Gonzaga University

The Repository of Gonzaga University

Civil Engineering Faculty Scholarship

Civil Engineering

8-20-2020

Correction to Degradation and Deactivation of Bacterial Antibiotic Resistance Genes during Exposure to Free Chlorine, Monochloramine, Chlorine Dioxide, Ozone, Ultraviolet Light, and Hydroxyl Radical

Huan He University of Washington

Peiran Zhou University of Washington

Kyle Shimabuku Gonzaga University, shimabuku@gonzaga.edu

Xuzhi Fang University of Washington

Shu Li University of Washington

Follow this and additional works at: https://repository.gonzaga.edu/civilschol

Commons

Recommended Citation

H. He et al., "Correction to Degradation and Deactivation of Bacterial Antibiotic Resistance Genes during Exposure to Free Chlorine, Monochloramine, Chlorine Dioxide, Ozone, Ultraviolet Light, and Hydroxyl Radical," Environ. Sci. Technol., vol. 54, no. 17, pp. 10975–10975, Sep. 2020, doi: 10.1021/acs.est.0c04935.

This Article is brought to you for free and open access by the Civil Engineering at The Repository of Gonzaga University. It has been accepted for inclusion in Civil Engineering Faculty Scholarship by an authorized administrator of The Repository of Gonzaga University. For more information, please contact jamesh@gonzaga.edu.

Authors

Huan He, Peiran Zhou, Kyle Shimabuku, Xuzhi Fang, Shu Li, Yunho Lee, and Michael C. Dodd

This article is available at The Repository of Gonzaga University: https://repository.gonzaga.edu/civilschol/1



pubs.acs.org/est



Addition/Correction

Correction to Degradation and Deactivation of Bacterial Antibiotic Resistance Genes during Exposure to Free Chlorine, Monochloramine, Chlorine Dioxide, Ozone, Ultraviolet Light, and Hydroxyl Radical

Huan He, Peiran Zhou, Kyle K. Shimabuku, Xuzhi Fang, Shu Li, Yunho Lee, and Michael C. Dodd* *Environ. Sci. Technol.* **2019**, *53*, *4*, 2013–2026. 10.1021/acs.est.8b04393

Cite This: Environ. Sci. Technol. 2020, 54, 10975–10975		Read Online		
ACCESS	III Metrics & More		E Article Recommendations	
On p S11 of the Supporting Information, Part A, the paragraph " <i>Recovery yields.</i> This method could typically recover 1 mL of \sim 10–30 mg/L linear dsDNA with a size of \sim 40–60 kbp (as		https://pubs.acs.org/10.1021/acs.est.0c04935		

of ~10–30 mg/L linear dsDNA with a size of ~40–60 kbp (as determined by PFGE; see Text S7) from 1L of 10⁶ CFU/mL 1A189 cells, or 1 mL of ~7.5–14.4 μ M total nucleotides (after nuclease P1 digestion; equivalent to ~2.3–4.5 mg/L as dsDNA) from 100 mL of 10⁶ CFU/mL cells. No significant difference was found between the recovery yields of untreated and disinfectant-treated cells."

should instead read

"Recovery yields. This method could typically recover 1 mL of ~10−30 mg/L linear dsDNA with a size of ~40−60 kbp (as determined by PFGE; see Text S7) from 1 L of 10⁶ CFU/mL 1A189 cells, or 1 mL of ~7.5−14.4 μ M total nucleotides (after nuclease P1 digestion; equivalent to ~2.3−4.5 mg/L as dsDNA) from 100 mL of 10⁶ CFU/mL cells. No significant differences were found between recovery yields from untreated and disinfectant-treated cells for NH₂Cl, ClO₂, or UV treatment, though FAC and O₃ treatment led to decreasing dsDNA recoveries at exposures ≥9 mg/L·min (7.6 × 10⁻³ M·s) and ≥0.02 mg/L·min (2.5 × 10⁻⁵ M·s), respectively."

We would also like to clarify that mass concentrations and exposures (*CTs*) provided for FAC and NH₂Cl throughout the main text and Supporting Information are in equivalent units "as Cl_2 " (i.e., mg/L as Cl_2 and mg/L as $Cl_2 \cdot min$), as this was not clearly stated in the original text.

AUTHOR INFORMATION

Corresponding Author

Michael C. Dodd; o orcid.org/0000-0001-7544-1642; Email: doddm@uw.edu

Authors

Huan He Peiran Zhou Kyle K. Shimabuku; © orcid.org/0000-0001-8497-5945 Xuzhi Fang Shu Li Yunho Lee; © orcid.org/0000-0001-5923-4897

Complete contact information is available at:



10975

Published: August 20, 2020