

# Environmental Science: Advances

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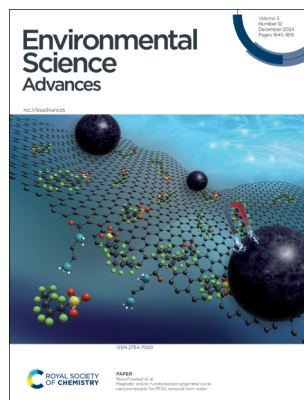
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## IN THIS ISSUE

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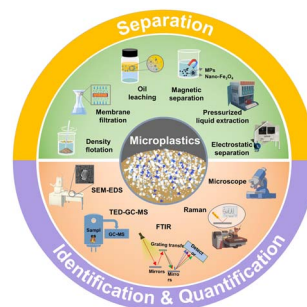
**Inside cover**  
See Reza Foudazi *et al.*, pp. 1698–1713. Image reproduced by permission of Margarita Rodriguez from *Environ. Sci.: Adv.*, 2024, 3, 1698.

## TUTORIAL REVIEW

1652

### Microplastics analysis: from qualitative to quantitative

Meina Huang, Chunying Si, Chuntian Qiu\* and Guoqing Wang\*

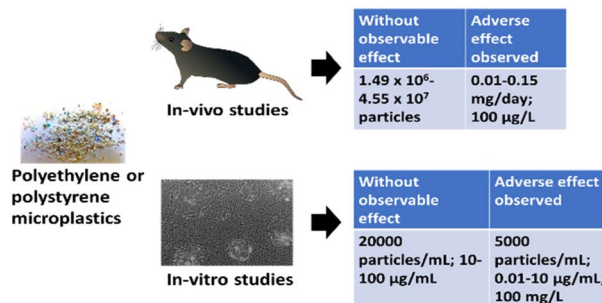


## CRITICAL REVIEWS

1669

### A review of the toxic effects of microplastics based on studies on mammals and mammalian cell lines

Kuok Ho Daniel Tang



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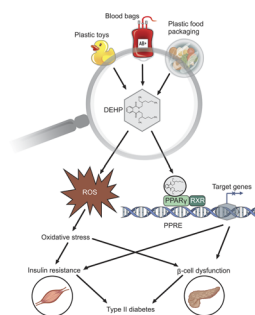
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## CRITICAL REVIEWS

1679

**Di(2-ethylhexyl)phthalate and type 2 diabetes**

Sebolaishi Doris Makhubela,\* Ananias Hodi Kgopa, Matlou Phineas Mokgotho and Leshweni Jerry Shai

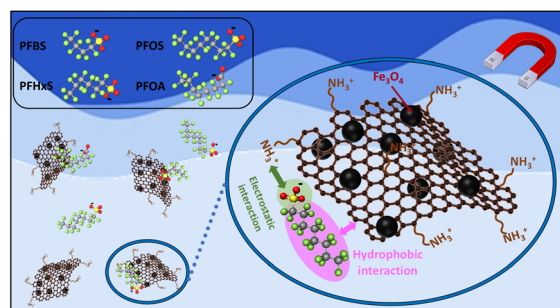


## PAPERS

1698

**Magnetic amino-functionalized graphene oxide nanocomposite for PFAS removal from water**

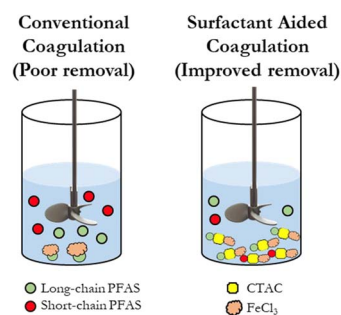
Shokouh Mahpishanian, Muchu Zhou and Reza Foudazi\*



1714

**Surfactant-enhanced coagulation and flocculation improves the removal of perfluoroalkyl substances from surface water**

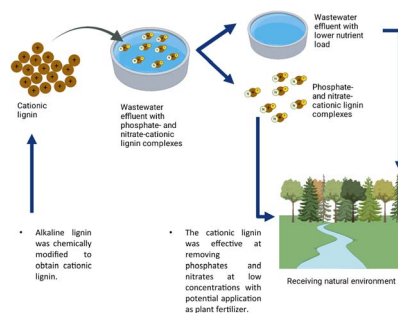
Amith Sadananda Maroli, Yi Zhang, Jonathan Lubiantoro and Arjun K. Venkatesan\*



