

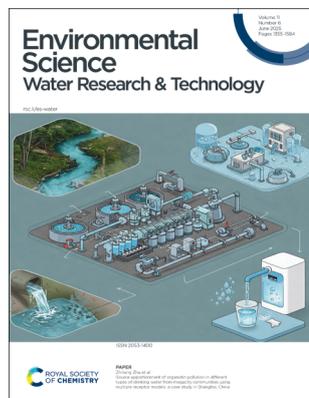
Environmental Science Water Research & Technology

rsc.li/es-water

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

IN THIS ISSUE

ISSN 2053-1400 CODEN ESWRAR 11(6) 1355-1584 (2025)



Cover

See Zhiliang Zhu *et al.*,
pp. 1446–1459.

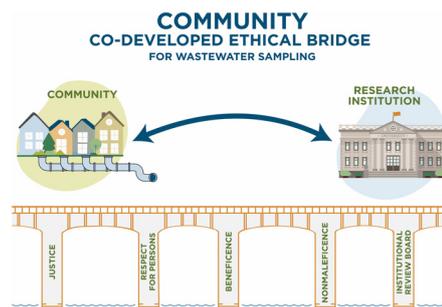
Image reproduced by
permission of Qinghui Huang
from *Environ. Sci.: Water Res.
Technol.*, 2025, **11**, 1446.

PERSPECTIVE

1363

A case study of ethical bridges: wastewater-based epidemiology in the Rubbertown Air Toxics and Health Assessment (RATHA) project

Kathleen Clarke, Lauren B. Anderson, Arnita Gadson, Rochelle H. Holm,* Avery Kolers and Ted Smith

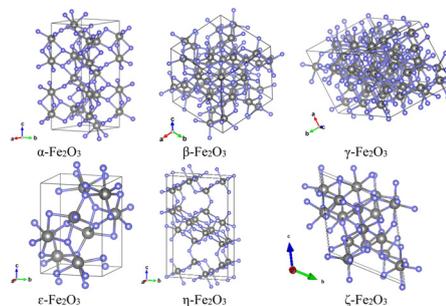


TUTORIAL REVIEW

1369

Recent developments of iron oxide-based photocatalysts in water treatment technology: a review

Chao Li, Shilong He, Hong Mo, Xueqing Xu, Peixian Yang and Mengfei Liu*



Environmental Science: Atmospheres

GOLD
OPEN
ACCESS

Connecting communities
and inspiring new ideas

rsc.li/submittoEA

Fundamental questions
Elemental answers

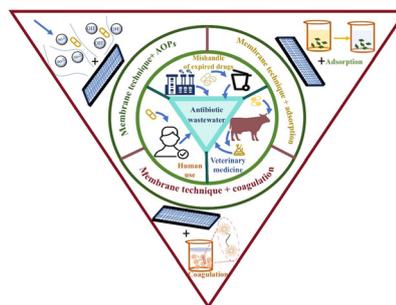


CRITICAL REVIEWS

1386

Research status of membrane separation technology in the treatment of antibiotic wastewater

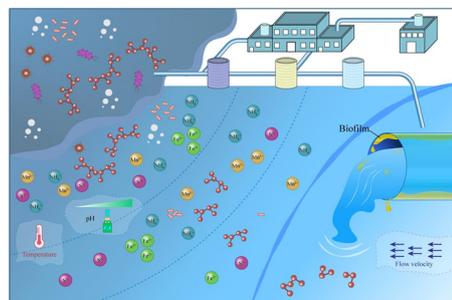
Shida Zhang, Xuewan Zhang, Xue Shen,* Xiangrui Lu, Yuqi Guo, Yingqiang Li, Xue Han, Rupeng Liu,* Feiyong Chen and Cuizhen Sun



