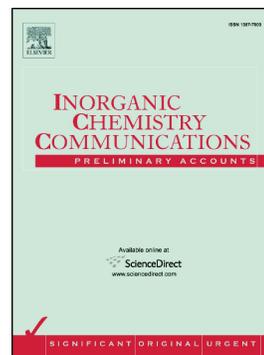


## Accepted Manuscript

Keggin type of polyoxometalate templated assembly of a silver-organic framework with silver-organic cages and helical structures

Jing-Wen Sun, Hai-Yan Zhang, Hai-Jun Wang, Song Chen, Jing-Han Wang, Lei Liu



PII: S1387-7003(18)30361-7  
DOI: doi:[10.1016/j.inoche.2018.05.019](https://doi.org/10.1016/j.inoche.2018.05.019)  
Reference: INOCHE 6981  
To appear in: *Inorganic Chemistry Communications*  
Received date: 19 April 2018  
Revised date: 15 May 2018  
Accepted date: 15 May 2018

Please cite this article as: Jing-Wen Sun, Hai-Yan Zhang, Hai-Jun Wang, Song Chen, Jing-Han Wang, Lei Liu , Keggin type of polyoxometalate templated assembly of a silver-organic framework with silver-organic cages and helical structures. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Inoche(2017), doi:[10.1016/j.inoche.2018.05.019](https://doi.org/10.1016/j.inoche.2018.05.019)

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 proof before it is published in its final 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.

Keggin type of polyoxometalate templated assembly of a silver-organic framework with silver-organic cages and helical structures

Jing-Wen Sun <sup>a</sup>, Hai-Yan Zhang <sup>b</sup>, Hai-Jun Wang <sup>a</sup>, Song Chen <sup>a</sup>, Jing-Han Wang <sup>a</sup>,  
Lei Liu <sup>a,\*</sup>

<sup>a</sup> School of Pharmacy, Qiqihar Medical University, Qiqihar, 161006, P. R. China

<sup>b</sup> Health Inspection Center, Qiqihar Medical University, Qiqihar, 161006, P. R. China

\*Corresponding author E-mail address:liuleiqiyi@sina.com.

**ABSTRACT:** A new POM-templated metal-organic framework [Ag<sub>8</sub>L<sub>4</sub>][PMo<sub>12</sub>O<sub>40</sub>]·OH {HL = 5-[4-(1,2,4-triazol-4-yl)phenyl]-1H-tetrazole} containing metal-organic nanocage and left- and right-handed helices has been isolated under hydrothermal conditions. The Keggin POM plays a template role in the formation of macrocycle and metal-organic nanocage, as shown by X-ray diffraction analysis. The new compound represents a scarce example of POM-encapsulated metal-organic nanocage. Additionally, its photocatalytic degradation of RhB was also investigated.

**Keywords:** Polyoxometalates; Metal-organic nanocage; Helical chains; Metal-organic frameworks; Photocatalysis

Metal-organic frameworks (MOFs), a class of state-of-the-art materials, have attracted considerable attention not only from their technological applications but also from their intriguing variety of architectures and topological aspects [1-5]. In the process of enlarge and enrich the discovery of MOFs, the rational synthesis of MOFs

Download English Version:

<https://daneshyari.com/en/article/7748529>

Download Persian Version:

<https://daneshyari.com/article/7748529>

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