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Authors: Jing Zou, Guan Zhang, Xiaoxiang Xu

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One-pot photoreforming of cellulosic biomass waste to hydrogen by merging photocatalysis with acid hydrolysis

Jing Zou^{a,b}, Guan Zhang^{b,*}, Xiaoxiang Xu^{c,**}

^a*School of Humanities & Social Science, The Chinese University of Hong Kong, Shenzhen, Shenzhen 518172, P.R. China.*

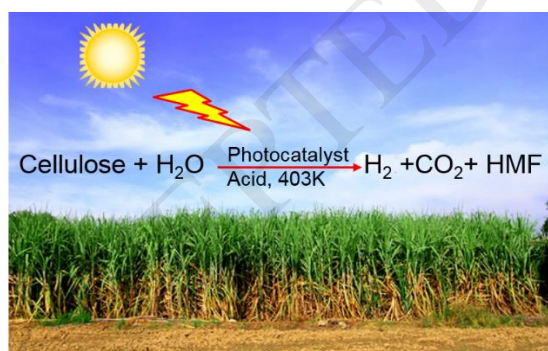
^b*School of Civil and Environmental Engineering, Harbin Institute of Technology, Shenzhen, Shenzhen 510855, P.R. China*

^c*Shanghai Key Laboratory of Chemical Assessment and Sustainability, School of Chemical Science and Engineering, Tongji University, Shanghai 200092, P.R. China.*

*E-mail: zhangguan@hit.edu.cn (G. Zhang), xxxu@tongji.edu.cn (X. Xu)

Graphical Abstract:

Efficient photocatalytic reforming cellulosic biomass to hydrogen has been accomplished via merging photocatalysis and acid hydrolysis.



Highlights:

- Efficient photocatalytic reforming cellulose to hydrogen has been accomplished.
- Carbohydrates as sacrificial electron donors were *in situ* generated via acid hydrolysis.
- An unexpected increase of 5-hydroxyl methyl furfural (HMF) production was also found.

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