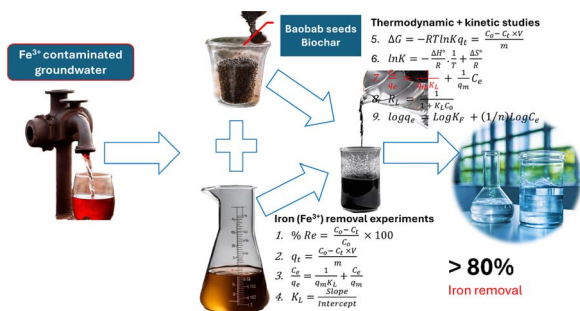
1722

**Lignin cationization for the removal of phosphates and nitrates from effluents of wastewater treatment plants**

Fannyuy V. Kewir, Carlos E. Astete, Divine B. Nde, Jessica R. Eberhard, W. David Constant and Cristina M. Sabliov\*



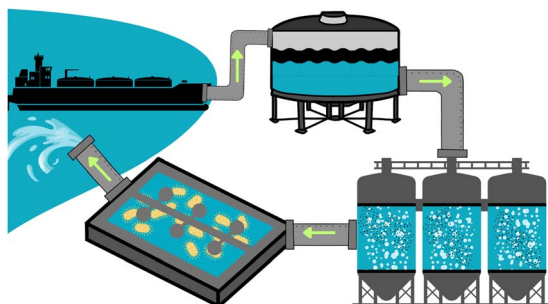
1735



### “Tree of life”: how baobab seed-derived biochar could lead to water safety for underprivileged communities through heavy metal (Fe) removal – SDG 6

Magdalena J. Mkelemi, Grite N. Mwaijengo and Mwemezi J. Rwiza\*

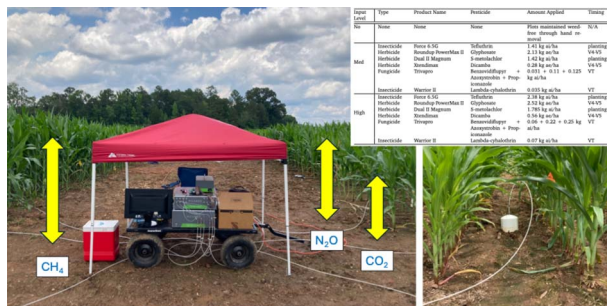
1746



### Examining the effectiveness of oiled ballast water treatment processes: insights into hydrocarbon oxidation product formation and environmental implications

Maxwell L. Harsha,\* Danielle E. Verna, Yanila Salas-Ortiz, Ed Osborn, Eduardo Turcios Valle, Aleksandar I. Goranov, Patrick G. Hatcher, Ana M. Aguilar-Islas, Patrick L. Tomco and David C. Podgorski

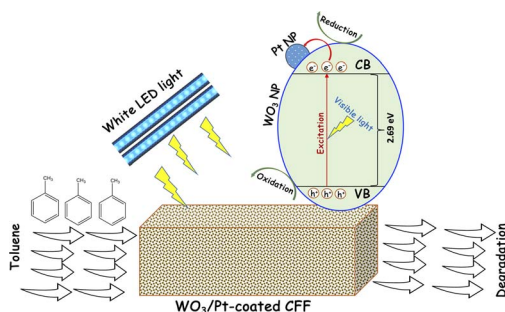
1760



### Soil greenhouse gas fluxes in corn systems with varying agricultural practices and pesticide levels

Eri Saikawa,\* Alexander Avramov, Nicholas Basinger, Jerzi Hood, Nandita Gaur, Aaron Thompson, Angela Moore, Douglas Wolf and Yaoxing Wu

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### WO<sub>3</sub>/Pt photocatalyst supported by a ceramic filter for indoor air purification under visible light irradiation

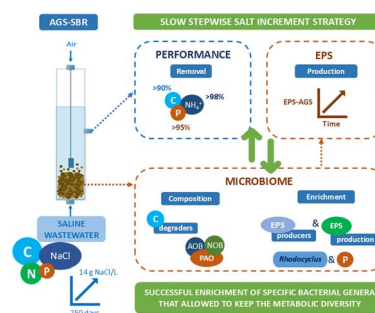
Sudipto Pal,\* Amruth Kaitheri, Sanosh Kunjalukkal Padmanabhan, Massimo Catalano, Stefano Perboni and Antonio Licciulli



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## Unravelling microbiome changes in aerobic granular sludge saline wastewater treatment using a slow stepwise salt increase strategy

Ana M. S. Paulo,\* Oihane Salazar, Joana Costa, Daniela P. Mesquita, Eugénio C. Ferreira, Paula M. L. Castro and Catarina L. Amorim



1802

## Cytotoxic and molecular effects of soil extracts from the Agbogbloshie electronic-waste site on fish and human cell lines

Krittika Mittal, Ke Xu, Jingyun Zheng, Stephane Bayen, Julius Fobil and Niladri Basu\*

