

Simultaneous detection of multiple inherited metabolic diseases using GC-MS urinary metabolomics by chemometrics multi-class classification strategies

Qin Yang, Lu Xu, Li-Juan Tang, Jiang-Tao Yang, Ben-Qing Wu, Nan Chen, Jian-Hui Jiang, Ru-Qin Yu



PII: S0039-9140(18)30438-7
DOI: <https://doi.org/10.1016/j.talanta.2018.04.081>
Reference: TAL18620

To appear in: *Talanta*

Received date: 26 January 2018
Revised date: 17 April 2018
Accepted date: 25 April 2018

Cite this article as: Qin Yang, Lu Xu, Li-Juan Tang, Jiang-Tao Yang, Ben-Qing Wu, Nan Chen, Jian-Hui Jiang and Ru-Qin Yu, Simultaneous detection of multiple inherited metabolic diseases using GC-MS urinary metabolomics by chemometrics multi-class classification strategies, *Talanta*, <https://doi.org/10.1016/j.talanta.2018.04.081>

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 galley proof before it is published in its final citable 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.

Simultaneous detection of multiple inherited metabolic diseases using GC-MS urinary metabolomics by chemometrics multi-class classification strategies

Qin Yang^{a,1}, Lu Xu^{b,1}, Li-Juan Tang^c, Jiang-Tao Yang^d, Ben-Qing Wu^{e,*}, Nan Chen^c, Jian-Hui Jiang^{c,*}, Ru-Qin Yu^c

^a School of Physics and Optoelectronic Engineering, Yangtze University, Jingzhou 434023, China

^b Institute of Applied Chemistry, College of Material and Chemical Engineering, Tongren University, Tongren 554300, China

^c State Key Laboratory of Chemo/Biosensing and Chemometrics, College of Chemistry and Chemical Engineering, Hunan University, Changsha 410082, China

^d The Children's Medical Center of Guangming New District Medical Group, Shenzhen 518000, China

^e Shenzhen Aone Medical Laboratory Co, Ltd, Shenzhen 518000, China
wubenqing783@126.com (B.Q. Wu),

jianhuijiang@hnu.edu.cn (J.H. Jiang).

* Corresponding Author. Tel.: +86 755 27165666, +86 731 88821916.

Abstract

Metabonomics has been widely used in disease diagnosis and clinically practical methods often require the detection of multi-class bio-samples. In this work, multi-class classification methods were investigated to simultaneously discriminate among 6 inherited metabolic diseases

¹ The contributions of two authors are equal.

Download English Version:

<https://daneshyari.com/en/article/7676230>

Download Persian Version:

<https://daneshyari.com/article/7676230>

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