Organic Polymer Photocatalysts for Hydrogen Production and Micropollutant Oxidation in Wastewater

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Introduction

- sunlight.
- efficiency.
- **Polymer photocatalysts** can be cast as films for scale up of photocatalysis process in contrast to TiO₂ semiconductors.

Polymer Photocatalysts

- Fine-tune properties



Methods / Previous Research



Visible light photocatalysis using P10 and glucose





- Previous experiments show that glucose oxidation can successfully drive hydrogen evolution
- Use this knowledge to guide selection of micropollutants to be oxidised

Future Research Solution-processable polymer photocatalyst **Conjugated polyelectrolytes:** Br⁻ Potential scale up Effective H₂ production



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References

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