

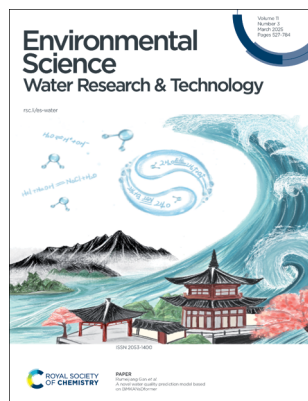
# Environmental Science Water Research & Technology

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## IN THIS ISSUE

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### Cover

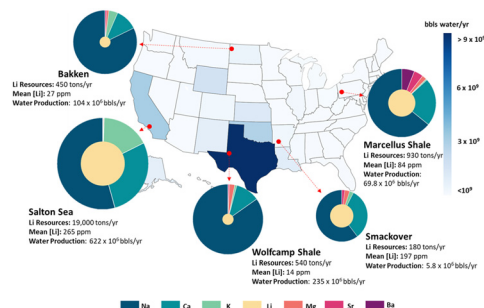
See Rumeijiang Gan *et al.*,  
pp. 590–603.  
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*Environ. Sci.: Water Res.  
Technol.*, 2025, **11**, 590.

## PERSPECTIVE

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### Lithium recovery from U.S. oil and gas produced waters: resource quality and siting considerations

Sheila Gerardo and Wen Song\*



## TUTORIAL REVIEW

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### Review of quantitative microbial risk assessments for potable water reuse

Emily Clements, Charlotte van der Nagel,  
Katherine Crank, Deena Hannoun and Daniel Gerrity\*

#### Potable Reuse QMRA



30 Studies identified

DFR → IPR → DPR

- Concentrations
- GC:IU Ratios
- Failure Analysis
- Ingestion Frequency
- Treatment Train

Treatment failure analysis incorporated in several papers

Choice of treatment train impacts risk predictions

Credited LRVs result in higher risk predictions than actual LRVs

Ingestion frequency impacts risk intervals and outliers

Topic

Influential Parameters

Takeaways



**GOLD  
OPEN  
ACCESS**

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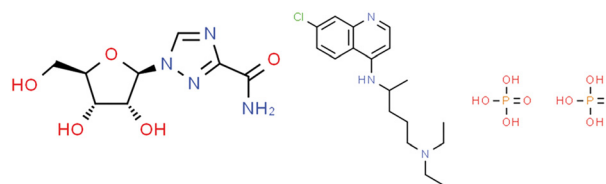


## CRITICAL REVIEWS

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### The occurrence, characteristics and control of ribavirin and chloroquine phosphate in the aquatic environment: a review

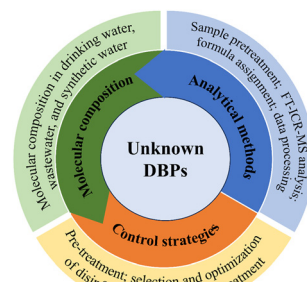
Xicheng Wang, Zhangbin Pan, Zhenqi Du, Wuchang Song, Congcong Li, Rong Xiao and Ruibao Jia\*



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### Deciphering molecular composition and summarizing control strategies of unknown disinfection by-products in water and wastewater based on FT-ICR-MS analysis: a comprehensive review

Changmin Wang, Bingliang Zhang,\* Youzhuang Rong, Xifeng Shi\* and Yunyan Liu\*

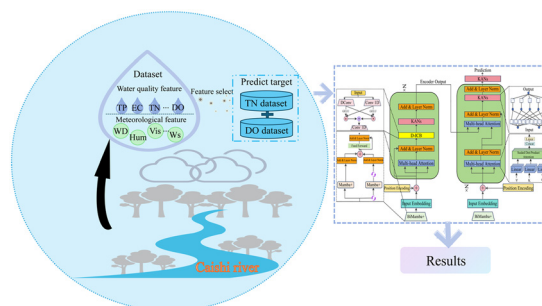


## PAPERS

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### A novel water quality prediction model based on BiMKANsDformer

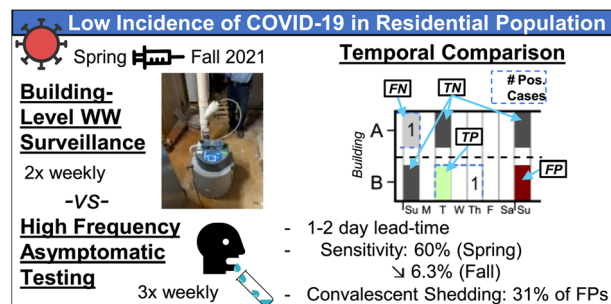
Tichen Huang, Yuyan Jiang, Rumeijiang Gan\* and Fuyu Wang



