

Accepted Manuscript

A measure of concentration robustness in a biochemical reaction network and its application on system identification

Jianxiong Ye, An Li, Jingang Zhai

PII: S0307-904X(17)30464-X
DOI: [10.1016/j.apm.2017.07.026](https://doi.org/10.1016/j.apm.2017.07.026)
Reference: APM 11876



To appear in: *Applied Mathematical Modelling*

Received date: 28 February 2017
Revised date: 2 June 2017
Accepted date: 18 July 2017

Please cite this article as: Jianxiong Ye, An Li, Jingang Zhai, A measure of concentration robustness in a biochemical reaction network and its application on system identification, *Applied Mathematical Modelling* (2017), doi: [10.1016/j.apm.2017.07.026](https://doi.org/10.1016/j.apm.2017.07.026)

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Highlights

- We give a measure of concentration robustness in metabolism system.
- A scheme based on Monte-Carlo method is proposed to evaluate the robustness index.
- System identification problem is formulated as a minimax dynamic optimization problem.
- We use concentration robustness index to identify kinetic parameters and uncertain metabolic mechanisms.

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