

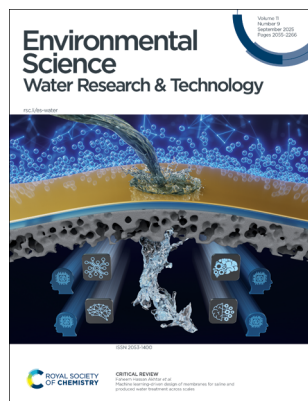
Environmental Science Water Research & Technology

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Cover

See Faheem Hassan Akhtar *et al.*, pp. 2080–2099.

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EDITORIAL

2062

Editorial Perspectives: sanitation developments since ‘*Pitfalls and progress*’

Michael R. Templeton

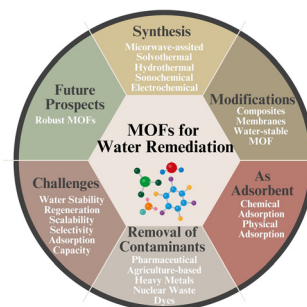


PERSPECTIVE

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Metal organic framework-based materials for water remediation: recent progress, challenges, and future perspectives

Abdulaziz Al-Anazi, Muhammad Tuoqeer Anwar,* Naveed Husnain, Muhammad Rehman Asghar, Saad Ahmed, Awais Ihsan, Muhammad Salman Mustafa, Ghulam Abbas Ashraf and Tahir Rasheed*





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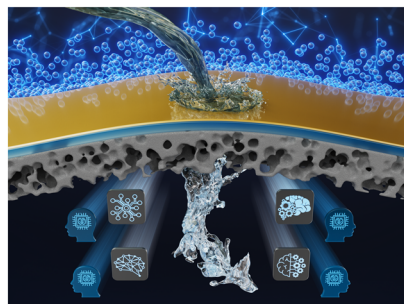


CRITICAL REVIEWS

2080

Machine learning-driven design of membranes for saline and produced water treatment across scales

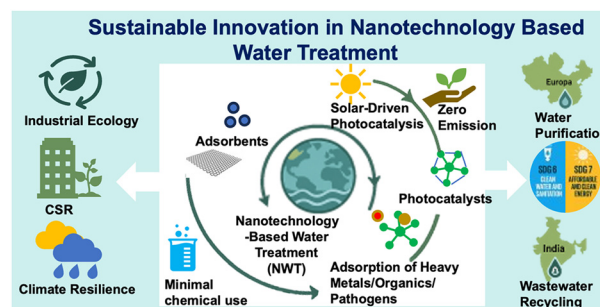
Uzair Ahmad, Ahmed Abdala, Kim Choon Ng and Faheem Hassan Akhtar*



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Sustainable innovation in nanotechnology-based water treatment: aligning climate change adaptation with industrial ecology and CSR goals

Sanduni Dabare, Sisitha Rajapaksha* and Imalka Munaweera*

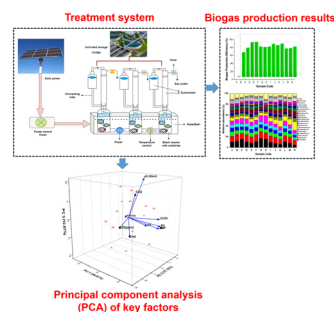


PAPERS

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Optimizing waste-to-energy conversion: the impact of catalytic pretreatment on thermophilic anaerobic digestion of sewage sludge

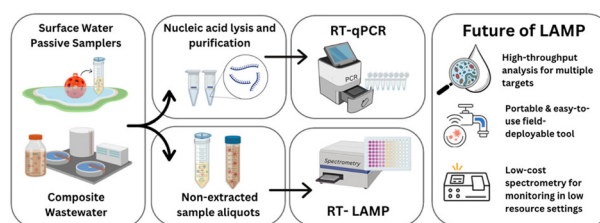
Mansuur Husein, Liang Cheng,* Francis Kwaku Attiogbe, Abdallah Abdelfattah, Hussein Sulemana, Philip Allan Barnes and Hany S. El-Mesery



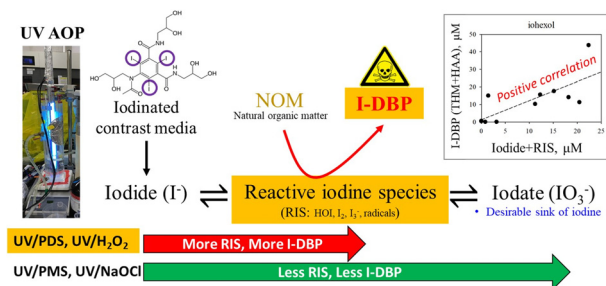
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Isothermal amplification as a water safety tool: rapid detection of viruses in surface water and wastewater

