

# Environmental Science Processes & Impacts

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### Cover

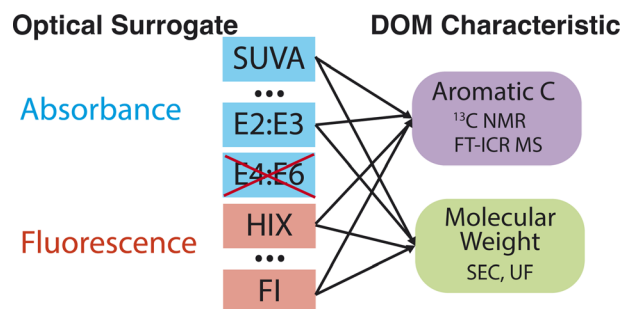
See Subhasmita Panda, Chinmay Mallik, S. Suresh Babu, Sudhir Kumar Sharma, Tuhin Kumar Mandal, Trupti Das and R. Boopathy, pp. 1716–1735. Image reproduced by permission of Subhasmita Panda and Boopathy R. from *Environ. Sci.: Processes Impacts*, 2024, 26, 1716.

## CRITICAL REVIEW

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### Critical review of fluorescence and absorbance measurements as surrogates for the molecular weight and aromaticity of dissolved organic matter

Julie A. Korak\* and Garrett McKay\*

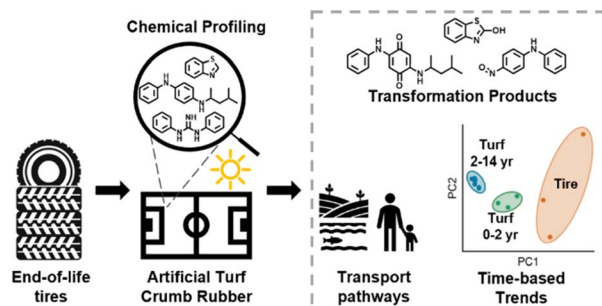


## PAPERS

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### Emerging investigator series: in-depth chemical profiling of tire and artificial turf crumb rubber: aging, transformation products, and transport pathways

Madison H. McMinn, Ximin Hu, Katherine Poisson, Phillip Berger, Paola Pimentel, Xinwen Zhang, Pranali Ashara, Ella L. Greenfield, Jessica Eig and Zhenyu Tian\*



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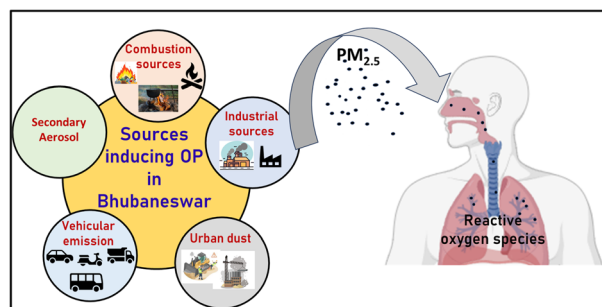
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Fundamental questions  
Elemental answers

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## Vehicular pollution as the primary source of oxidative potential of PM<sub>2.5</sub> in Bhubaneswar, a non-attainment city in eastern India

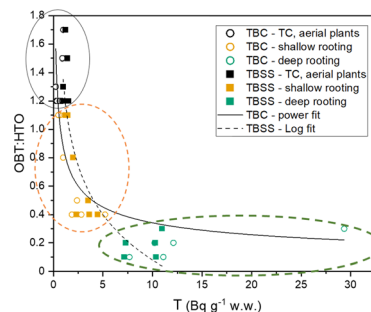
Subhasmita Panda, Chinmay Mallik, S. Suresh Babu, Sudhir Kumar Sharma, Tuhin Kumar Mandal, Trupti Das and R. Boopathy\*



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## Influence of tritium exposure route on vegetation types at the Savannah River Site

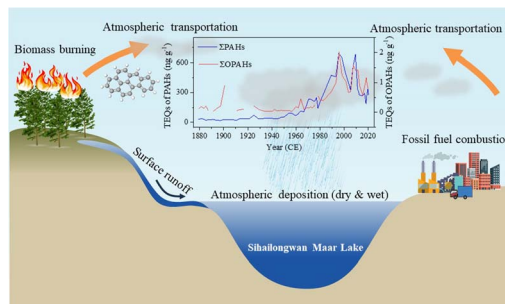
Martine C. Duff,\* Elizabeth A. Pettitt and Holly VerMeulen



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## A 150 years record of polycyclic aromatic compounds in the Sihailongwan Maar Lake, Northeast China: impacts of socio-economic developments and pollution control

