

Photocatalytic CoP₂-Loaded Red Phosphorus for H₂ Formation from Water

>> Developed by Prof. YU Chai-mei Jimmy | Dept. of Chemistry

Aim

- To provide high efficiency and low-cost method for hydrogen (H₂) production from water

Advantages

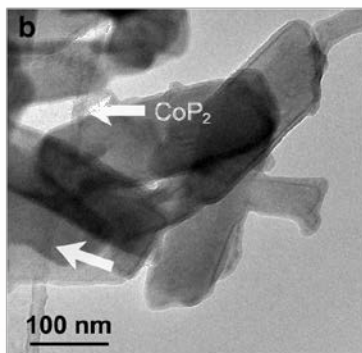
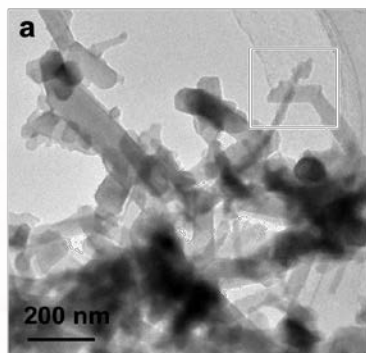
- performance for CoP₂: 6 times > Platinum
- Price for CoP₂: 200 times < Platinum

Features

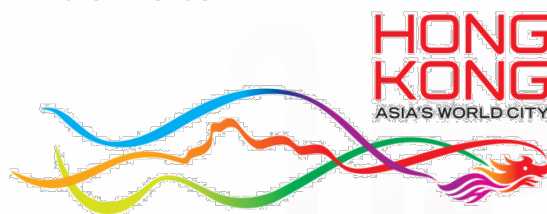
- a red phosphorus photocatalyst with broad visible light absorption (up to 700nm)
- a non-noble metal co-catalyst of CoP₂

Related Patent / Reference

- US8,940,656
- Wang et al, *Appl. Catal., B*, 2012 **Highly Cited!**



◀ Transmission electron microscopy (TEM) images of CoP₂ loaded red phosphorus prepared according to the invention.



CUHK Tech ID: P-2012-474

For further information, please contact:

Dr. Ken CHOW

kenchow@cuhk.edu.hk | +852-3943 1453



◀ Story / video featuring the invention in the 《Brand Hong Kong》 Series by the Hong Kong Government

<http://goo.gl/JS0zUh>



研究及知識轉移服務處

Office of Research and Knowledge Transfer Services



香港中文大學

The Chinese University of Hong Kong