

# Environmental Science Water Research & Technology

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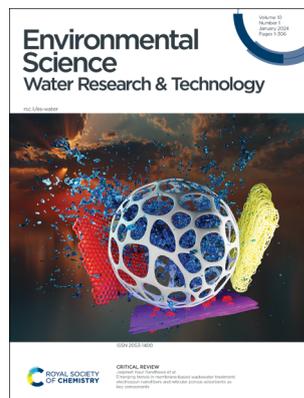
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## IN THIS ISSUE

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Technol.*, 2024, 10, 29.

## EDITORIAL

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### Advancing global priorities in water research and technology

Graham Gagnon

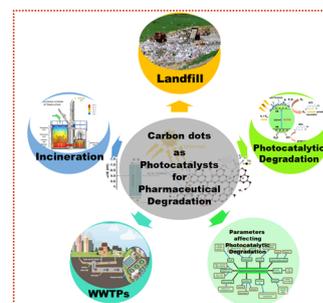


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Tahir Rasheed,\* Muhammad Tuoqeer Anwar,  
Darim Badur Ferry, Amjad Ali and Muhammad Imran



# Fuelling your energy research



## Energy & Environmental Science

Agenda-setting research in energy science and technology

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Jenny Nelson, Imperial College London, UK

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## CRITICAL REVIEWS

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## Emerging trends in membrane-based wastewater treatment: electrospun nanofibers and reticular porous adsorbents as key components

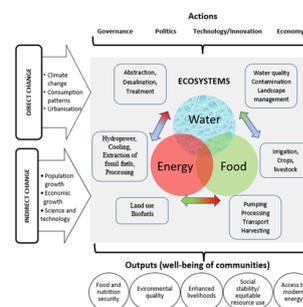
Manish Kumar, Sumanta Chowdhury and Jaspreet Kaur Randhawa\*



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## Enhancing community well-being in African drylands through technology-based solutions in the water–energy–food–ecosystems nexus

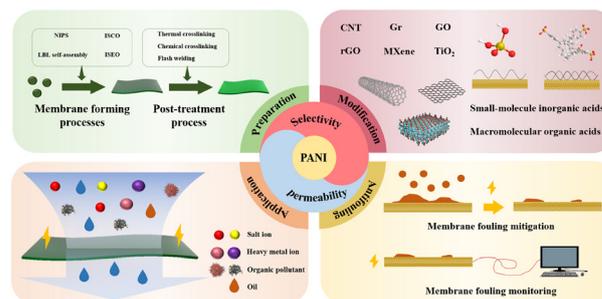
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## Preparation, modification and antifouling properties of polyaniline conductive membranes for water treatment: a comprehensive review

Jiajin Hao, Lei Wang,\* Xudong Wang, Jin Wang, Miaolu He, Xinyue Zhang, Jiaqi Wang, LuJie Nie and JingXian Li



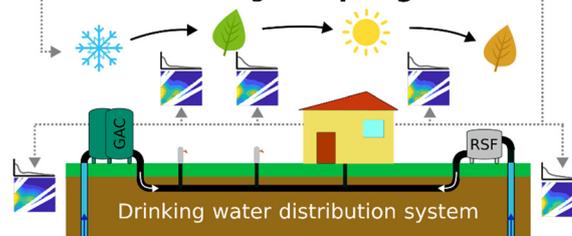
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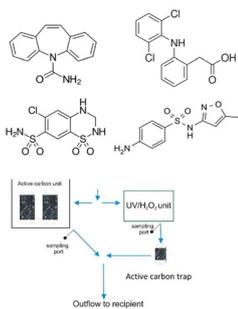
## Source to tap investigation of natural organic matter in non-disinfected drinking water distribution systems

Marco Gabrielli, Fabio Pulcini, Giacomo Barbesti and Manuela Antonelli\*

## Natural organic matter variability in time and among sampling locations



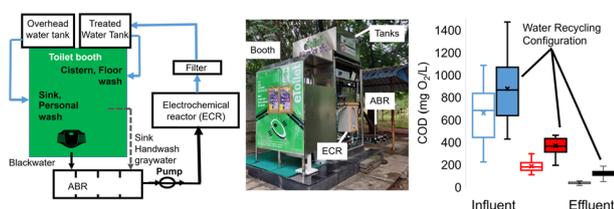
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## Evaluation and comparison of UV/H<sub>2</sub>O<sub>2</sub> and adsorption on active carbon as a tertiary wastewater treatment for pharmaceutical removal within a small WWTP: a pilot study

Vladislav Knytl, Pavel Mašin, Věra Vlčková, Jaroslav Semerád, Klára Michalíková, Petra Najmanová and Tomáš Cajthaml\*

