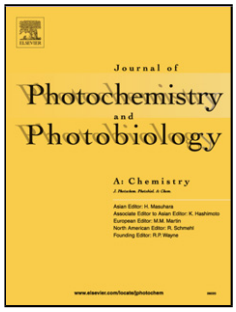

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Comparative photocatalytic performance of TiO_2 supported on clinoptilolite and TiO_2/Salicylaldehyde-NH_2-MIL-101(Cr) for degradation of pharmaceutical pollutant atenolol under UV and visible irradiations

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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_2 on the catalyst supports
- Degradation efficiency by visible light was increased after immobilization.
- The effect was more pronounced with salicylaldehyde-NH_2-MIL-101(Cr) support.
- The degradation process was kinetically fast
- The regenerated photocatalysts retained most of initial activity