#### Author's Accepted Manuscript

Canted antiferromagnetism in  $KNi_3[PO_3(F,OH)]_2[PO_2(OH)_2]F_2$  with a stair-case Kagomé lattice

Li-Chen Liu, Wei-Jian Ren, Ya-Xi Huang, Yuanming Pan, Jin-Xiao Mi



www.elsevier.com/locate/yjssc

PII: S0022-4596(17)30263-3

DOI: http://dx.doi.org/10.1016/j.jssc.2017.07.011

Reference: YJSSC19861

To appear in: Journal of Solid State Chemistry

Received date: 23 April 2017 Revised date: 30 June 2017 Accepted date: 7 July 2017

Cite this article as: Li-Chen Liu, Wei-Jian Ren, Ya-Xi Huang, Yuanming Pan and Jin-Xiao Mi, Canted antiferromagnetism i KNi<sub>3</sub>[PO<sub>3</sub>(F,OH)]<sub>2</sub>[PO<sub>2</sub>(OH)<sub>2</sub>]F<sub>2</sub> with a stair-case Kagomé lattice, *Journal of Solid State Chemistry*, http://dx.doi.org/10.1016/j.jssc.2017.07.011

This is a PDF file of an unedited manuscript that has been accepted fo publication. As a service to our customers we are providing this early version o 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

# Canted antiferromagnetism in $KNi_3[PO_3(F,OH)]_2[PO_2(OH)_2]F_2 \quad with \quad a \quad stair-case$ Kagomé lattice

Li-Chen Liu, Wei-Jian Ren, Ya-Xi Huang, Yuanming Pan, and Jin-Xiao Mi<sup>a,\*</sup>

a. Fujian Provincial Key Laboratory of Advanced Materials (Xiamen University), Department of Materials Science and Engineering, College of Materials, Xiamen University, Xiamen 361005, Fujian Province, People's Republic of China. E-mail: jxmi@xmu.edu.cn

b. Department of Geological Sciences, University of Saskatchewan, Saskatoon, SK S7N 5E2, Canada.

llc123ok@vip.qq.com

935428502@qq.com

yaxihuang@xmu.edu.cn

yuanming.pan@usask.ca

jxmi@xmu.edu.cn

\*Corresponding author

#### **ABSTRACT**

A new nickel phosphate  $KNi_3[PO_3(F,OH)]_2[PO_2(OH)_2]F_2$  has been synthesized using a modified hydrothermal method. Structural characterizations show that it adopts a 3D framework structure with 2D layers of Ni octahedra in a stair-case Kagomé lattice. The Ni2 octahedron at the inversion center shares two *trans*-faces with Ni1 octahedra to form a linear trimer (Ni $_3O_8F_6$ ) as the basic structural unit. The Ni-trimers are linked between themselves by sharing F-corners and to  $[PO_3(F,OH)]$  tetrahedral groups by sharing

## دريافت فورى ب متن كامل مقاله

### ISIArticles مرجع مقالات تخصصی ایران

- ✔ امكان دانلود نسخه تمام متن مقالات انگليسي
  - ✓ امكان دانلود نسخه ترجمه شده مقالات
    - ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
  - ✓ امكان دانلود رايگان ۲ صفحه اول هر مقاله
  - ✔ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
    - ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات