

Accepted Manuscript

Hydrodynamics, mass transfer and cell growth characteristics in a novel micro-bubble stirred bioreactor employing sintered porous metal plate impeller as gas sparger

Ganlu Li, Hui Li, Guoguang Wei, Xun He, Sheng Xu, Kequan Chen, Pingkai Ouyang, Xiaojun Ji

PII: S0009-2509(18)30594-3
DOI: <https://doi.org/10.1016/j.ces.2018.08.025>
Reference: CES 14440

To appear in: *Chemical Engineering Science*

Received Date: 15 May 2018
Revised Date: 25 July 2018
Accepted Date: 11 August 2018

Please cite this article as: G. Li, H. Li, G. Wei, X. He, S. Xu, K. Chen, P. Ouyang, X. Ji, Hydrodynamics, mass transfer and cell growth characteristics in a novel microbubble stirred bioreactor employing sintered porous metal plate impeller as gas sparger, *Chemical Engineering Science* (2018), doi: <https://doi.org/10.1016/j.ces.2018.08.025>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



**Hydrodynamics, mass transfer and cell growth characteristics in a
novel microbubble stirred bioreactor employing sintered porous
metal plate impeller as gas sparger**

Ganlu Li ^{a,b,#}, Hui Li ^{a,b,#}, Guoguang Wei ^{a,b}, Xun He ^{a,b}, Sheng Xu ^{a,b}, Kequan Chen ^{a,b,*}, Pingkai Ouyang ^{a,b}, Xiaojun Ji ^{a,b}

^a *College of Biotechnology and Pharmaceutical Engineering, Nanjing Tech University, Nanjing, China*

^b *State Key Laboratory of Materials-Oriented Chemical Engineering, Nanjing, China*

[#]*The authors contributed equally to this work*

^{*}*Corresponding author. E-mail: kqchen@njtech.edu.cn*

Download English Version:

<https://daneshyari.com/en/article/11000240>

Download Persian Version:

<https://daneshyari.com/article/11000240>

[Daneshyari.com](https://daneshyari.com)