

Environmental Science Water Research & Technology

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Cover

See Graham A. Gagnon *et al.*,
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Inside cover

See Aizhong Ding *et al.*,
pp. 773–782.

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EDITORIAL

760

Outstanding Reviewers for *Environmental Science: Water Research & Technology* in 2017

We would like to take this opportunity to highlight the Outstanding Reviewers for *Environmental Science: Water Research & Technology* in 2017, as selected by the editorial team for their significant contribution to the journal.

PAPERS

764

Potential for manganese biofouling in water transmission lines using model reactors

Nicole E. Allward, Brittany S. Gregory, Amina K. Sottdart and Graham A. Gagnon*

Biologically mediated manganese oxide accumulation was observed in a water supply plant transmission line. A novel, putative manganese oxidizing bacterium, *Candidatus Koribacter*, was identified.

773**The performance of a sulfate-radical mediated advanced oxidation process in the degradation of organic matter from secondary effluents**

Dayang Wang, Lirong Cheng, Mingming Wang, Xuezheng Zhang, Dong Xue, Wenjing Zhuo, Lei Zheng and Aizhong Ding*

The effects of sulfate radical-mediated advanced oxidation processes with transition metal and energy activation methods were investigated during effluent organic matter (EfOM) degradation.

783**Fabrication of magnetic particles reinforced nano-hydroxyapatite/gelatin composite for selective Cr(VI) removal from water**

Venkatarajan Gopalakannan, Soodamani Periyasamy and Natrayasamy Viswanathan*

The presence of chromium ion in drinking water has been proven to be toxic and carcinogenic.

775**Aqueous phase corona discharge for the reduction of nitrate in solution**

V. Lakhian and S. E. Dickson-Anderson*

The capability of aqueous plasma discharge capabilities are beyond oxidative treatment to reduce nitrate ions with the addition of methanol.

806**Link between dissolved organic matter transformation and process performance in a membrane bioreactor for urinary nitrogen stabilization**

Céline Jacquin, Mathias Monnot, Razina Hamza, Yahaut Kouadio, François Zaviska, Tony Merle, Geoffroy Lesage* and Marc Héran

MBR instabilities during urinary nitrogen stabilization could be identified and explained using 3DEEM.

820

Long-term partial nitrification and microbial characteristics in treating low C/N ratio domestic wastewater

Bo Wang, Mengyue Zhao, Yuanyuan Guo, Yongzhen Peng* and Yue Yuan

Partial ammonium oxidation and sludge in situ fermentation were first proposed as key factors facilitating long-term stable nitrification for treating domestic wastewater

828

Effects of operating and design parameters on ion exchange columns for nutrient recovery from urine

William A. Tarpeh, Ileana Wald, Maja Wiprachtiger and Kara L. Nelson*

Ion exchange is a promising option for recovering nutrients (nitrogen, phosphorus, and potassium) from source-separated urine.

839

Desalination as a negative emissions technology

P. A. Davies,* Q. Yuan and R. de Richter

We propose to treat desalination reject brine by electrolysis to form $Mg(OH)_2$ and thus absorb CO_2 via the oceans.

851

Concentrating underground brine using a TFC hollow fiber forward osmosis membrane: effects of cleaning

Gang Chen, Xue-Mei Li, Manhong Huang and Tao He*

In this work, underground brine (UGB) with high salinity was concentrated using a thin-film composite (TFC) hollow fiber forward osmosis (FO) membrane.

863

In situ field trial to evaluate the efficacy of Cutrine Ultra to manage a cyanobacteria population in a drinking water source

Elizabeth A. Crafton, Jessica Glowczewski, Donald W. Ott and Teresa J. Cutright*

Research found that a 1/4 dose of the manufacturer's recommended application amount could mitigate HABs over short periods of time.

872

Impact of water quality parameters on bacteria inactivation by low-voltage electroporation: mechanism and control

Zheng-Yang Huo, Guo-Qiang Li, Tong Yu, Yun Lu, Hao Sun, Yin-Hu Wu, Cecilia Yu, Xing Xie* and Hong-Ying Hu*

Nanowire-modified low-voltage electroporation enables high-efficiency disinfection and the impact of water quality parameters were analyzed.

CORRECTIONS

882

Correction: Impact of water quality parameters on bacteria inactivation by low-voltage electroporation: mechanism and control

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883

Correction: Potential for manganese biofouling in water transmission lines using model reactors

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