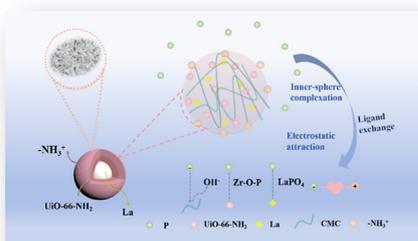
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## Water recycling public toilets based on onsite electrochemical wastewater treatment

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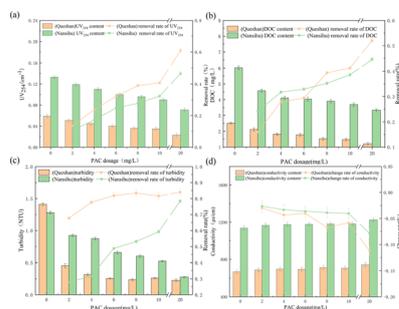
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## Integrated fabrication of CMC@UiO-66-NH<sub>2</sub>@PEI composite adsorbents for efficient batch and dynamic phosphate capture

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## Study on the efficiency of the preoxidation-coagulation process in removing disinfection by-product precursors from micropolluted water

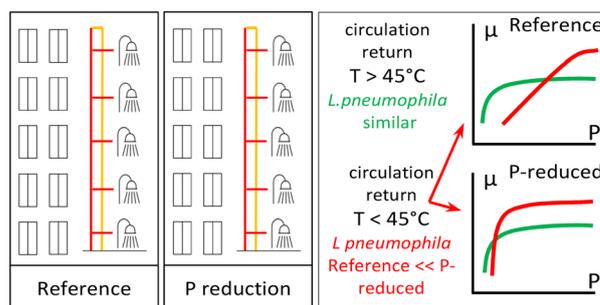
Junwei He, Ruibao Jia, Yonglei Wang,\* Ke Lin, Baozhen Liu, Baosen Liu and Guilin He



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### Effect of microbially available phosphorous removal on *Legionella* spp. in multi-storey residential dwellings in Latvia

Marta Zemīte,\* Daina Pūle, Olga Kirilina-Gūtmane, Laima Ķimse, Mārtiņš Strods, Jurgis Zemītis, Linda Mežule, Olga Valciņa and Tālis Juhna



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### Pilot-scale evaluation of the sustainability of membrane desalination systems for the concentrate volume minimization of coal chemical wastewater

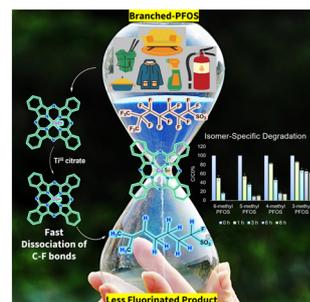
Fayuan Chen,\* Linnan Ma, Zhong Zhang, Xiao Wang, Qinghong Wang, Xiaolong Wang, Chunmao Chen, Linyu Jiang and Xianhui Li\*

Metric	VSEP	DTRO	FO-RO
Water recovery	★★★★	★★★★★	★★★★★
Resistance to fouling	★★★★	★★★★★	★★★★★
CAPEX	★★★★★	★★★★★	★★★★★
OPEX	★★★★★	★★★★★	★★★★★

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### Fast reductive defluorination of branched perfluorooctane sulfonic acids by cobalt phthalocyanine: electrochemical studies and mechanistic insights

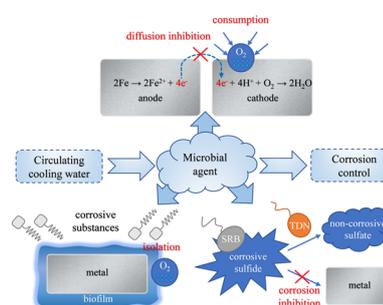
Maryam Mirabediny, Tsz Tin Yu, Jun Sun, Matthew Lee, Denis M. O'Carroll, Michael J. Manfield, Björn Åkermark, Biswanath Das\* and Naresh Kumar\*



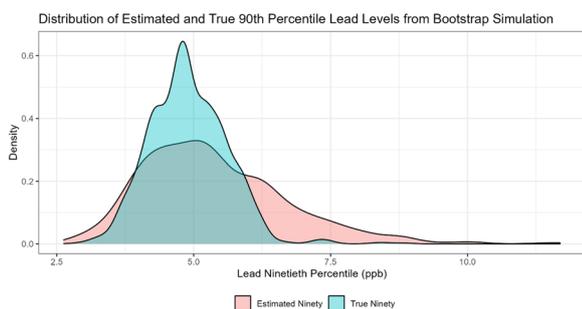
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### The effect and mechanism of a microbial agent used for corrosion control in circulating cooling water

