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Title: Single atom Cu(I) promoted mesoporous titanias for photocatalytic Methyl Orange depollution and H₂ production

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Single atom Cu(I) promoted mesoporous titanias for photocatalytic Methyl Orange depollution and H₂ production

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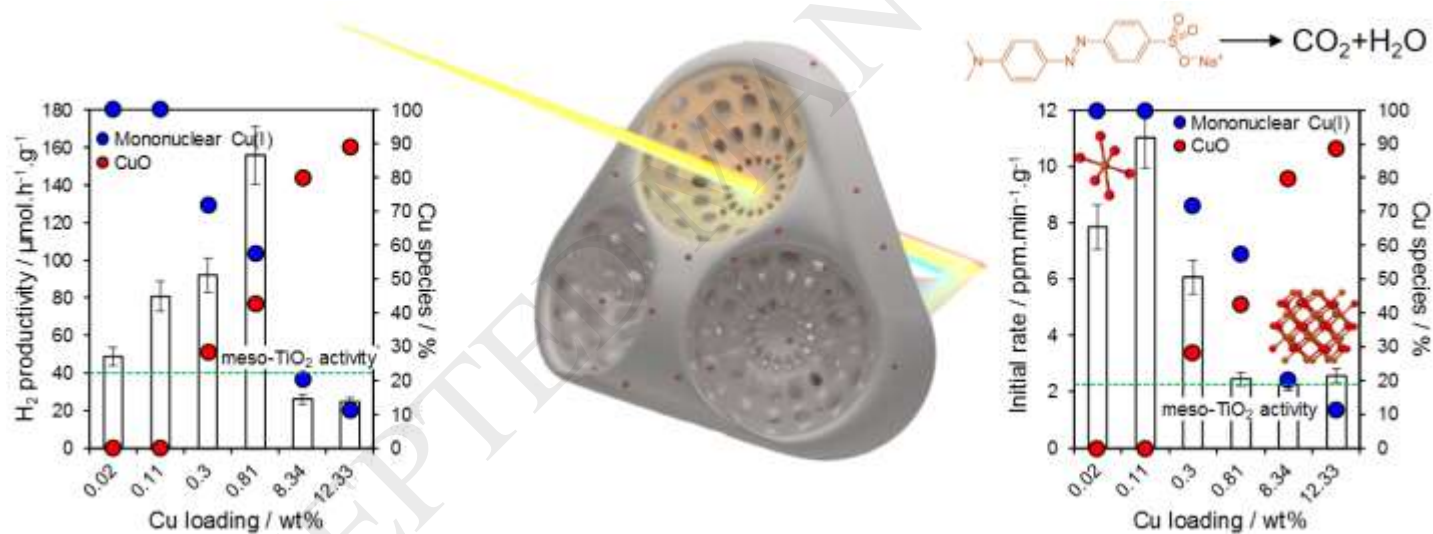
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Graphical abstract



Highlights

- A facile route to mesoporous titanias with tunable photophysical properties
- Photocatalytic dye degradation and H₂ production ∝ mesopore size (∝ 1/band gap)
- Ultra-low Cu promoter levels deliver four- to six-fold photoactivity enhancements
- First demonstration of atomically dispersed Cu(I) as a photocatalytic promoter

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