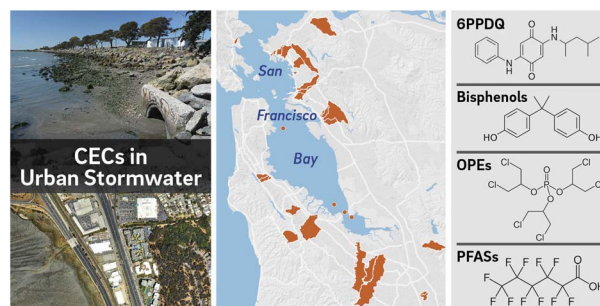
Jianing Zhang, Chong Wei,\* Yongming Han,\* Benjamin A. Musa Bandowe, Dewen Lei and Wolfgang Wilcke



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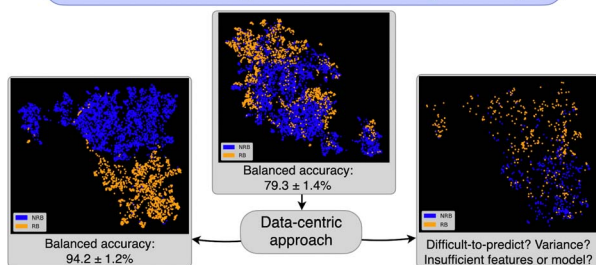
## Storms mobilize organophosphate esters, bisphenols, PFASs, and vehicle-derived contaminants to San Francisco Bay watersheds

Katherine T. Peter, Alicia Gilbreath, Melissa Gonzalez, Zhenyu Tian, Adam Wong, Don Yee, Ezra L. Miller, Pedro M. Avellaneda, Da Chen, Andrew Patterson, Nicole Fitzgerald, Christopher P. Higgins, Edward P. Kolodziej and Rebecca Sutton\*



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## Machine Learning for Aerobic Biodegradability

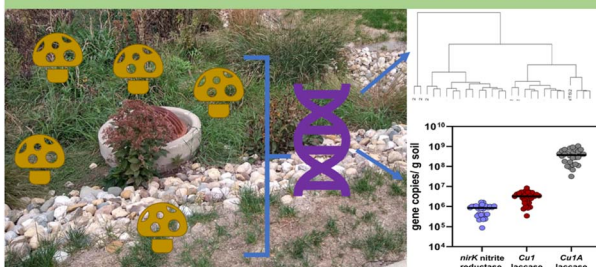


## Critical insights into data curation and label noise for accurate prediction of aerobic biodegradability of organic chemicals

Paulina Körner, Juliane Glüge,\* Stefan Glüge and Martin Scheringer

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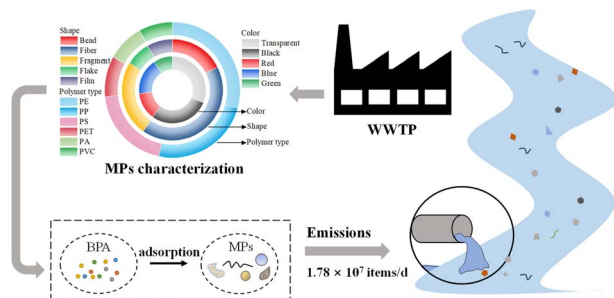
## Fungal Communities + Remediation Genes in Stormwater Bioretention



## Fungal diversity and key functional gene abundance in low bioretention cells: implications for stormwater remediation potential

Erica A. Wiener, Jessica M. Ewald and Gregory H. LeFevre\*

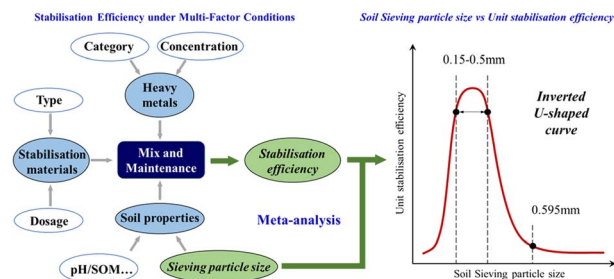
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## Microplastics are effective carriers of bisphenol A and facilitate its escape from wastewater treatment systems

Wang Li, Bo zu,\* Lei Li, Jian Li, Jiawen Li and Qiuje Xiang

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## Impact of particle size separation on the stabilisation efficiency of heavy-metal-contaminated soil: a meta-analysis

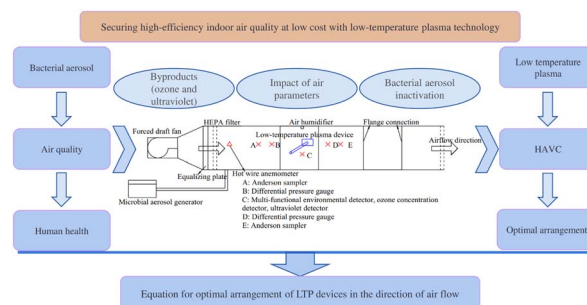
Lixia Sun, Yunlong Zhang, Bo Wu,\* Enzhu Hu, Linlin Li, Longlong Qu and Shuqi Li