Yu Wang, Hongfeng Liao, Li Gan, Zhengxiu Liu, Ziqiang Tang, Xiaoran Zhao, Yubin Zeng\* and Chunsong Ye\*



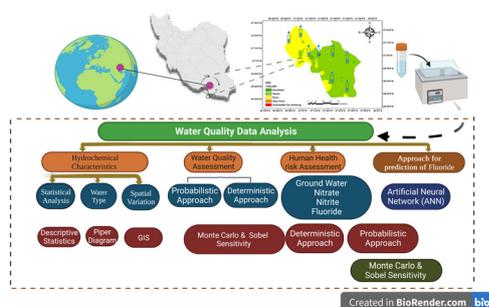
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## Estimating impacts of LCRR's fifth-liter sampling and find-and-fix requirements on large water systems

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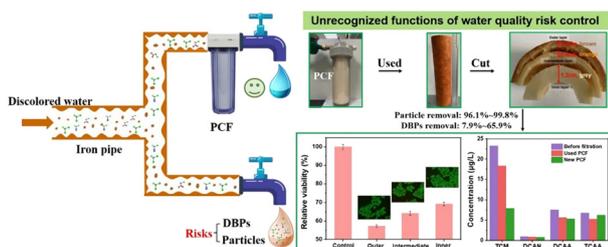
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## Quality evaluation and health risk assessment of drinking water in Minab County: hydrochemical analysis and artificial neural network modeling

Majid Amiri Gharaghani, Amin Mohammadpour,  
Mahsa Keshtkar, Aboalfazl Azhdarpour\*  
and Razieh Khaksefidi\*

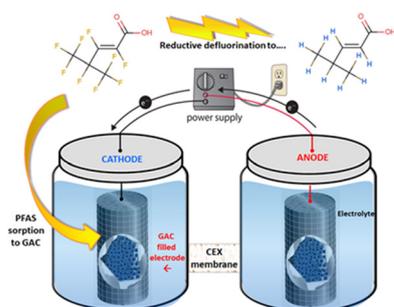
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## Particle and DBP removal efficiency and toxicity evaluation of polypropylene cotton filters in household drinking water purification systems

Linlin Pan, Yuan Zhuang,\* Ruya Chen, Yitian He  
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## Electrochemical degradation of a C6-perfluoroalkyl substance (PFAS) using a simple activated carbon cathode

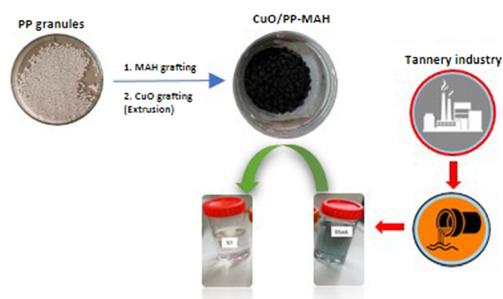
Diana Ackerman Grunfeld, Adele M. Jones, Jun Sun,  
Song Thao Le, Russell Pickford, Qingguo Huang,  
Michael Manefield, Naresh Kumar, Matthew J. Lee  
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### *In situ* green synthesis of copper(II) oxide (CuO) and maleic anhydride grafted polypropylene (PP-MAH) for highly efficient nanocatalysis in tannery wastewater treatment

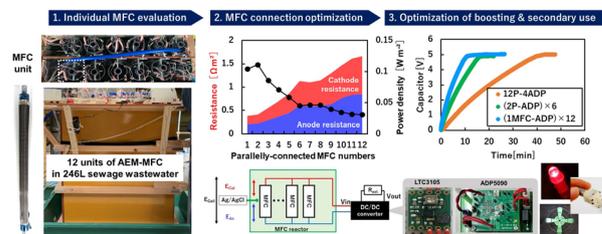
Farnam Manavi, Mohammad Reza Allahgoli Ghasri,\*  
Shervin Ahmadi and Sima Habibi



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### Optimizing low-voltage boosting for an air-cathode microbial fuel cell with an anion exchange membrane in a 246 L wastewater treatment reactor

Ayano Shimidzu, Fumichika Tanaka, Takahiro Matsumura,  
Mitsuhiro Sakoda, Kazuki Iida and Naoko Yoshida\*



## CORRECTION

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### Correction: Unlocking the effect of Zn<sup>2+</sup> on crystal structure, optical properties, and photocatalytic degradation of perfluoroalkyl substances (PFAS) of Bi<sub>2</sub>WO<sub>6</sub>

Mirabbos Hojamberdiev,\* Ana Laura Larralde, Ronald Vargas, Lorean Madriz, Kunio Yubuta,  
Lokesh Koodlur Sannegowda, Ilona Sadok, Agnieszka Krzyszczak-Turczyn, Patryk Oleszczuk and Bożena Czech\*