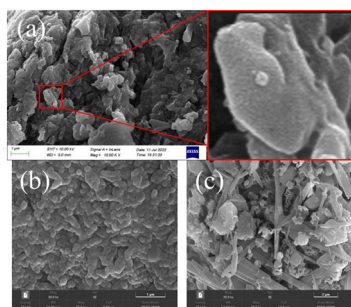
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### Building-level wastewater surveillance as an early warning system for COVID-19 outbreaks in congregate living settings

Natalie G. Exum,\* Steven J. Chow, Caroline Coulter, Christopher D. Gocke, Andrew Pekosz, Roanna Kessler and Kellogg J. Schwab



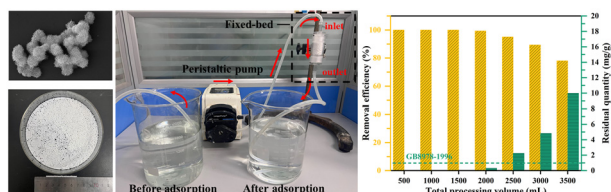
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### Nanobioparticle-prepared biochar enhanced Fenton oxidation for treatment of saline organic wastewater

Shanhong Lan,\* Shiwen Geng, Yuqi Jin, Hui Zhang, Xun Liu, Chenbo Ma, Chuankun Li, Xuejie Dong, Qiliang Cao and Ke Li

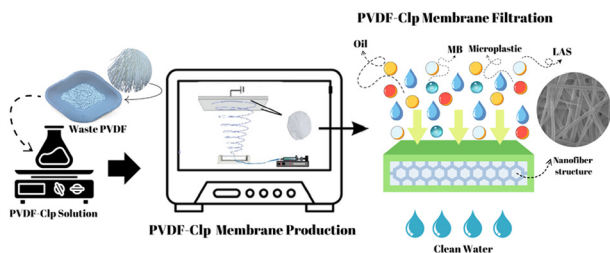
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### Microwave-assisted fabrication of porous flower-like pseudo-boehmite and high-efficiency phosphate removal from water: batch and fixed-bed column continuous operation

Ruohui Du, Huiyu Li, Saeed Ahmed, Shaowei Shi and Yongjun Feng\*

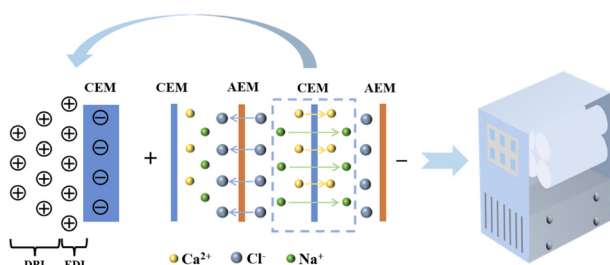
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### Production of natural zeolite-filled recycled PVDF filters and their application for gray water treatment

Ayşenur Katırcı, Seniyeçan Kahraman and Filiz Uğur Nigiz\*

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### Selective removal of $\text{Ca}^{2+}$ from brackish water by electrodialysis desalination: process optimization and application

Li Chen, Ling Feng,\* Renliang Zhang, Pengyu Liu and Binghui Tian\*





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## Effective measuring campaigns for reliable and informative full-scale WWTP data

Q. H. Le, P. Carrera, M. C. M. van Loosdrecht and E. I. P. Volcke\*

How to measure the right things in WWTPs?



### Experimental design

Multi-objective optimization  
(min cost, max accuracy)  
Mass balances

Tested in 5 full-scale plant layouts

Effective measuring campaign

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## Seasonal variation and risk assessment for the presence of pharmaceuticals in Brazilian urban rivers

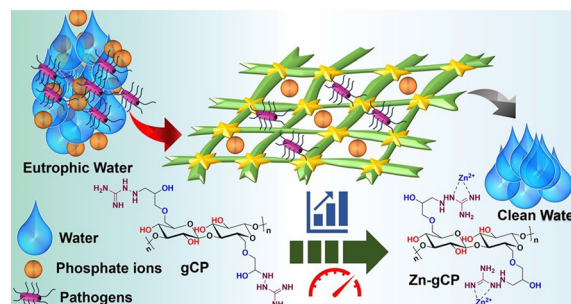
Miraldo Santa Rosa dos Santos, Cristiane Vidal, Vinicius Sarracini Santos, Ramon Domingues and Cassiana Carolina Montagner\*



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## Guanidine-modified cellulose enhances capturing and recovery of phosphates from wastewater

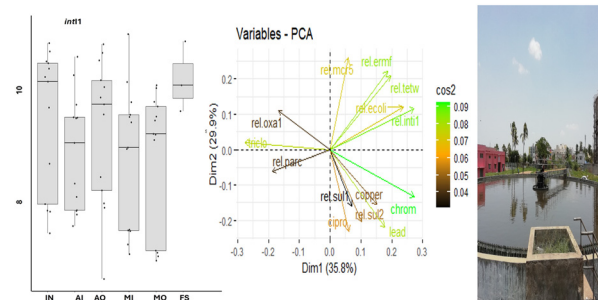
Gunanka Hazarika, Sribash Das, Anjali Patel and Debasis Manna\*



