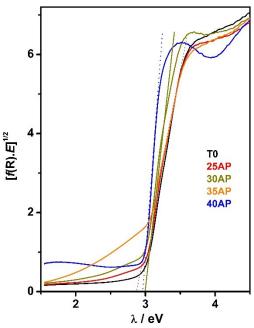
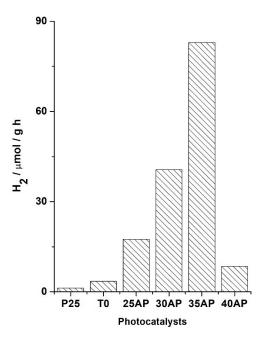
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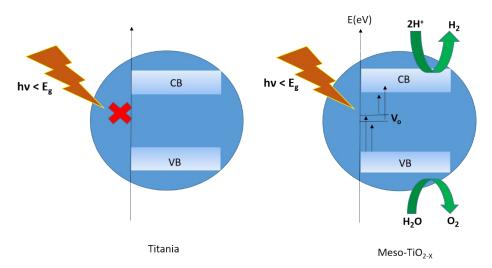
## **Supplementary Information**



**Figure S1.** Tauc's plots of all meso- $TiO_{2-X}$  catalysts are shown; meso- $TiO_{2-X}$  materials exhibits enhanced absorption in the visible region of spectra.



**Figure S2.** Hydrogen generation results of meso- $TiO_{2-X}$  material under visible light in an aq. methanol solution. Increase in the  $H_2$  generation by an order of 5 can be observed for 35AP in comparison to T0.



**Figure S3.** A schematic diagram showing lower energy visible light photon absorption by meso- $TiO_{2-X}$  materials available in AM1.5 irradiation for photocatalysis.