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## Experimental assessment of low temperature plasma devices for bacterial aerosol inactivation in the air duct of HVAC systems

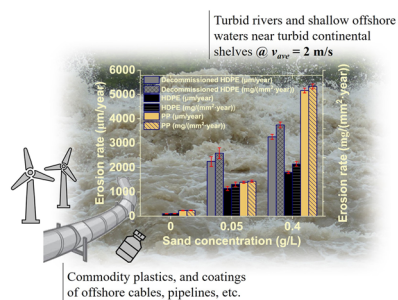
Yang Lv,<sup>\*</sup> Xiaodong Wang, Beibei Wang and Wenjie Yuan



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## Erosion of rigid plastics in turbid (sandy) water: quantitative assessment for marine environments and formation of microplastics

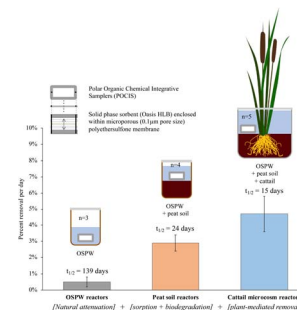
Ali Al-Darraj,<sup>\*</sup> Ibukun Oluwoye,<sup>\*</sup> Christopher Lagat, Shuhei Tanaka and Ahmed Barifcani



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## Depletion rates of O<sub>2</sub>-naphthenic acids from oil sands process-affected water in wetland microcosms

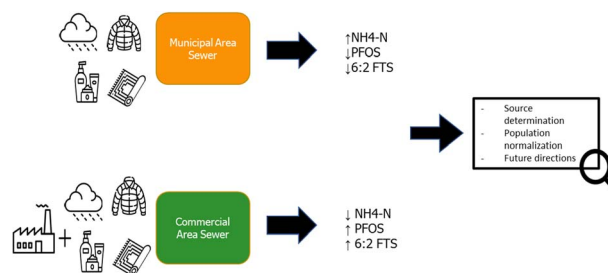
Alexander M. Cancelli<sup>\*</sup> and Frank A. P. C. Gobas



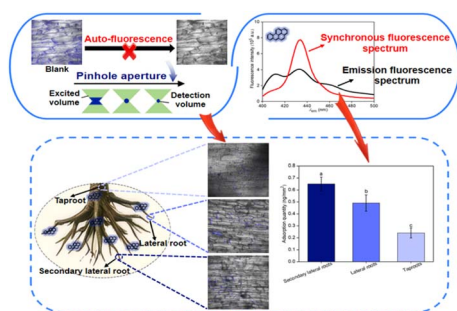
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## Exploring the variability of PFAS in urban sewage: a comparison of emissions in commercial versus municipal urban areas

Krlovic N.,<sup>\*</sup> Saracevic E., Derx J., Gundacker C., Krampe J., Kreuzinger N., Zessner M. and Zoboli O.



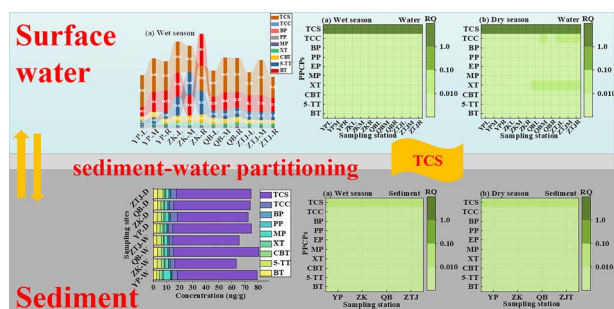
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### Combining a tunable pinhole with synchronous fluorescence spectrometry for visualization and quantification of benzo[a]pyrene at the root epidermis microstructure of *Kandelia obovata*

Bingman Lei, Yaxian Zhu and Yong Zhang\*

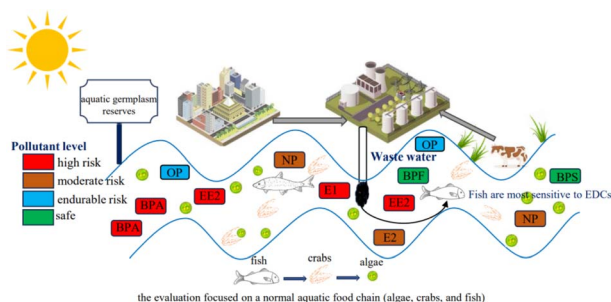
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### Assessment of occurrence, source appointment, and ecological risks of pharmaceuticals and personal care products in the water–sediment interface of Qiantang River in the Hangzhou region

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### Pollution characteristics and risk assessment of endocrine-disrupting chemicals in surface water of national (freshwater) aquatic germplasm resource reserves in Guangdong Province

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