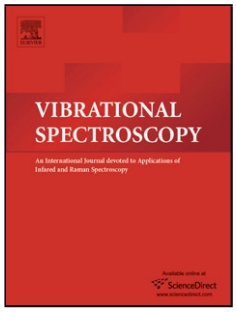

Title: Raman Spectroscopy of (Fe,Li)-Doped Delafossite Oxide $CuCrO_2$

Authors: João Frederico Haas Leandro Monteiro, Ezequiel Costa Siqueira, Daiane Siqueira Vallis, Everton de Andrade, Marcos Vinicius Woiski Barcote, Alcione Roberto Jurelo

PII: S0924-2031(18)30061-4
DOI: https://doi.org/10.1016/j.vibspec.2018.07.009
Reference: VIBSPE 2824

To appear in: *VIBSPE*

Received date: 28-2-2018
Revised date: 16-6-2018
Accepted date: 25-7-2018

Please cite this article as: Monteiro JFHL, Siqueira EC, Vallis DS, de Andrade E, Barcote MVW, Jurelo AR, Raman Spectroscopy of (Fe,Li)-Doped Delafossite Oxide $CuCrO_2$, *Vibrational Spectroscopy* (2018), https://doi.org/10.1016/j.vibspec.2018.07.009

Raman Spectroscopy of (Fe,Li)-Doped Delafossite Oxide $CuCrO_2$

João Frederico Haas Leandro Monteiro*, Ezequiel Costa Siqueira
Departamento de Física, Universidade Tecnológica Federal do Paraná,
Campus Ponta Grossa,
Avenida Monteiro Lobato 1787, 84.016-210, Ponta Grossa, Paraná, Brazil
(Physics Department, Federal Technological University of Parana Campus Ponta Grossa)

Daiane Siqueira Vallis, Everton de Andrade, Marcos Vinicius Woiski Barcote, Alcione Roberto Jurelo

Departamento de Física, Universidade Estadual de Ponta Grossa, Av. Gen. Carlos Cavalcanti 4748, 84.030-000, Ponta Grossa, Paraná, Brazil
(Physics Department, State University of Ponta Grossa)

***Corresponding Author:**

João Frederico Haas Leandro Monteiro

Departamento de Física

Universidade Tecnológica Federal do Paraná

Av. Monteiro Lobato

84.016-210

Ponta Grossa, Paraná, Brazil

Tel : +55 42 3220 4800

e-mail : jfhlmonteiro@hotmail.com

Abstract

In this paper we investigated the vibrational properties of (Fe,Li)-doped delafossite oxide $CuCrO_2$ by means of Raman experiments. The measurements were carried out at ambient temperature and pressure and on *ab*- and *a(b)c*-plane of a single grain. The samples were prepared using self-combustion urea nitrate process and the structure of all samples was checked using X-ray diffraction. All peaks were indexed as arising from $CuCrO_2$ delafossite with