Emalie K. Hayes,* Madison T. Gouthro and Graham A. Gagnon*



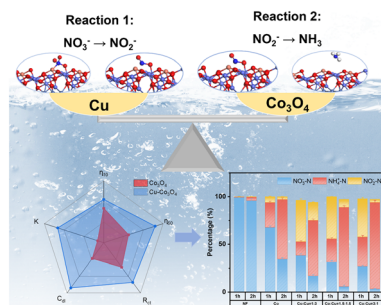
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Formation dynamics of inorganic iodine species during UV-based advanced oxidation of iodopamidol and iohexol and their correlation with iodinated disinfection by-product yields

Hojoong Ji, Jaehyeong Park, Seonyoung An, Seo-Yeong Choi and Jong Kwon Choe*

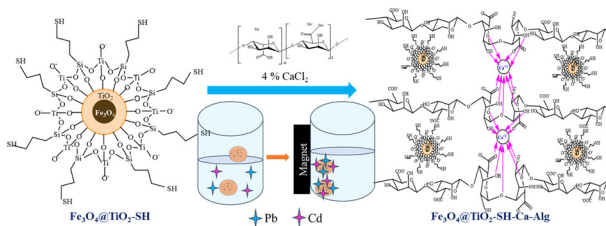
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Fabrication of dual-sited Cu doped Co₃O₄ on nickel foam (Cu-Co₃O₄/NF) for segmentally efficient electrochemical nitrate reduction under low conductivity

Xueqi Tao, Shuaishuai Man, Qun Yan,* Athanasia Tekerlekopoulou, Dimitris V. Vayenas and Bin Huang

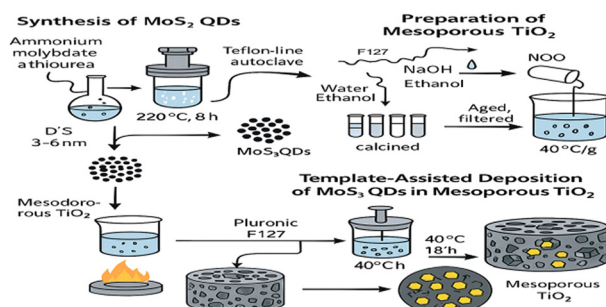
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An innovative approach towards the selective recovery of Pb(II) and Cd(II): thiol-functionalized TiO₂-based magnetic core-shell nanoparticle-loaded hydrogel

Purbali Das, Hirakendu Basu,* Brindaban Modak, Ranita Basu, Sudeshna Saha, Shweta Singh and Chandra Nath Patra

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Nanoconfined MoS₂ quantum dots in mesoporous TiO₂: a high-performance platform for electrochemical microplastic sensing

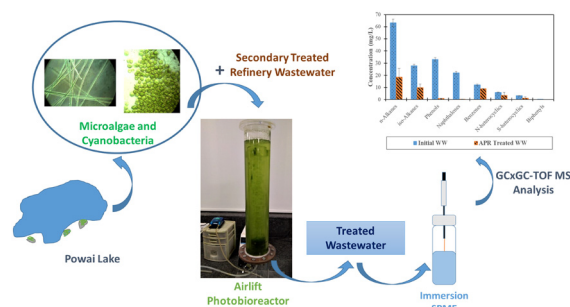
Rima Heider Al Omari, Shelesh Krishna Saraswat, Abhinav Kumar, Subbulakshmi Ganesan, Shaker Mohammed, Aashna Sinha, Hadi Noorizadeh* and Mostafa Kazemi



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Assessment of reactor hydrodynamics and treatment effectiveness of secondary treated refinery wastewater in an airlift photobioreactor

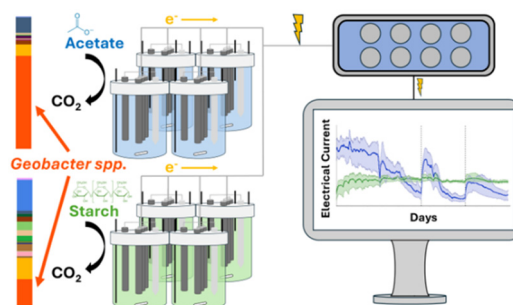
Prashant Sinha and Suparna Mukherji*



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Investigating substrate impact on electroactive biofilm performance in low-cost, single-chamber microbial electrolysis cells for biosensing

Connor E. Saucedo and Adam L. Smith*



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Evaluation of point-of-use drinking water treatment performance for typical per- and polyfluoroalkyl substances in tap water

Yangyuan Ji, Tao Yuan,* Zhenjin Li, Yanan Xing, Yan Cao, Xiaoli Zhao, Xinyue Ma, Zhemin Shen, Shuangqing Hu and Genxiang Shen*



Point-of-use Drinking Water Treatment	Limitation on PFAS	
Direct Consumption	X	
Boiling	X	
Filter (GAC and Ion Exchange Resins)	X	
Membrane filtration	UF	X
	RO	✓
Bottled water	✓	

2248

Adsorbent modified constructed wetlands for advanced removal of bulk organics and heavy metals from municipal wastewater effluent

Luca M. Ofiera, Thomas Wintgens and Christian Kazner*

