

# Environmental Science Water Research & Technology

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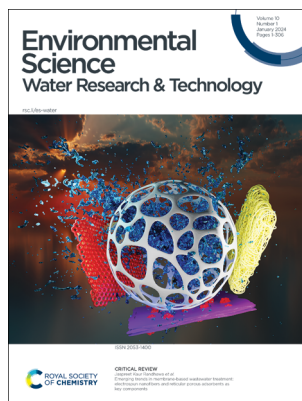
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## IN THIS ISSUE

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Technol.*, 2024, 10, 29.

## EDITORIAL

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### Advancing global priorities in water research and technology

Graham Gagnon

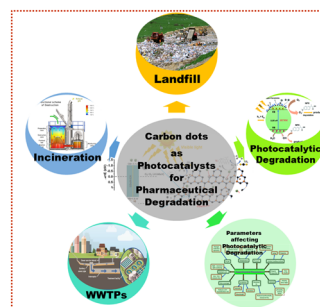


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### Zero-dimensional luminescent carbon dots as fascinating analytical tools for the treatment of pharmaceutical based contaminants in aqueous media

Tahir Rasheed,\* Muhammad Tuoqeer Anwar,  
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# 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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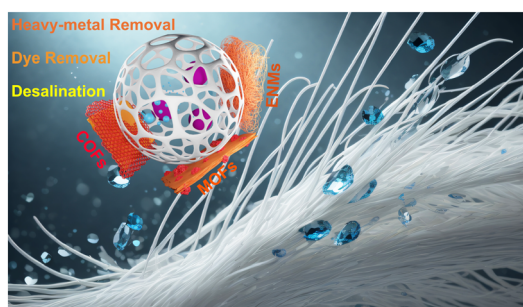
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## CRITICAL REVIEWS

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

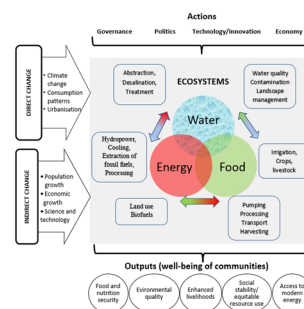
Manish Kumar, Sumanta Chowdhury and Jaspreet Kaur Randhawa\*



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

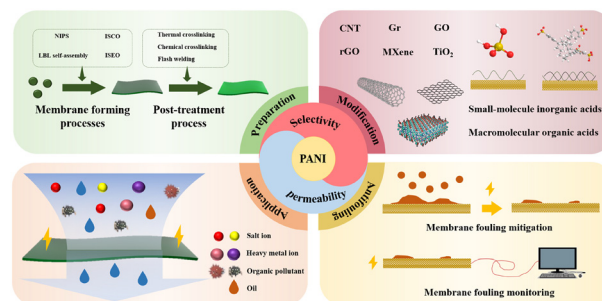
M. Thameur Chaibi, M. Soussi\* and A. Karnib



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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



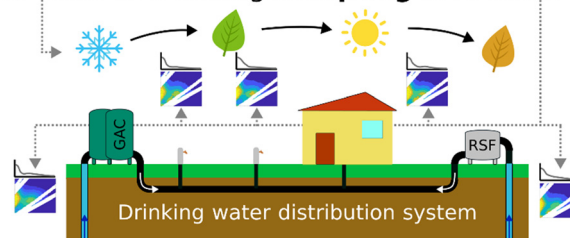
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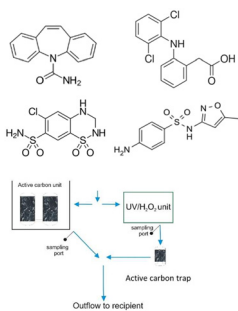
## Source to tap investigation of natural organic matter in non-disinfected drinking water distribution systems

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

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



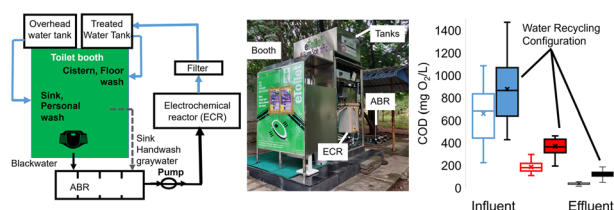
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## Evaluation and comparison of UV/H<sub>2</sub>O<sub>2</sub> and adsorption on active carbon as a tertiary wastewater treatment for pharmaceutical removal within a small WWTP: a pilot study

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

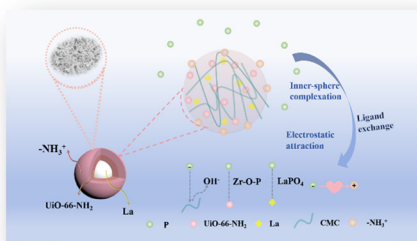
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## Water recycling public toilets based on onsite electrochemical wastewater treatment

Pragadeesh Subramani, Milan Basil, Praveen Rosario, Dijin Ramachandran Jalaja, Vaishali Choudhary, Jayakumar Renganathan, Ligy Philip, Kangwoo Cho, Claire Welling, Sonia Grego and Clément Cid\*

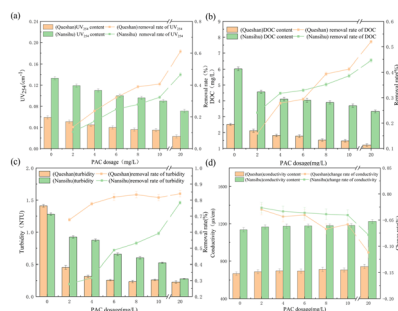
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## Integrated fabrication of CMC@UiO-66-NH<sub>2</sub>@PEI composite adsorbents for efficient batch and dynamic phosphate capture