1401

Microbial dynamics at different stages of drinking water treatment systems

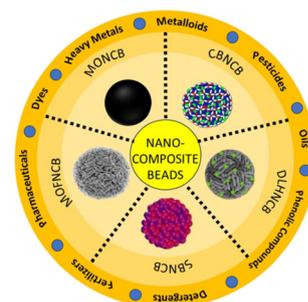
Zhenru Zhao, Wenjun Sun,* Yanchu Ke, Yuanna Zhang and Xiaohui Wang*



1428

Recent innovations in nanocomposite beads for the removal of pollutants from water: a critical review

Abdullah, Zumra and Saeed Ahmed*

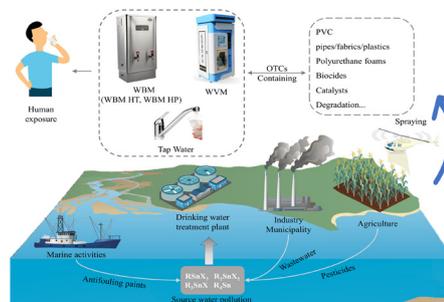


PAPERS

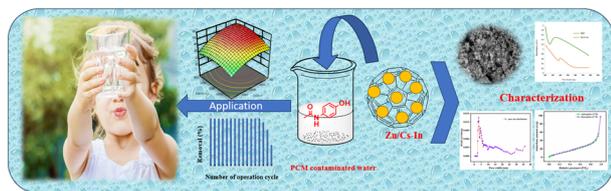
1446

Source apportionment of organotin pollution in different types of drinking water from megacity communities using multiple receptor models: a case study in Shanghai, China

Qinghui Huang, Ying Meng, Yang Lu, Zhiliang Zhu,* Yanling Qiu and Åke Bergman



1460



Mechanistic insights into paracetamol adsorption from water using ZnO nanoparticle-immobilized chitosan-inulin composites: fractal kinetics, statistical physics, thermodynamic analysis, and application to real water samples

Mohd Nasir,* Daniya Shahid, Wajiha Khan, Atif Afroz, Mohammad Shahzad Samdani and Md. Abdur Rashid Mia

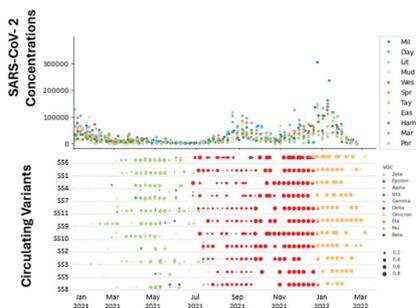
1485



Effects of polysaccharides and proteins in EPSs on DBP formation during iron release

Qiaojiao Mu, Hongtao Zhao,* Yuan Zhuang,* Yili Wang and Baoyou Shi

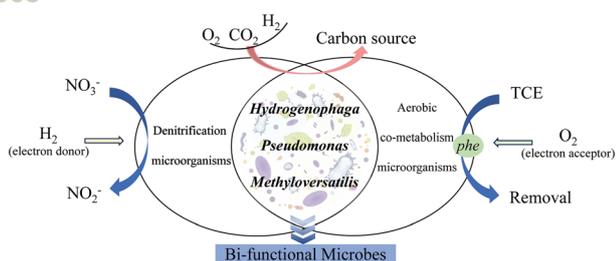
1494



Dynamics of SARS-CoV-2 variants in southwest Ohio municipal wastewater

Maitreyi Nagarkar, Scott P. Keely, Emily A. Wheaton, Chloe Hart, Michael A. Jahne, Jay L. Garland, Eunice Varughese and Nichole E. Brinkman*

1505



Nitrate enhances TCE removal by enriching bifunctional denitrifying/aerobic co-metabolizing microbes in the joint H₂/O₂ system

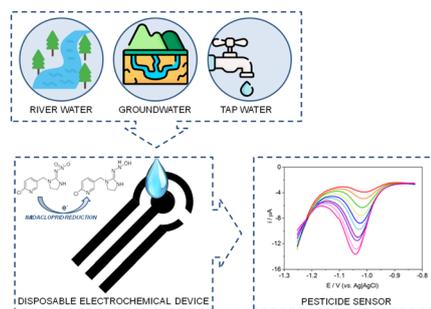
Wenyi Huang, Weiwei Ouyang, Haonan Bian and Hui Liu*



