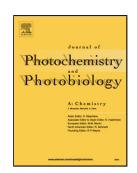
## Accepted Manuscript

Title: Comparative photocatalytic performance of  ${\rm TiO_2}$  supported on clinoptilolite and  ${\rm TiO_2/Salicylaldehyde-NH_2-MIL-101(Cr)}$  for degradation of pharmaceutical pollutant atenolol under UV and visible irradiations



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### ACCEPTED MANUSCRIPT

Comparative photocatalytic performance of TiO<sub>2</sub> supported on clinoptilolite and TiO<sub>2</sub>/Salicylaldehyde-NH<sub>2</sub>-MIL-101(Cr) for degradation of pharmaceutical pollutant atenolol under UV and visible irradiations

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#### **Highlights**

- Band gap energy of the synthesized catalyst was calculated by Tauc plot
- Significant shift to lower energy was occurred after immobilization of TiO<sub>2</sub> on the catalyst supports
- Degradation efficiency by visible light was increased after immobilization.
- The effect was more pronounced with salicylaldehyde-NH<sub>2</sub>-MIL-101(Cr) support.
- The degradation process was kinetically fast
- The regenerated photocatalysts retained most of initial activity

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