

Accepted Manuscript

Title: Investigations on Bubble Growth Mechanism during Photoelectrochemical and Electrochemical Conversions

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PII: S0927-7757(16)30004-8
DOI: <http://dx.doi.org/doi:10.1016/j.colsurfa.2016.01.004>
Reference: COLSUA 20385



To appear in: *Colloids and Surfaces A: Physicochem. Eng. Aspects*

Received date: 30-10-2015
Revised date: 31-12-2015
Accepted date: 5-1-2016

Please cite this article as: Yechun Wang, Xiaowei Hu, Zhenshan Cao, Liejin Guo, Investigations on Bubble Growth Mechanism during Photoelectrochemical and Electrochemical Conversions, *Colloids and Surfaces A: Physicochemical and Engineering Aspects* <http://dx.doi.org/10.1016/j.colsurfa.2016.01.004>

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Investigations on Bubble Growth Mechanism during Photoelectrochemical and Electrochemical Conversions

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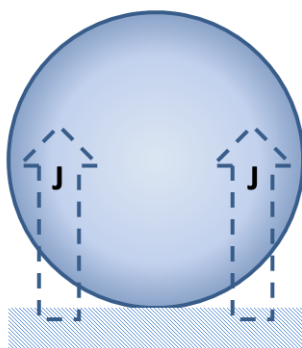
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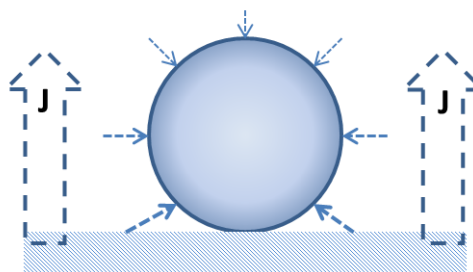
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Graphical abstract

Surface reaction controlled



Gas transfer from liquid to bubble diffusion controlled



Highlights

- ✧ A reaction cell meeting the requirements of photoelectrochemical and electrochemical conversions were set up for gas-evolving investigation.
- ✧ Bubble grows as $R \sim t^{0.3}$ in photoelectrochemical conversion due to the small effective solid surface engaged; while bubble grows as $R \sim t^{0.5}$ in the electrochemical conversion due to the big

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