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

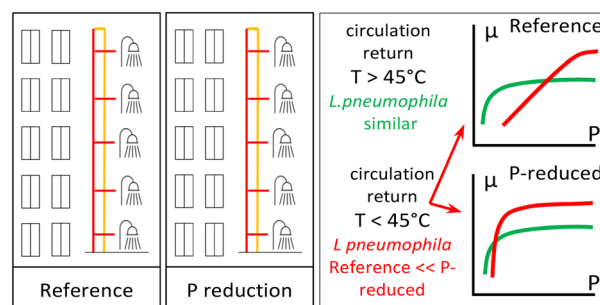
Junwei He, Ruibao Jia, Yonglei Wang,\* Ke Lin, Baozhen Liu, Baosen Liu and Guilin He



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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

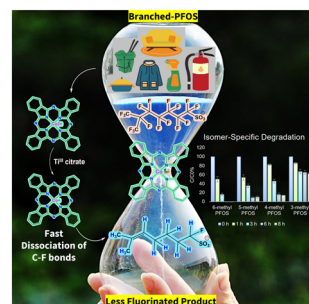
Fayuan Chen,\* Linnan Ma, Zhong Zhang, Xiao Wang, Qinghong Wang, Xiaolong Wang, Chunmao Chen, Linyu Jiang and Xianhui Li\*

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

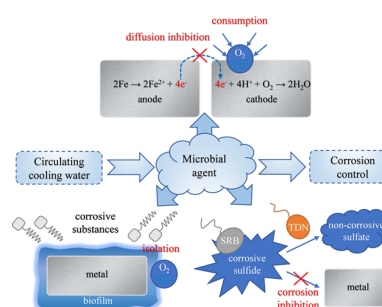
Maryam Mirabediny, Tsz Tin Yu, Jun Sun, Matthew Lee, Denis M. O'Carroll, Michael J. Manfield, Björn Åkermark, Biswanath Das\* and Naresh Kumar\*



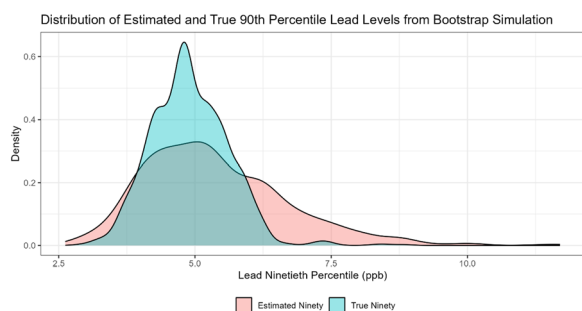
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### The effect and mechanism of a microbial agent used for corrosion control in circulating cooling water

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



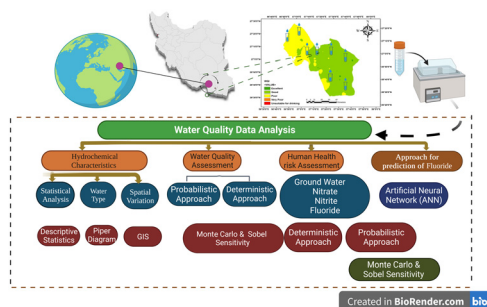
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## Estimating impacts of LCRR's fifth-liter sampling and find-and-fix requirements on large water systems

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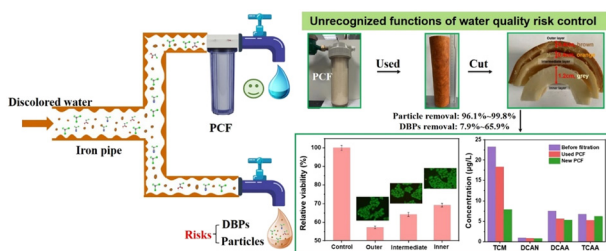
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## Quality evaluation and health risk assessment of drinking water in Minab County: hydrochemical analysis and artificial neural network modeling

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

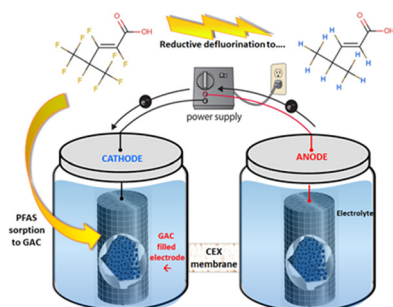
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## Particle and DBP removal efficiency and toxicity evaluation of polypropylene cotton filters in household drinking water purification systems

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  
and Denis M. O'Carroll\*

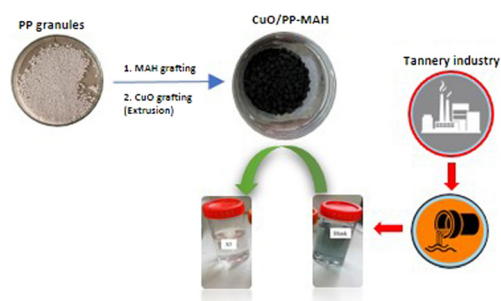


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### *In situ* green synthesis of copper(II) oxide (CuO) and maleic anhydride grafted polypropylene (PP-MAH) for highly efficient nanocatalysis in tannery wastewater treatment

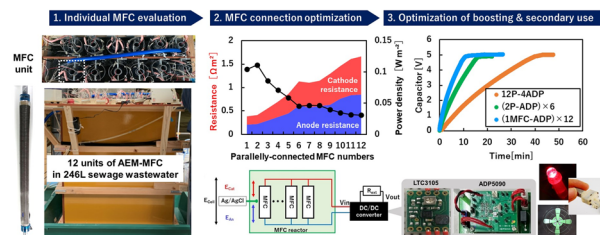
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Shervin Ahmadi and Sima Habibi



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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 Krzyszczyk-Turczyn, Patryk Oleszczuk and Bożena Czech\*

