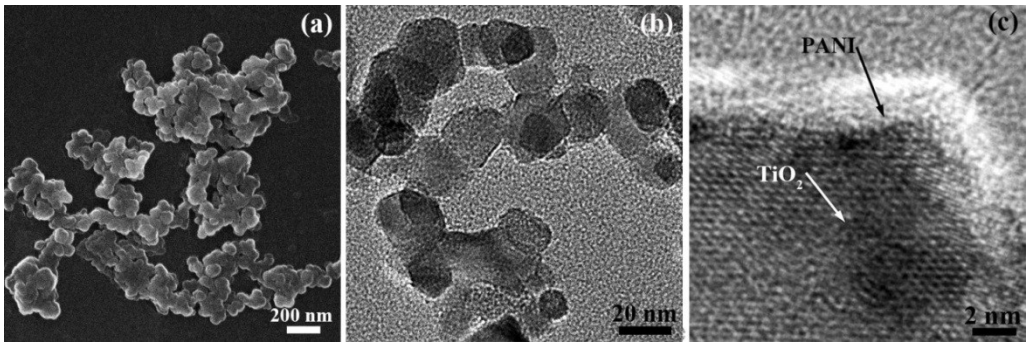

Figure S4. Morphology images of PANI@TiO_2 (80:1): (a) SEM image, (b) TEM image, (c) HRTEM image.

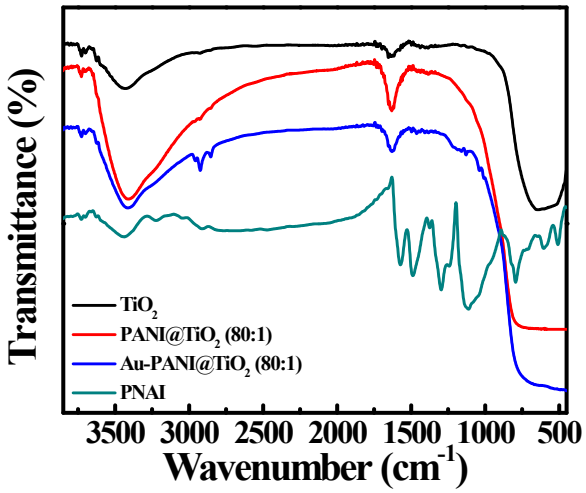

Figure S5. FT-IR spectra of TiO_2, PANI, PANI@TiO_2 (80:1) and Au-PANI@TiO_2 (80:1).

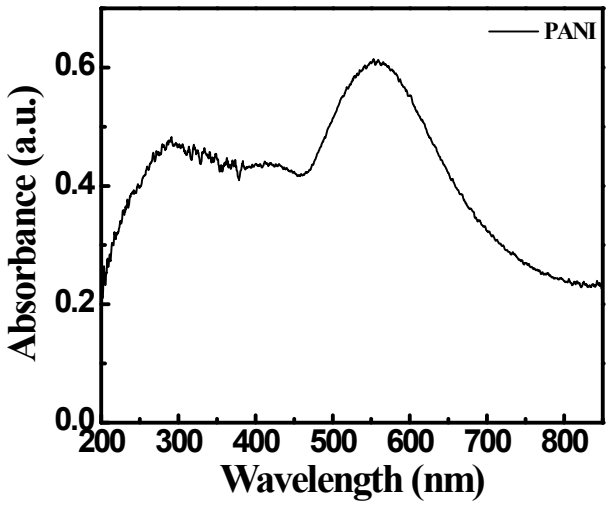

Figure S6. UV-vis diffuse reflectance spectra of PANI.

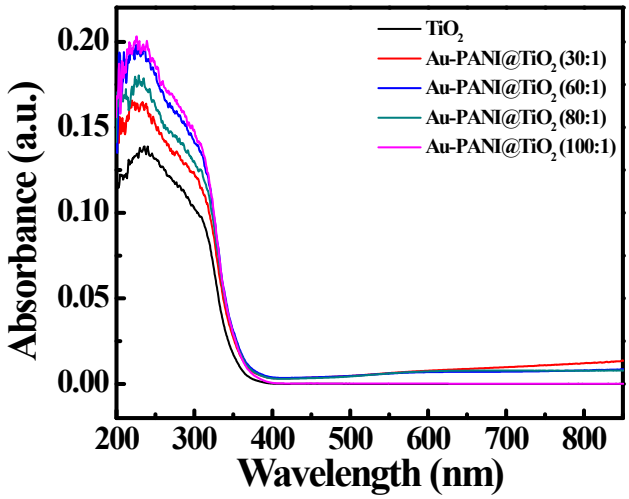

Figure S7. UV-vis diffuse reflectance spectra of TiO_2, Au-PANI@TiO_2 (30:1), Au-PANI@TiO_2 (60:1), Au-PANI@TiO_2 (80:1) and Au-PANI@TiO_2 (100:1) samples