1517

A highly sensitive disposable electrochemical sensor based on copper nanoparticles for pesticide imidacloprid determination in contaminated water sources

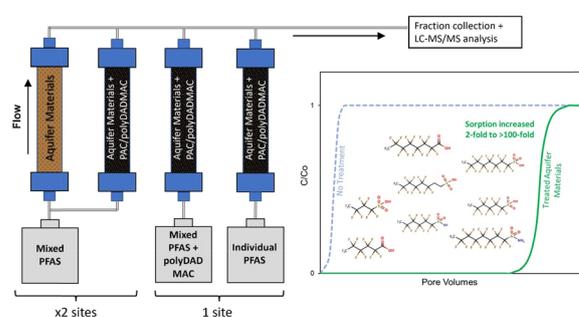
Julia Oliveira Fernandes, Cassiano Augusto Rolim Bernardino, Maria Carolina da Costa Marques, Octavio Pereira Lopes de Souza, Claudio Fernando Mahler, Bernardo Ferreira Braz, Ricardo Erthal Santelli, Thiago da Cruz Canevari and Fernando Henrique Cincotto*



1527

In situ sequestration of per- and polyfluoroalkyl substances in aquifer materials using polydiallyldimethyl ammonium chloride-stabilized powdered activated carbon

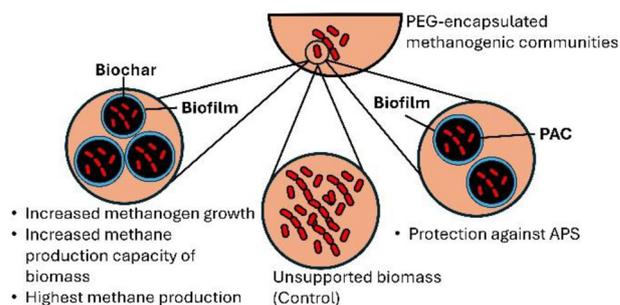
William M. Longo, Sneha Sinha, Mito Imagawa, William A. Arnold, James Hatton, Kurt D. Pennell and Matt F. Simcik*



1542

Protection and enrichment: how two different carbonaceous biofilm supports improve methane yield from encapsulated anaerobic microorganisms

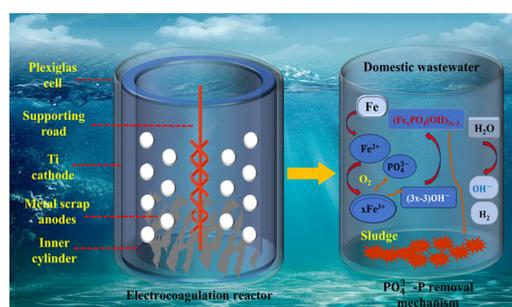
Annesh Borthakur,* Mariah Dorner, Kendall Johnson, William A. Arnold and Paige J. Novak*

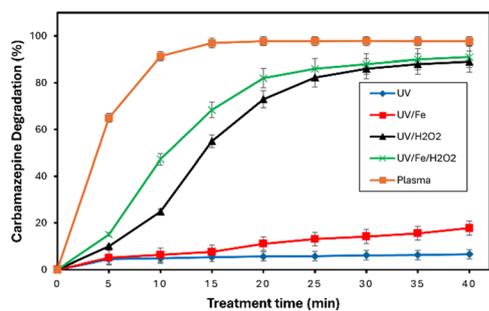


1554

Chemical and electrochemical coagulation processes as a tertiary treatment for residual phosphate removal from domestic wastewater: effect of operating parameters and calculation of operating cost

Nawid Ahmad Akhtar, Mehmet Kobya and Erhan Gengec*





Insights into the degradation of carbamazepine using a continuous-flow non-thermal plasma: kinetics and comparison with UV-based systems

Samuel O. Babalola, Michael O. Daramola and Samuel A. Iwarere*

