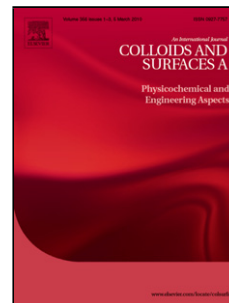


## Accepted Manuscript

Title: Biochar/MnAl-LDH composites for Cu (nullnull) removal from aqueous solution

Authors: Tao Wang, Cui Li, Chongqing Wang, Hui Wang

PII: S0927-7757(17)31041-5  
DOI: <https://doi.org/10.1016/j.colsurfa.2017.11.034>  
Reference: COLSUA 22081



To appear in: *Colloids and Surfaces A: Physicochem. Eng. Aspects*

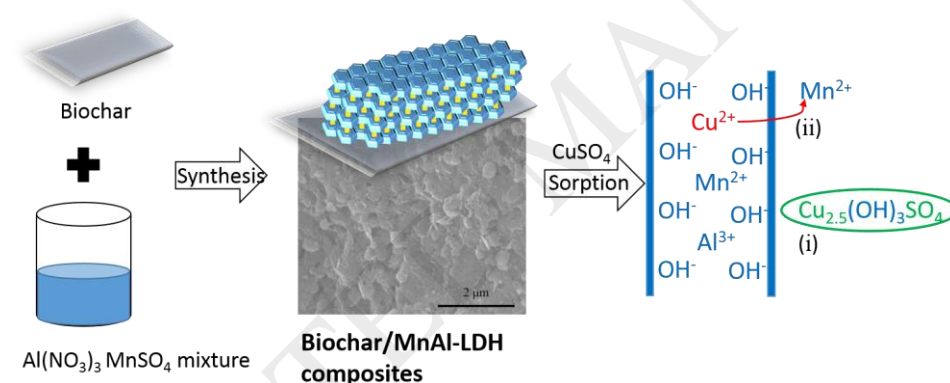
Received date: 19-8-2017  
Revised date: 23-10-2017  
Accepted date: 10-11-2017

Please cite this article as: Tao Wang, Cui Li, Chongqing Wang, Hui Wang, Biochar/MnAl-LDH composites for Cu (x399;x399;) removal from aqueous solution, *Colloids and Surfaces A: Physicochemical and Engineering Aspects* <https://doi.org/10.1016/j.colsurfa.2017.11.034>

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.

**Biochar/MnAl-LDH composites for Cu (II) removal from aqueous solution**Tao Wang <sup>a, 1</sup>, Cui Li <sup>a, 1</sup>, Chongqing Wang <sup>a, b</sup>, Hui Wang <sup>a, \*</sup><sup>a</sup> School of Chemistry and Chemical Engineering, Central South University, Changsha 410083, PR China<sup>b</sup> School of Chemical Engineering and Energy, Zhengzhou University, Zhengzhou 450001, PR China

\* Corresponding author. Tel: +86-731-88879616; E-mail address: huiwang1968@163.com (Hui Wang).

<sup>1</sup> These authors contributed equally to this work and should be considered co-first authors.**Graphical Abstract**

**ABSTRACT:** Biochar/MnAl-layered double hydroxides (LDH) composites were prepared to remove Cu (II) from aqueous solution. The affecting factors including sorbent dosage, initial pH and coexistence cations were investigated by batch experiments. The data of X-ray diffraction (XRD), Fourier transform infrared (FTIR) and scanning electron microscopy (SEM) equipped with energy dispersive spectrometer (EDS) showed that biochar/MnAl-LDH composites was successfully synthesized. The characterizations also indicated the adsorption process involved surface precipitation

Download English Version:

<https://daneshyari.com/en/article/6977942>

Download Persian Version:

<https://daneshyari.com/article/6977942>

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