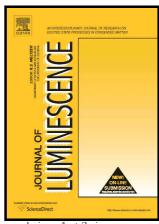
# Author's Accepted Manuscript

Excitation- emission matrix fluorescence spectroscopy combined with three-way chemometrics analysis to follow denatured states of secondary structure of bovine serum albumin

Sahar Heidari, Bahram Hemmateenejad, Saeed Yousefinejad, Ali A. Moosavi-Movahedi



www.elsevier.com/locate/jlumin

PII: S0022-2313(17)32141-5

DOI: https://doi.org/10.1016/j.jlumin.2018.06.029

Reference: LUMIN15691

To appear in: Journal of Luminescence

Received date: 12 December 2017 Revised date: 27 April 2018 Accepted date: 11 June 2018

Cite this article as: Sahar Heidari, Bahram Hemmateenejad, Saeed Yousefinejad and Ali A. Moosavi-Movahedi, Excitation- emission matrix fluorescence spectroscopy combined with three-way chemometrics analysis to follow denatured states of secondary structure of bovine serum albumin, *Journal of Luminescence*, https://doi.org/10.1016/j.jlumin.2018.06.029

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.

## **ACCEPTED MANUSCRIPT**

Excitation- emission matrix fluorescence spectroscopy combined with threeway chemometrics analysis to follow denatured states of secondary structure of bovine serum albumin

Sahar Heidari <sup>a</sup>, Bahram Hemmateenejad <sup>a</sup>, Saeed Yousefinejad <sup>b\*</sup>, Ali A. Moosavi-Movahedi <sup>c</sup>

<sup>a</sup> Department of Chemistry, Shiraz University, Shiraz, Iran

<sup>b</sup> Research Center for Health Sciences, Institute of Health, Department of Occupational Health Engineering, School of Health, Shiraz University of Medical Sciences, Shiraz, Iran

<sup>c</sup> Institute of Biochemistry and Biophysics, University of Tehran, Tehran, Iran

yousefisa@sums.ac.ir yousefinejad.s@gmail.com

\* Corresponding author, Fax: +98 71 37256006,

#### **Abstract**

Monitoring the secondary structure of proteins is surely important in different biochemical and biophysical interactions. In this study, estimation of changes in secondary structure motifs of bovine serum albumin were done by means of fluorescence spectroscopy coupled by parallel factor analysis (PARAFAC) method. Different parameters such as core consistency, number of iteration and residual sum of squares were used to estimate optimum number of components in PARAFAC of fluorescence spectra and finally three components were utilized for resolving

### Download English Version:

# https://daneshyari.com/en/article/7839652

Download Persian Version:

https://daneshyari.com/article/7839652

<u>Daneshyari.com</u>