Accepted Manuscript

Hydroxyl and sulfate radical mediated degradation of ciprofloxacin using nano zerovalent manganese catalyzed $S_2O_8^{\ 2-}$

Noor S. Shah, Javed Ali Khan, Murtaza Sayed, Zia Ul Haq Khan, Hafiz Sajid Ali, Behzad Murtaza, Hasan M. Khan, Muhammad Imran, Nawshad Muhammad

PII: S1385-8947(18)31717-0

DOI: https://doi.org/10.1016/j.cej.2018.09.009

Reference: CEJ 19848

To appear in: Chemical Engineering Journal

Received Date: 8 June 2018
Revised Date: 31 August 2018
Accepted Date: 2 September 2018



Please cite this article as: N.S. Shah, J. Ali Khan, M. Sayed, Z. Ul Haq Khan, H. Sajid Ali, B. Murtaza, H.M. Khan, M. Imran, N. Muhammad, Hydroxyl and sulfate radical mediated degradation of ciprofloxacin using nano zerovalent manganese catalyzed S₂O₈ ²⁻, *Chemical Engineering Journal* (2018), doi: https://doi.org/10.1016/j.cej.2018.09.009

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.

ACCEPTED MANUSCRIPT

1	Hydroxyl and sulfate radical mediated degradation of ciprofloxacin using nano
2	zerovalent manganese catalyzed $S_2O_8^{2-}$
3	
4	Noor S. Shah ^{1, *} , Javed Ali Khan ² , Murtaza Sayed ^{2, *} , Zia Ul Haq Khan ¹ , Hafiz Sajid Ali ¹
5	Behzad Murtaza ¹ , Hasan M. Khan ² , Muhammad Imran ¹ , Nawshad Muhammad ³
6	
7	¹ Department of Environmental Sciences, COMSATS University Islamabad, Vehari
8	Campus 61100, Pakistan
9	² Radiation Chemistry Laboratory, National Centre of Excellence in Physical Chemistry,
10	University of Peshawar, Peshawar 25120, Pakistan
11	³ Interdisciplinary Research Centre for Biomedical Material, COMSATS University
12	Islamabad, Lahore Campus 54000, Pakistan
13	
14	Corresponding Author Names and Emails:
15	1. Noor S. Shah: samadchemistry@gmail.com
16	2. Murtaza Sayed: murtazasayed@uop.edu.pk
17	Tel: +923349158516
18	

Download English Version:

https://daneshyari.com/en/article/10145187

Download Persian Version:

https://daneshyari.com/article/10145187

<u>Daneshyari.com</u>