## **Accepted Manuscript**

Biofilms as a sink for antibiotic resistance genes (ARGs) in the Yangtze Estuary

Xing-pan Guo, Yi Yang, Da-pei Lu, Zuo-shun Niu, Jing-nan Feng, Yu-ru Chen, Fei-yun Tou, Emily Garner, Jiang Xu, Min Liu, Michael F. Hochella, Jr.

PII: S0043-1354(17)30946-6

DOI: 10.1016/j.watres.2017.11.029

Reference: WR 13359

To appear in: Water Research

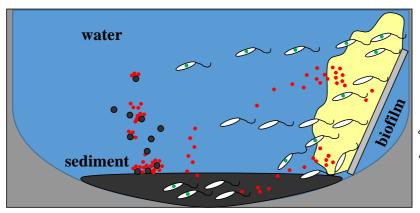
Received Date: 8 September 2017
Revised Date: 9 November 2017
Accepted Date: 11 November 2017

Please cite this article as: Guo, X.-p., Yang, Y., Lu, D.-p., Niu, Z.-s., Feng, J.-n., Chen, Y.-r., Tou, F.-y., Garner, E., Xu, J., Liu, M., Hochella Jr., , M.F., Biofilms as a sink for antibiotic resistance genes (ARGs) in the Yangtze Estuary, *Water Research* (2017), doi: 10.1016/j.watres.2017.11.029.

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



- ARGs in extracellular DNA
- **bacteria** without ARGs
- ARGs in intracellular DNA or Antibiotic resistence bacteria
  - Suspended particulate matter

## Download English Version:

## https://daneshyari.com/en/article/8874660

Download Persian Version:

https://daneshyari.com/article/8874660

<u>Daneshyari.com</u>