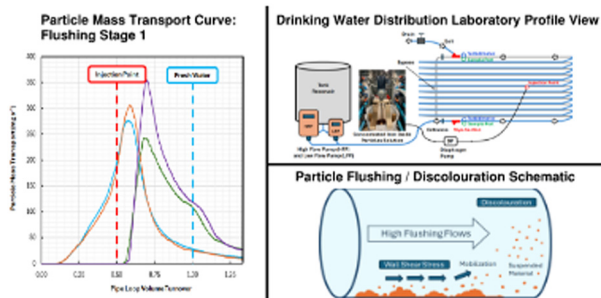
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## Removal of antibiotic resistance genes and co-selectors in a full-scale sewage treatment plant during droughts and floods

Sourabh Dixit, Jayavignesh Vijayan, Harshita Singh, Indumathi M. Nambi, T. Renganathan, R. Ravikrishna and Gargi Singh\*



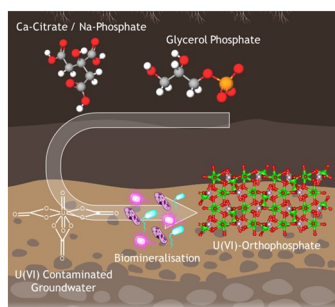
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## Behaviour of particle mobilization and reattachment under flushing conditions in PVC pipes using a full-scale laboratory system

Benjamin Anderson, Artur Sass Braga,\* Yves Filion and Sarah Jane Payne

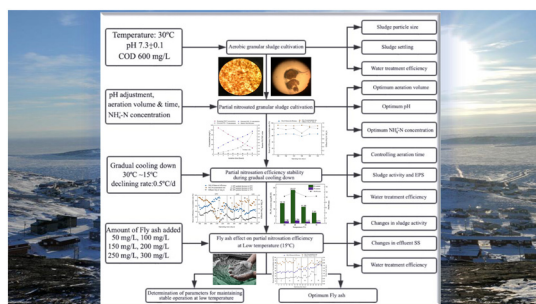
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## Bioremediation of uranium contaminated sites through the formation of U(VI) phosphate (bio) minerals

Callum Robinson, Sam Shaw, Jonathan R. Lloyd, James Graham and Katherine Morris\*

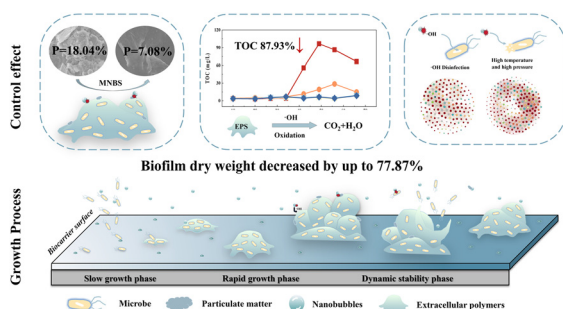
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## Fly ash integration for enhanced partial nitrification stabilization and aerobic granular sludge stability under low-temperature conditions

Jun Li,\* Salma Tabassum\* and Hüseyin Altundag

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## Mechanism by which micro-nano bubbles impact biofilm growth in drinking water distribution systems

Aibao Luo, Tianzhi Wang,\* Peiyuan Luo, Zhiwei Zheng, Manuel Fiallos, Yongning Bian and Soon-Thiam Khu

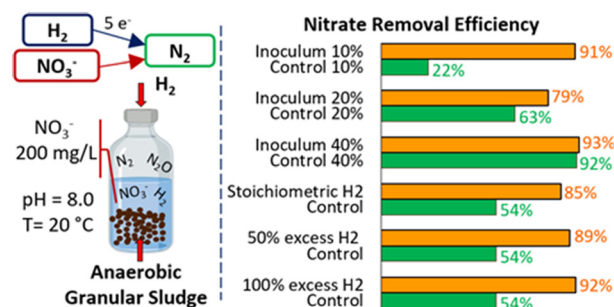


## PAPERS

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# Effect of inoculum percentage and hydrogen supply on hydrogenotrophic denitrification driven by anaerobic granular sludge

Emanuele Marino,\* Armando Oliva, Stefano Papirio, Giovanni Esposito and Francesco Pirozzi



## CORRECTION

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## Correction: Kinetics and mechanism of hydrolysis of $\text{PF}_6^-$ accelerated by $\text{H}^+$ or $\text{Al}^{3+}$ in aqueous solution

Takuto Miyashita,\* Kouji Yasuda\* and Tetsuya Uda\*

