

High-Efficiency Visible Light Photocatalysis Driven by Low Power LEDs

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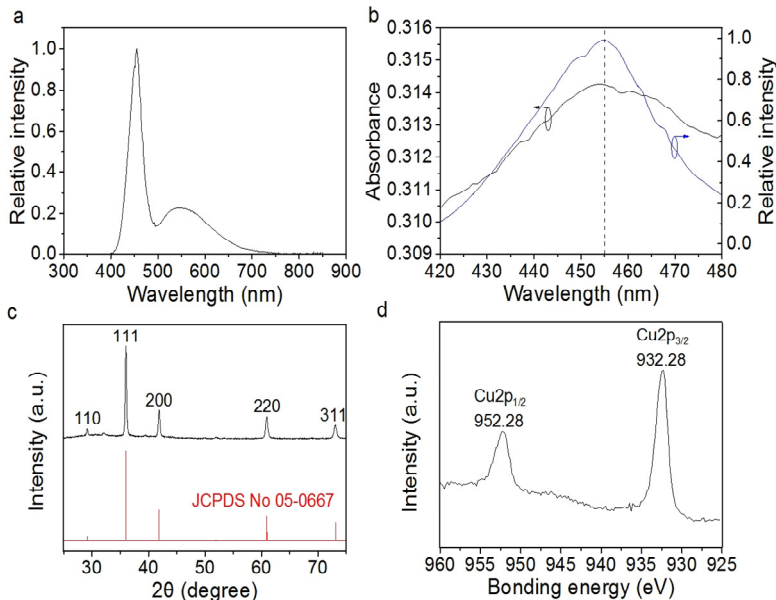
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Introduction

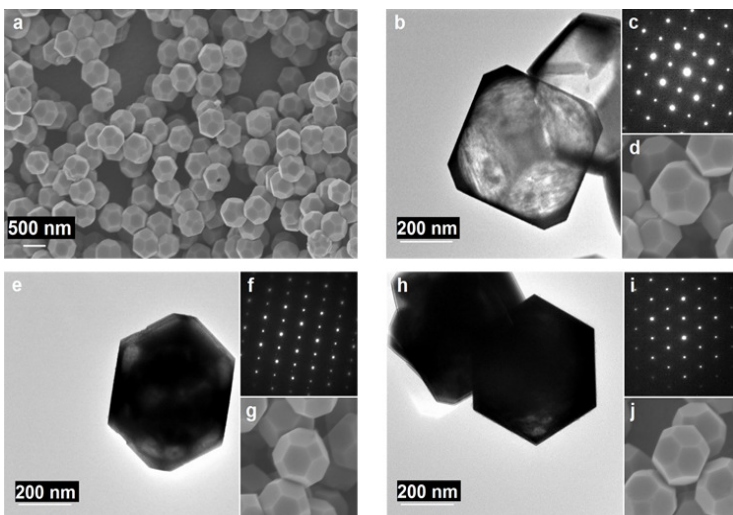
- Photocatalytic activity of Cu_2O nanocrystals investigated using low-power white LEDs.
- Detailed characterization, Irradiance-dependent reaction rate and photoefficiency of Cu_2O nanocrystals.

Results and Discussions

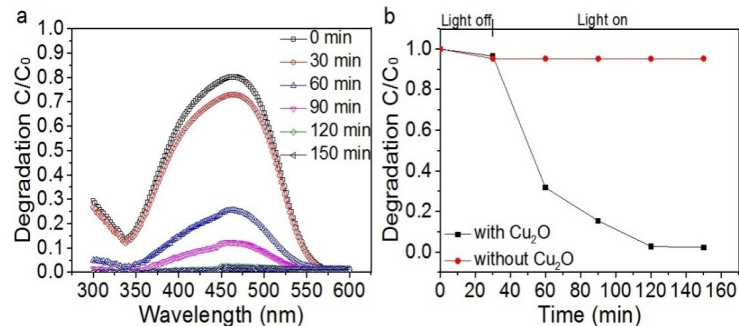
- Optic and chemical characterization.



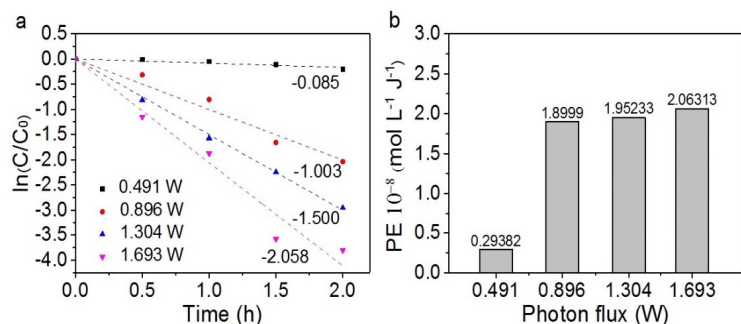
- Structure of Cu_2O nanocrystals.



- Degradation of MO versus time.



- Reaction rate and photoefficiency.



Conclusion

- Low cost visible light photocatalyst synthesized using facile hydrothermal method
- High photocatalytic activity irradiated by low-power white LEDs.
- Low power consumption with high photoefficiency.
- Easy photocatalyst recovery due to reasonable particle size.

Related Publication: • Yang Su *et al.*, submitted.

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